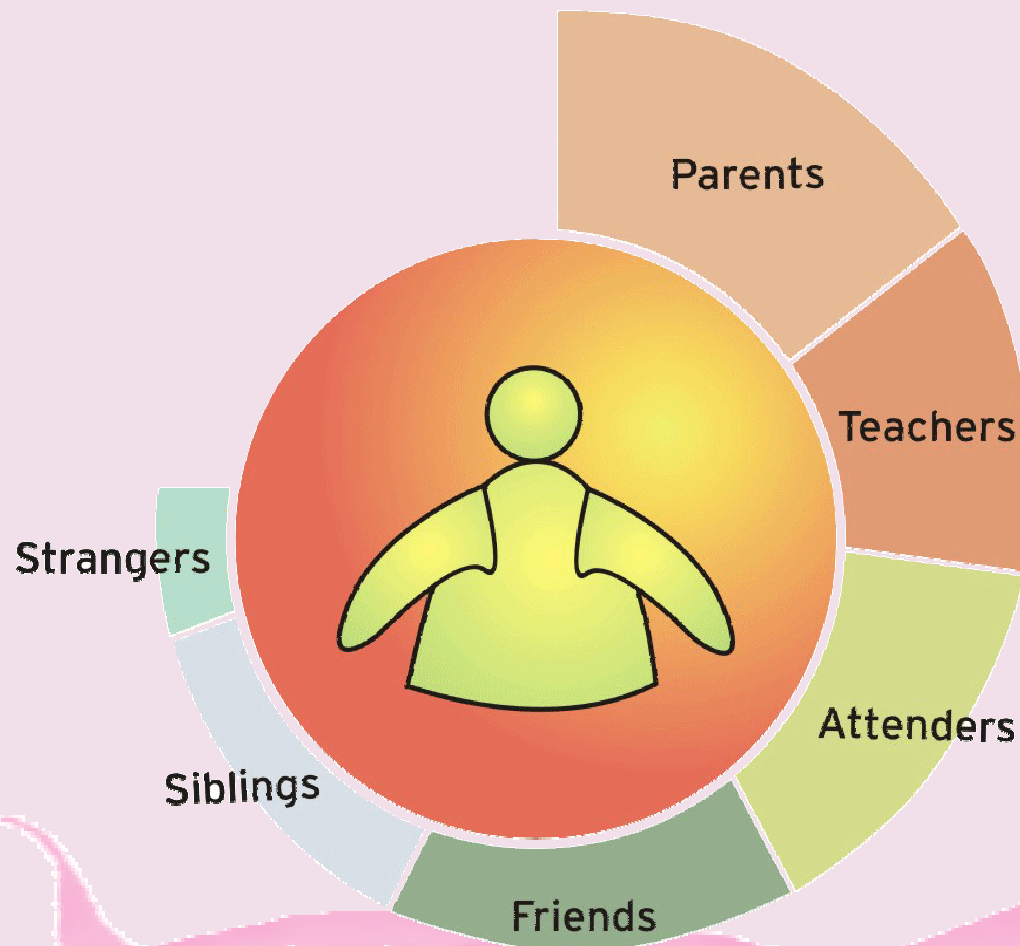


# Communication world of Cerebral Palsy



# With Whom would a Non-Verbal Interact...and How?





Modes of communication

# Profile for Study

- Our focus for **Age 9 – 13** (chronological age)
- Physical **DISABILITIES** may vary
- Have an average **LEARNING** ability
- And they are **NON-VERBAL**



