

# *Environmental Properties of Construction Materials*

**Psychological effects of wood in indoor use**

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# *Background*

- **Ongoing project:**  
*Psychological benefits of wood in indoor settings*
- **Research questions for this study:**
  - What does people associate with natural building materials?
  - Are specific building materials associated with a good indoor environment?
  - Which environmental attributes are considered important by consumers?

# *Method*

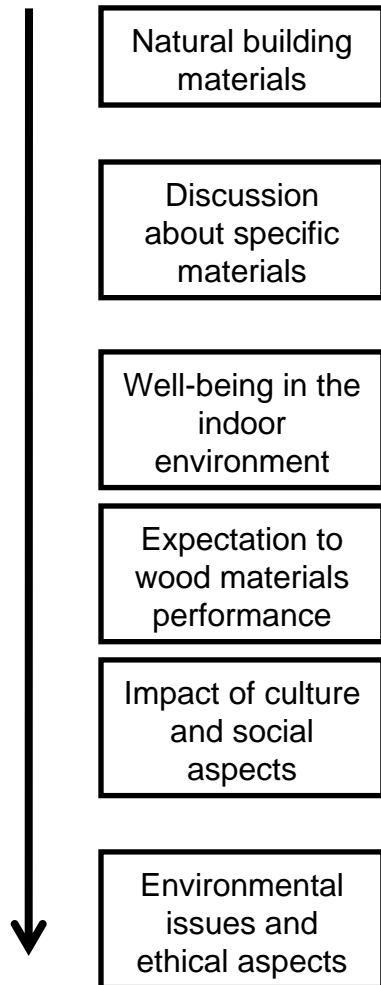
- **Focus group analysis**

**”... provide information about a range of ideas and feelings that individuals have about certain issues, as well as illuminating the differences in perspective between groups of individuals.”**

*Rabiee 2004*

- **Structured discussion within a group of people**
- **Commonly used in sociology and marketing**
- **Testing of concepts, experiences and attitudes**
- **Conducted in cooperation with Statitcs Norway**

# Implementation



- **Preparation of guide**
- **Recruiting participants**
- **Data: recording of sound, video, transcription**
- **Analysis**

# *Participants*

- 1. Non-scandinavians (male + female)**
- 2. No previous experience with building/remodeling (m+f)**
- 3. Previous experience with building/remodeling (f)**
- 4. Previous experience with building/remodeling (m)**

## *Group discussion*

### **Discuss selected themes**

- **Describe their home and experience with building/remodeling**
- **Assess four wood material samples**
- **Well-being in indoor environment**
- **Expected performance of wood building materials**
- **The importance of cultural and social background**
- **Environmental and ethical issues**

# *Naturalness*

- **Not processed / close to natural features**
- **Should not contain chemical additives**
- **This concept is easily misinterpreted**

## *Impact on interior environment*

- **Variation and contrasts in material**
- **Overall impression**
- **Adjusted to time and place**
- **The need to individualize the internal environment**
- **Materials that can withstand wear and tear**
- **Ideal: Combinations of materials that ensure variety in the visual impression of the room, but at the same time constitute a whole**



## *Use of wood*

- **Housing: cozy, warm feeling**
- **Tactile qualities, e.g. wooden flooring (also public buildings)**
- **Impressions must match the building's function: public buildings should not look like a private residence**
- **Promote the use of timber outside the housing market by developing products that does not express typical wood characteristics**

## *Experience with building/remodeling*

- **Key explanatory variable**
- **Perceived experience**
- **Technical characteristics**
- **Technical solutions**
- **Quality and performance: People with experience have more realistic expectations**

## *Cultural/social background*

- **Key explanatory variable**
- **Non-Scandinavians: Overwhelmed by the use of wood in Norwegian homes**
- **Standard of living: High standard of living = high expectations**
- **Home Improvement: Cheap vs. expensive strategies**

# *Environmental properties*

- **Interpreted in a number of ways**
  - Sustainable raw material
  - Durable product
  - Local sourcing of material/closeness to production site
  - Organic products, Bio-dynamic
  - Recycling
  - ...
- **Typical consumer segments**
  - Pragmatic consumers (trusts authorities)
  - Environmental conscious consumers
  - Sceptics

# *Environmental issues*

- **Purchasing decision**
  - Previous experience
  - Time left to purchase
- **Consumers have no clear understanding of why a product is environmentally beneficial**
- **Communicate why your product is environmentally friendly!**
- **How do you do this?**
  - EPD
  - GWP
  - LCA
  - Other...