# **Trending Data Collecting Methods:**

## Questionnaires:

Given a source as a stimulus, subject's emotional states is recorded in questionnaires and scaling is done based on its degree.

# Performing Gesture:

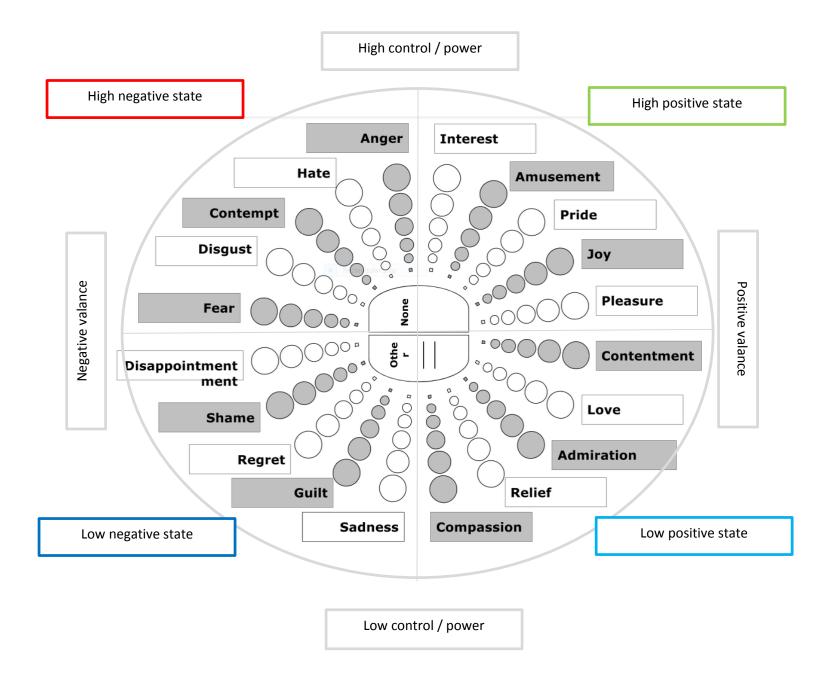
Given an emotion state, subjects are asked to perform gestures for that.

# Applications:

Applications recording day to day gesture activity is created and tested with the subjects.

Out of these three methods, Questionnaires is used in most cases.

### **Abstract Emotion States:**



# **Touch Properties:**

- 1. Pressure
- 2. Speed
- 3. Length

#### **Revised Data Set Format:**

T<sub>1</sub> Walking (low acceleration)

Time Stamp	t1a	t1b	t1c	t1d
Gesture	Click	Click	Click	Swipe
Touch Property	Pressure	Pressure	Pressure	Speed, length, Pressure

# **Gesture Properties:**

Event	Abbreviation	Properties	
Click	С	Pressure	
Swipe	Sw	Length (speed), Pressure	
Scroll	Sc	Length (speed), Pressure	

Activity Value (AV) = average of values of gesture events in a particular sub interval.

Pressure is directly proportional to AV.

## Assumptions:

1. If Length and Pressure are directly proportional, only Pressure is considered for evaluation.

Possible cases for assigning values to gesture events for each sub interval:

- 1: Assign values for each timestamp.
- 2: Assign values as an average for particular gesture event in each sub interval .

### **Gesture AV in the interval 6 sec:**

Gesture event	C,C,C,SW,C,,C,SC,C	C,SW,SC,C,C,C,C,C	C,SW,C,C,C,C,SC,C,C
Activity value	Хр	Υp	Ζp
Sub interval	2sec	2sec	2sec
Full interval	6sec		

Gesture event	C,C,SW,C,,C,SC,C	C,SW,SC,C,C	C,SW,C,C,C
Activity value	Хр	Υp	z p
Sub interval	2sec	2sec	2sec
Full interval	6sec		

### **Graph representing the Gesture Activity Value to Abstract Emotion State**