## Communication

### Physical

.Possible somehow with the help of external aids

.No treatment but they can be taught to manage with it

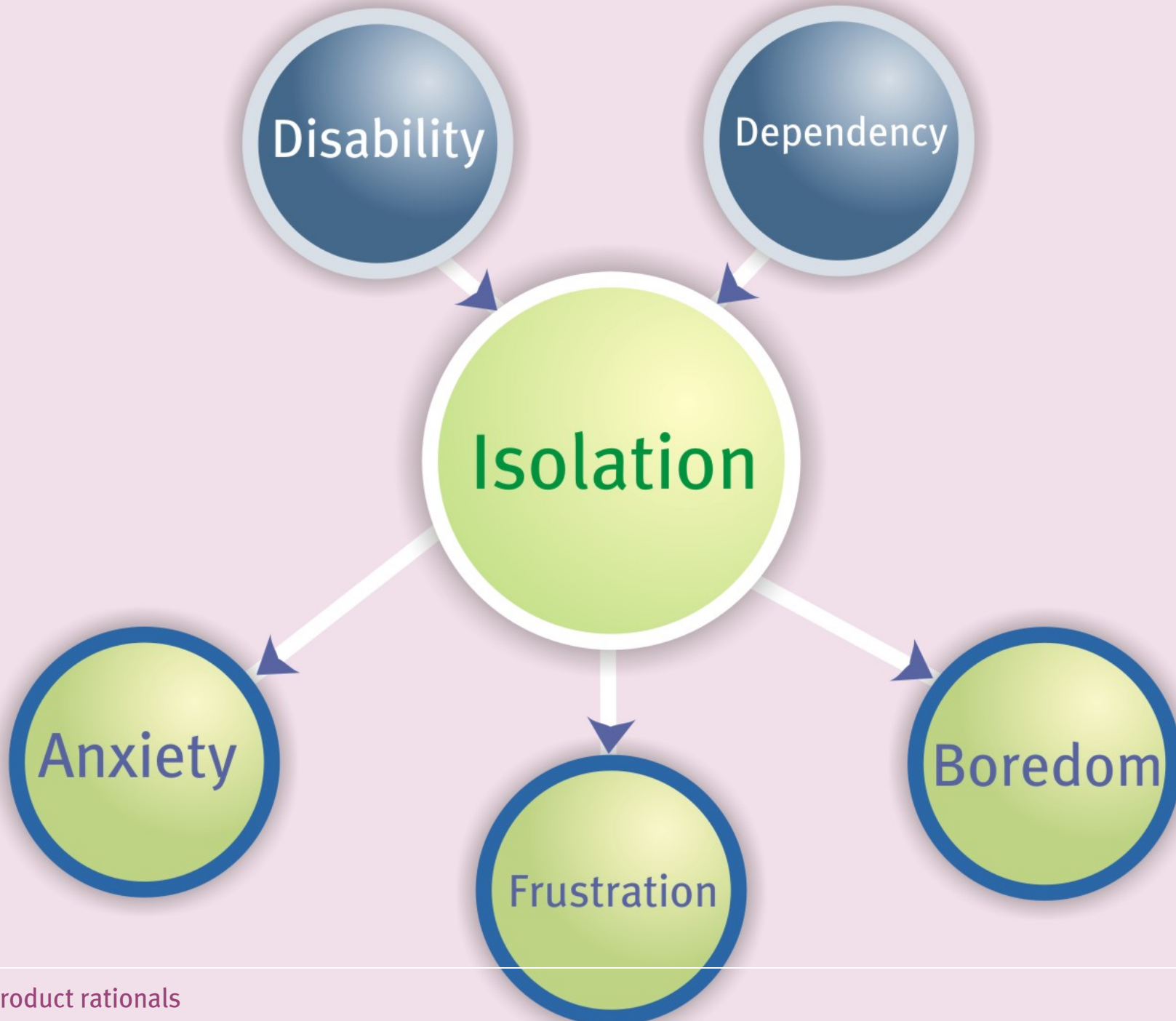
### Emotional

.Negligible because of disabilities

