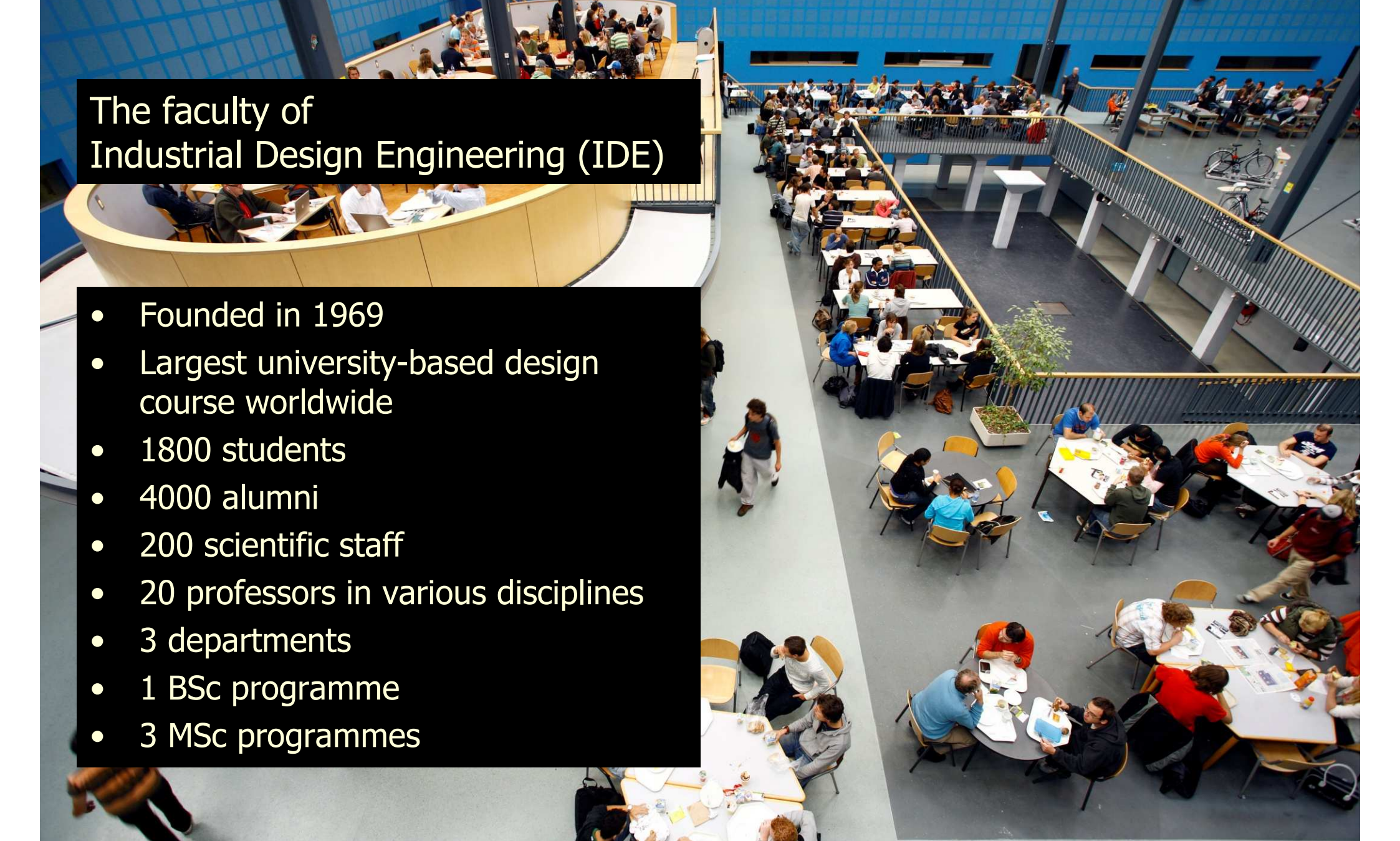


A group of about seven people are gathered in a modern building courtyard. They are looking at papers and documents spread out on the grass. The building has large glass windows and a sign that says "industriële ontwe". One person is wearing a yellow polo shirt and white pants, while others are in casual attire. The scene is bright and sunny.

