**Lab Report**

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**Introduction**

Sense of agency is the perception of taking control of one's own activities and exercising influence over them in an effort to shape external occurrences.Intentional binding, or the reduction of the apparent latency between an action and its result, is one such metric used in research concerning the sense of agency seeks to employ implicit measures. Intentional binding has been measured using a variety of paradigms.With more frequent and repeated operant experiences, deliberate binding implies an automatic strengthening of connection. This result supports the idea that automatic associative learning processes act as a bridge between higher level explicit features of sense of agency and intentional binding. Action-outcome congruence is the source of agency, or the perception that one is in control of initiating events and acts. Intentional binding, which is the compression of the subjective time between the action and the result, is a hallmark of a sense of agency.

**Method**

The next phase's decision to push the key or not is then communicated to the participant. As a result, we create a second circular polygon with identical dimensions but the original's shade changed to green (starts at 1 sec with infinite duration). The third stage should include a keyboard answer so that participants can respond. After one second, when the circle turns green, press the "spacebar”. The next step is to create a new routine called "beep," where we add a beep sound stimulus and set the start time as "$delay" and the sound frequency as "$freq" on set every repeat for 0.3 seconds before uploading the finished excel file. A text box response function is then displayed. As part of our instructions, we requested them to rate the delay on a scale of 0-999.

The button react is then included so that participants can submit their answers.

**Results**

The mean of expected condition was 65 and the mean of unexpected condition was 35.3 . Hence the difference between the estimates is :

| The difference | 29.66666667 |
| --- | --- |

**Discussion**

Agency is the feeling of control over your life, the power to shape your own ideas and actions, and the confidence in your abilities to face a variety of challenges and circumstances. Your sense of agency enables you to maintain psychological stability while being adaptable in the face of change or conflict. Your personal power and capacity to influence the future are known as your agency. On the basis of an assessment of a correlate of voluntary activity, implicit measures draw conclusions about the agentic experience. No one is ever openly questioned about their agentic experience in these paradigms. Intentional binding is likely the most frequently utilised implicit metric for sense of agency. Studies on schizophrenia patients have shown that these people struggle with agency processing. Sense of agency has a strong connection. The ability to predict, regulate, and monitor one's behaviour; the majority of research indicates that having more control is associated with a higher sense of agency.

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The study of the sense of agency may not be simple, despite its theoretical and practical relevance. In fact, given that it relates to the issue of subjective consciousness, it may even qualify as a "hard problem," according to i. Many believe there can be no objective science of first-person experiences, but many others argue that there is no such thing as a "hard problem" and that it is fully feasible, if not easy, to study subjective experiences.

<https://github.com/Aayushi0103/intentional-binding-task>