.It generates the feeling of dependency, disability which leads to isolation

# Towards the product brief





**Emotions** are a  
state marked by **prominent**  
**Internal patterns**

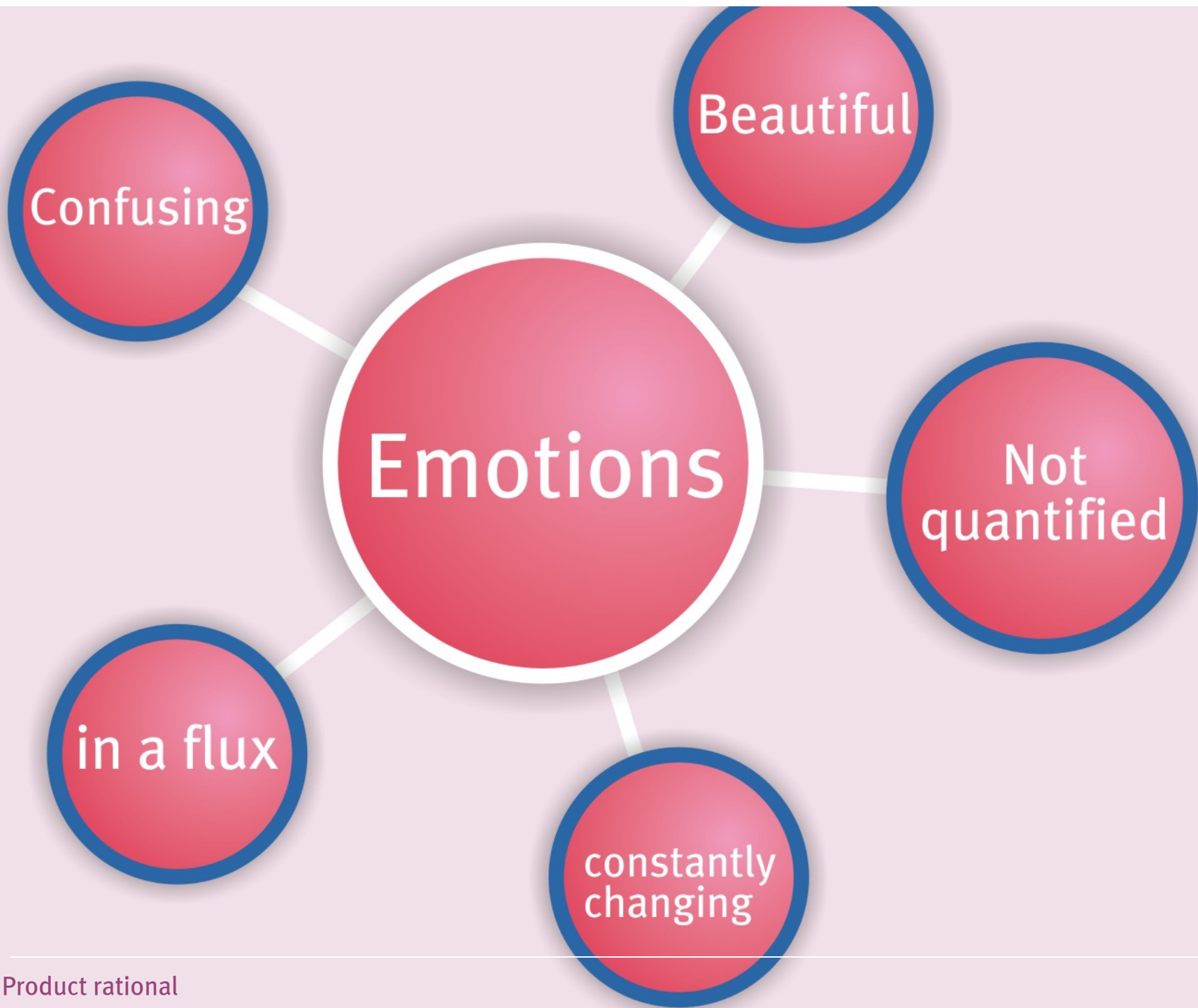
**not controllable**

**Involve**  
**complex