Leading in Product Design

Dr. Vikram Singh Parmar
Faculty of Industrial Design Engineering

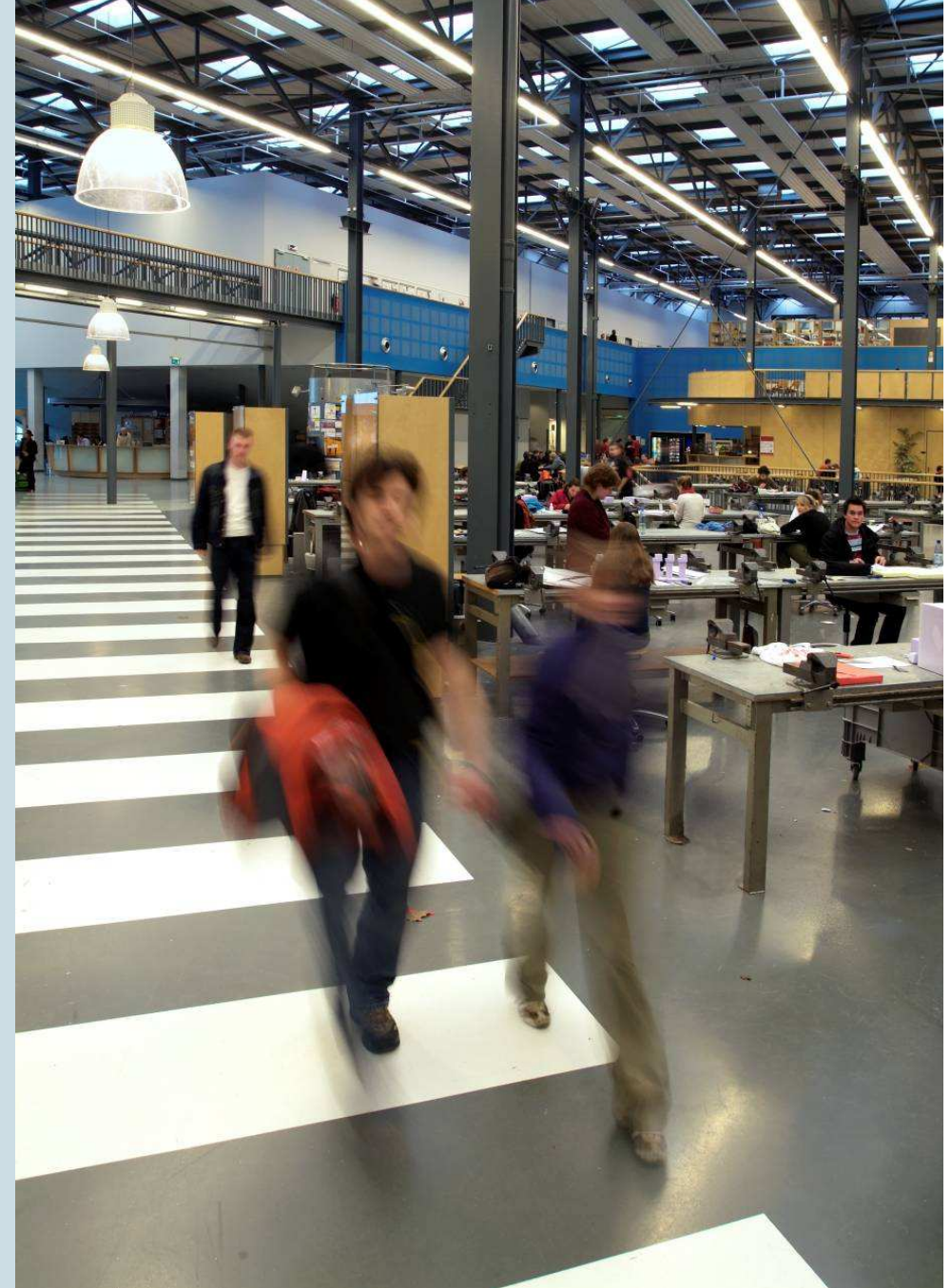


The faculty of Industrial Design Engineering (IDE)

- Founded in 1969
- Largest university-based design course worldwide
- 1800 students
- 4000 alumni
- 200 scientific staff
- 20 professors in various disciplines
- 3 departments
- 1 BSc programme
- 3 MSc programmes

The departments

- **Industrial Design**
appearance, interaction, use, design techniques
- **Design Engineering**
mechanics, materials, manufacturing, cost, CAD, electronics
- **Product Innovation & Management**
consumer behaviour, marketing, product management, design methodology



Research and product development

IDE's two major research themes:

- Design Theory and Support
- Design of Future Products

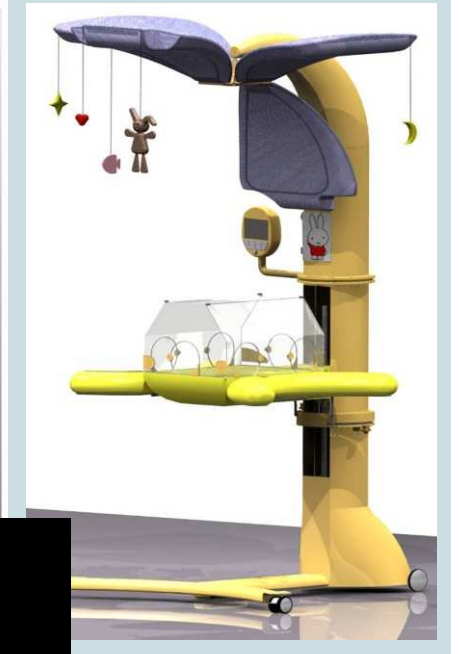
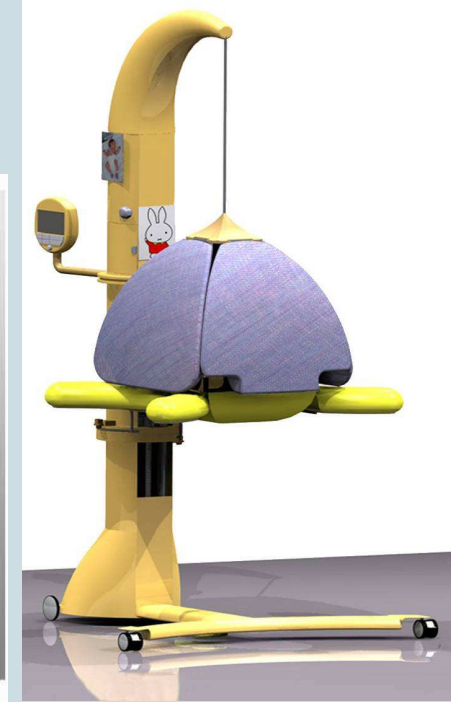
The research programme on consumer products and product development is the most comprehensive and in-depth programme worldwide



Products for Healthcare Medisign Delft

Medisign track trains dedicated and skilled engineers in human anatomy, physiology, medical technology, healthcare systems and basic surgical techniques:

- To meet the needs of specialist, physicians, therapists in all disciplines and, of course, patients and their family



Example of Medisign:
Babybloom

Research focus:
Western and Emerging markets

- Design for Diagnosis
- Design for Treatment
- Design for the Operating Room
- Products for Medication
- Nursing and Homecare
- Design for the Physically Challenged
- Prevention

Surgeons, PhD & Graduation
students, research staff



Design for Diagnosis

Design of a portable screening device for early detection of oral cancers in rural India (Philips Medical Systems)

Pen-shaped object and a processing unit connected to a fibre optic probe

Diagnosis instantly communicated to the user by a three-color LED



S.A. Hendrikse

Design for Diagnosis

Redesign of a prototype for the early Diagnose of lung cancer (Centre for Optical Diagnostic and Therapy)



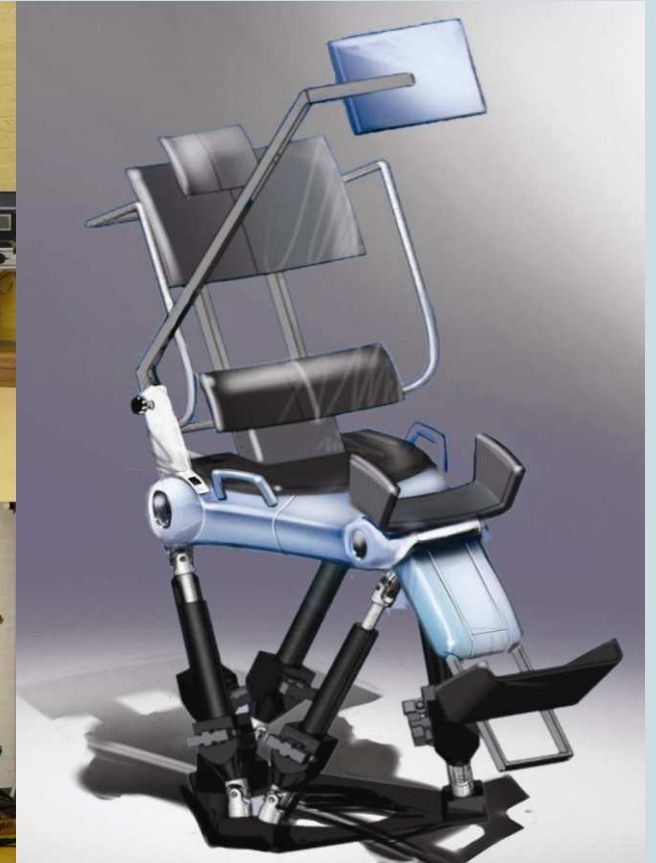
J.P.Vastert

Design for Treatment

Revalidation by means of virtual reality for physically weak hospital patients

Device evokes anticipatory and reactive muscle contractions in trunk and extremities for postural control