patterns** that undergo  
**physiological** changes



**Emotion and the multitude of  
meanings**  
emotions always in a constant **state  
of flux**

sensations of  
**patterns**  
inside the mind

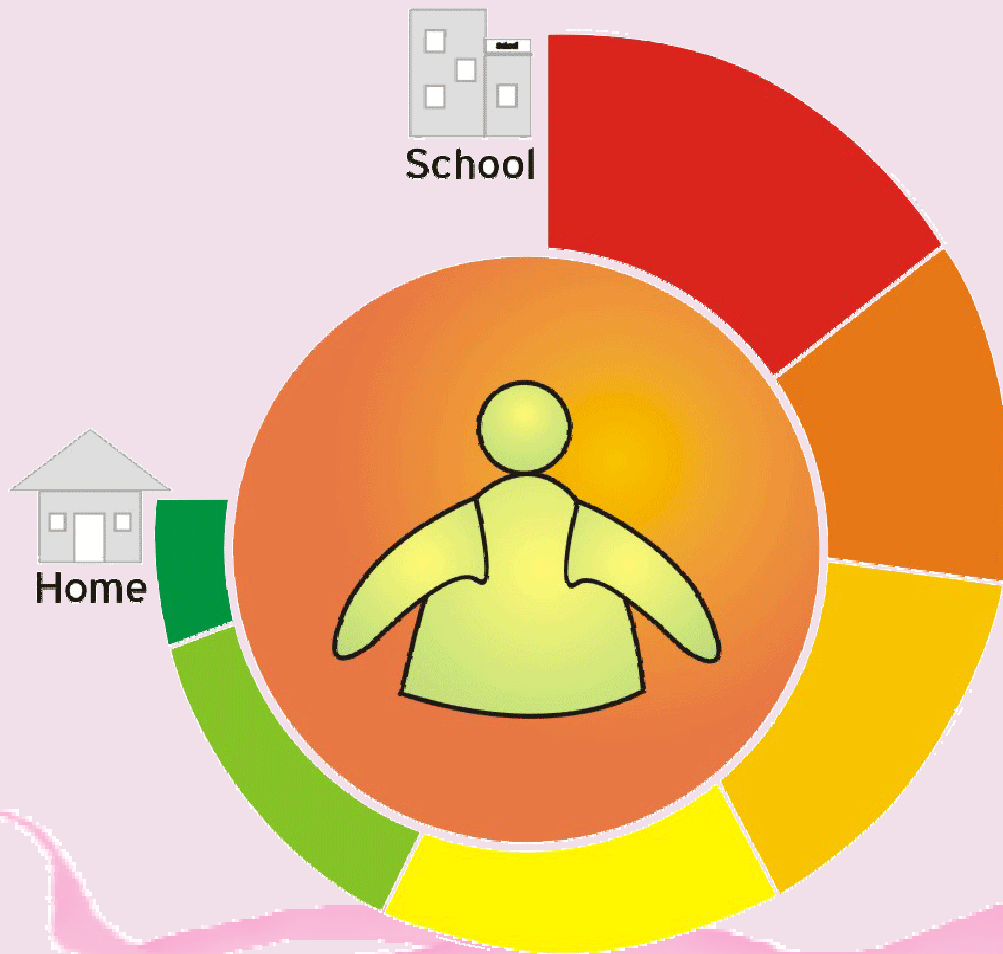


To develop an abstract vocabulary to  
**study emotions** on the basis of

sensations  
visual field  
colour patterns  
haptic factors  
olfactory senses

# In our world

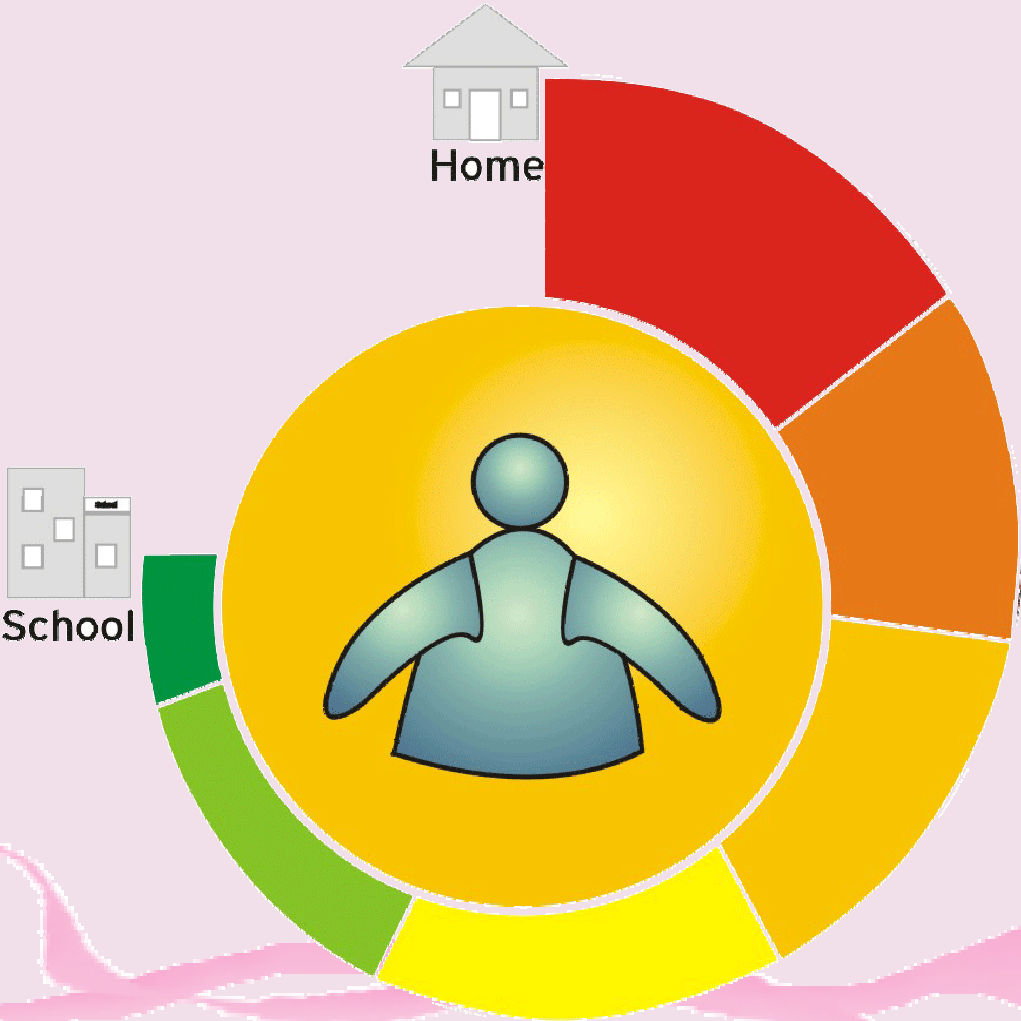
- More Isolation
- Unisolated / involved