Competition elements to keep the exercise attractive

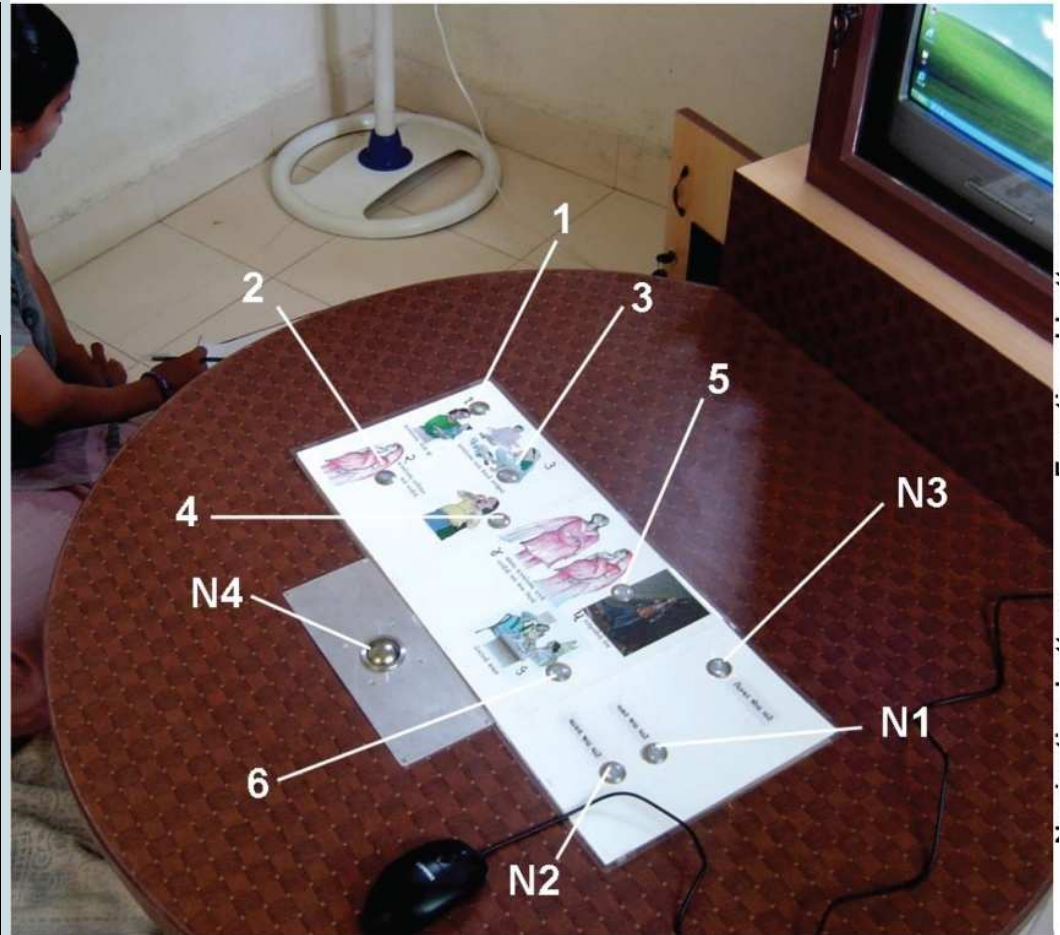


M.P. Menheere

Design for Prevention

Persuasive health information system for rural woman of India

Case: Maternal health & Menstruation



Parmar et al (2007,2008,2009)