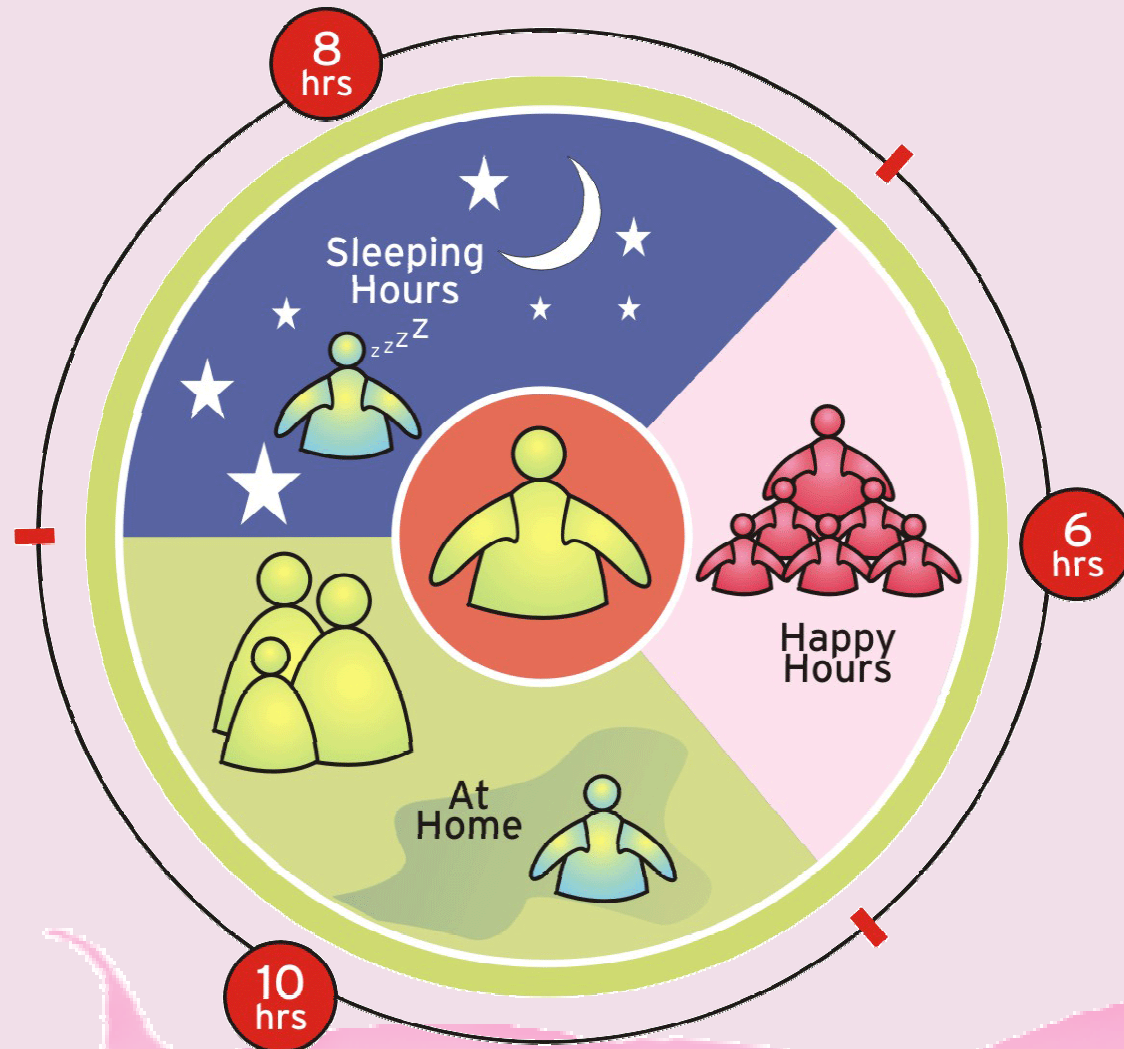
# In their world

More Isolation

Unisolated / involved

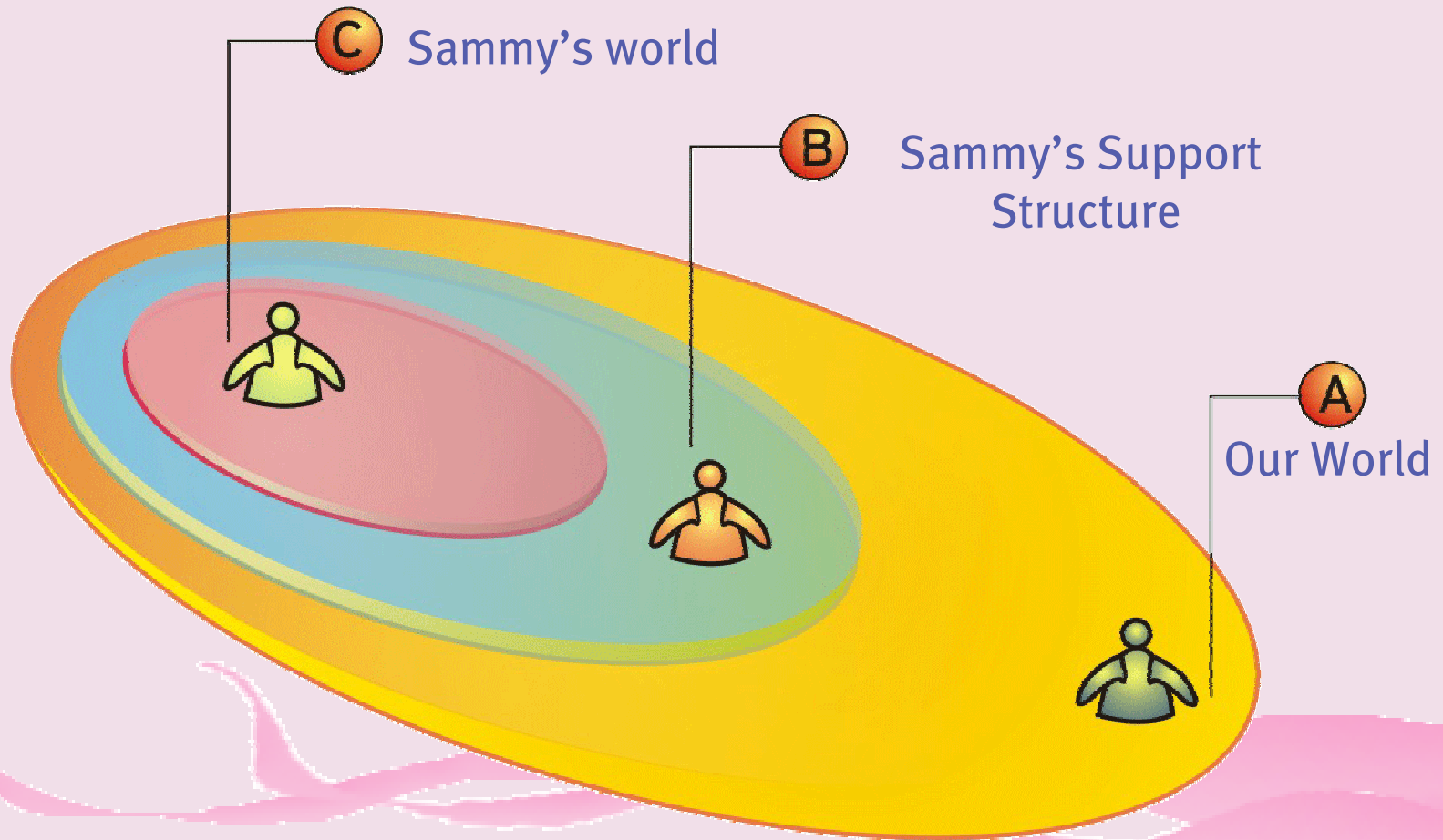


# A Day in Sammy's Life



how does the **8** hrs  
in **Isolation** compare with  
his lively **6** hrs  
at **special school**

# Hypothetically resolving Interaction within the 3 Levels





# Inferences for conceptual solution

- Leverage of emotional imbalance in current scenario
- Small small experiences of joy make them happy as a whole
- Redifining the concept of disability

# Metaphors

Star  
Jellyfish  
Indian Festivals  
Colours



# Early Concepts

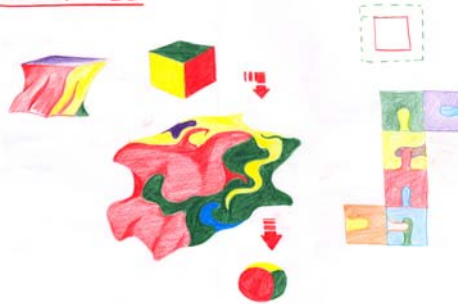


# Concepts

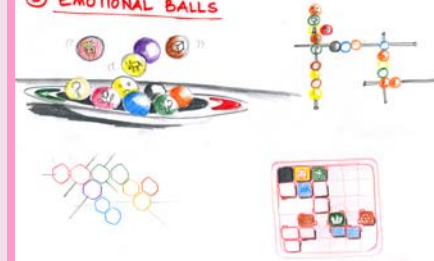
① COMMUNICATION BOARD



② SQUEEZY CUBE

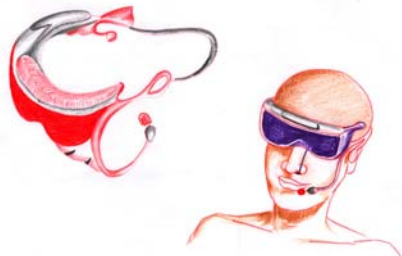


③ EMOTIONAL BALLS



- Based on "Abacus" and Folk "story painting"

④ VIRTUAL WORLD - HEADGEAR



⑤ FRUIT - (INTERACTIVITY)



⑥ SHARING COMPANION [PET]



# Final concept selection

On the basis of the user study experiments with forms shapes and textures  
It was observed that :

The users preferred a mixture between squeezy cube (that was soft and full of feel)

The users preferred the device to have ample space for the user to interact  
The device The users preferred the device to be of medium size, not too small or big