Design for Prevention

Persuasive health information system for rural woman of India

Case: Maternal health & Menstruation



Design for Prevention

Mobile Persuasive health information system for rural woman of India

Case: Maternal health & Menstruation



Sweet box

TUI based on traditional metaphors



Information candy

Design for Prevention

Mobile Persuasive health information system for rural woman of India

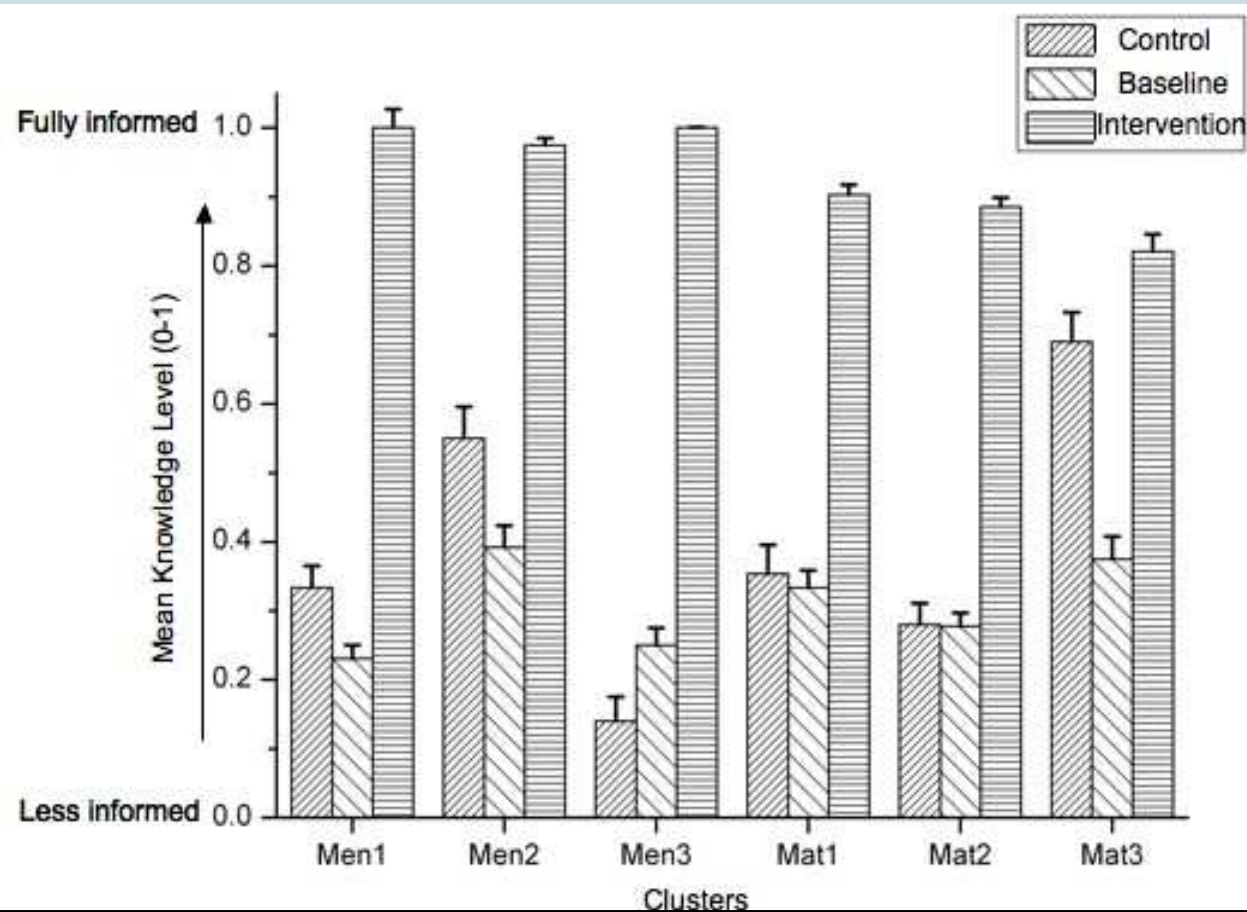
Case: Maternal health & Menstruation

Interactive sessions

(Parmar 2009)



Impact on mean knowledge level



Menses clusters:

- Men1- Societal stigma
- Men2- Menstrual practice
- Men3- Menstruation phenomenon

Maternal health cluster:

- Mat1- Nutritional habit
- Mat2- Maternal health phenomenon
- Mat3- Delivery practices

Collaboration opportunities

Diagnostic devices

Or early detection

Tele-medicine/monitoring

Product development
(software/hardware)

Usability testing with users

Behavior change intervention in rural
and urban areas



Turns dirty water into drinking water:
the Life Straw

A young child with dark hair, wearing a green long-sleeved shirt, is kneeling on a light-colored floor. The child is looking intently at a glowing white, cylindrical object that is attached to the back of a yellow toy truck. The object is illuminated with a bright blue and purple light. The toy truck is yellow with black wheels and features a red and white striped hazard symbol on its side. In the background, there is a wooden door and a Samsung television mounted on a wall, displaying the number 1749. A black text box is overlaid on the right side of the image.

Helps autistic children learn words:
LINKX