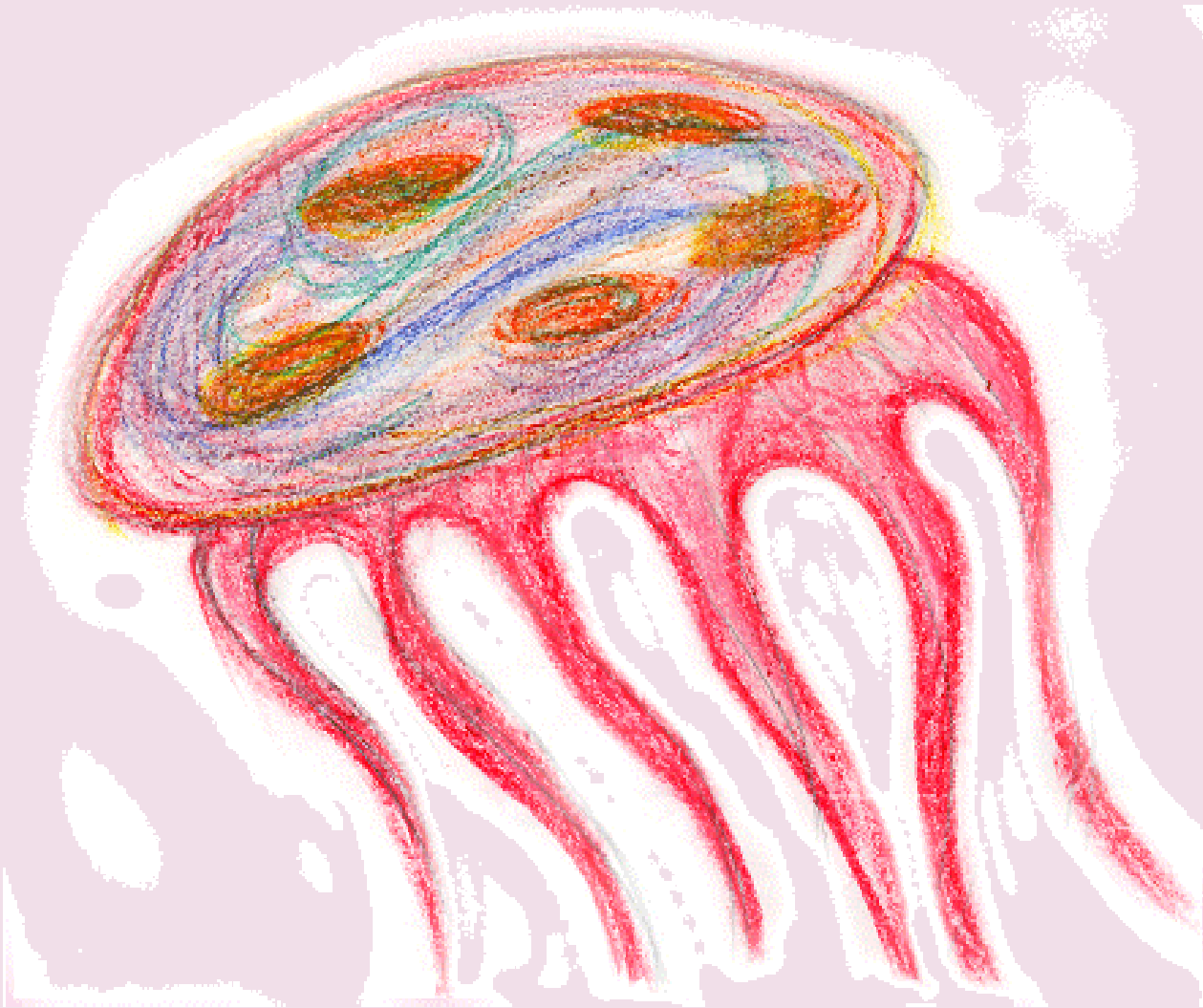
The users preferred intuitive interfaces.

The device should facilitate the user to develop and maintain friends(trust)

The users preferred an abstract language for communication.

The final concept was developed based on the user feedback as well as the alternate concepts.

The characteristics of a jelly like object were taken to develop for the form of the final concept.



Final Concept

Conceptual solution