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Customer's perspectives on a residential  
development using the Laddering method,  
Exploratory and Confirmatory Factor analysis

# Part one: Research question and objectives

- **Practical problem:** If the product is not appreciated by consumers they will search for another alternative which will decrease the estimated market share for a specific residential project.



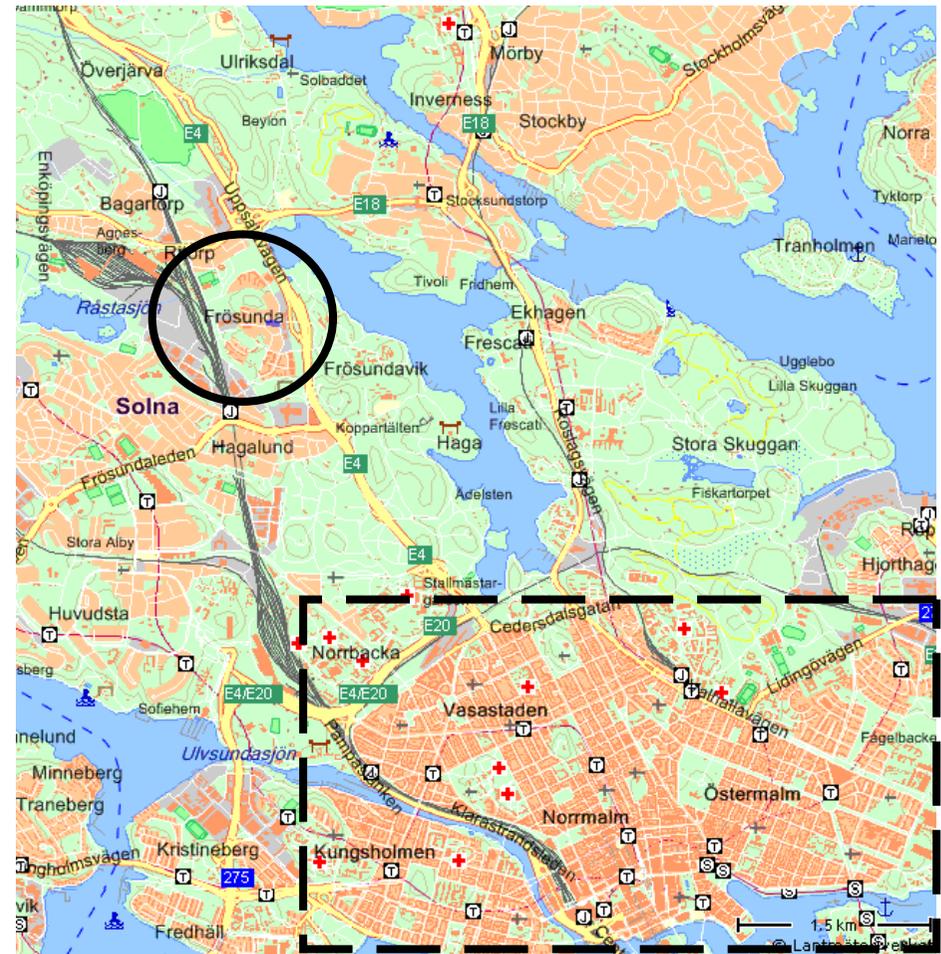
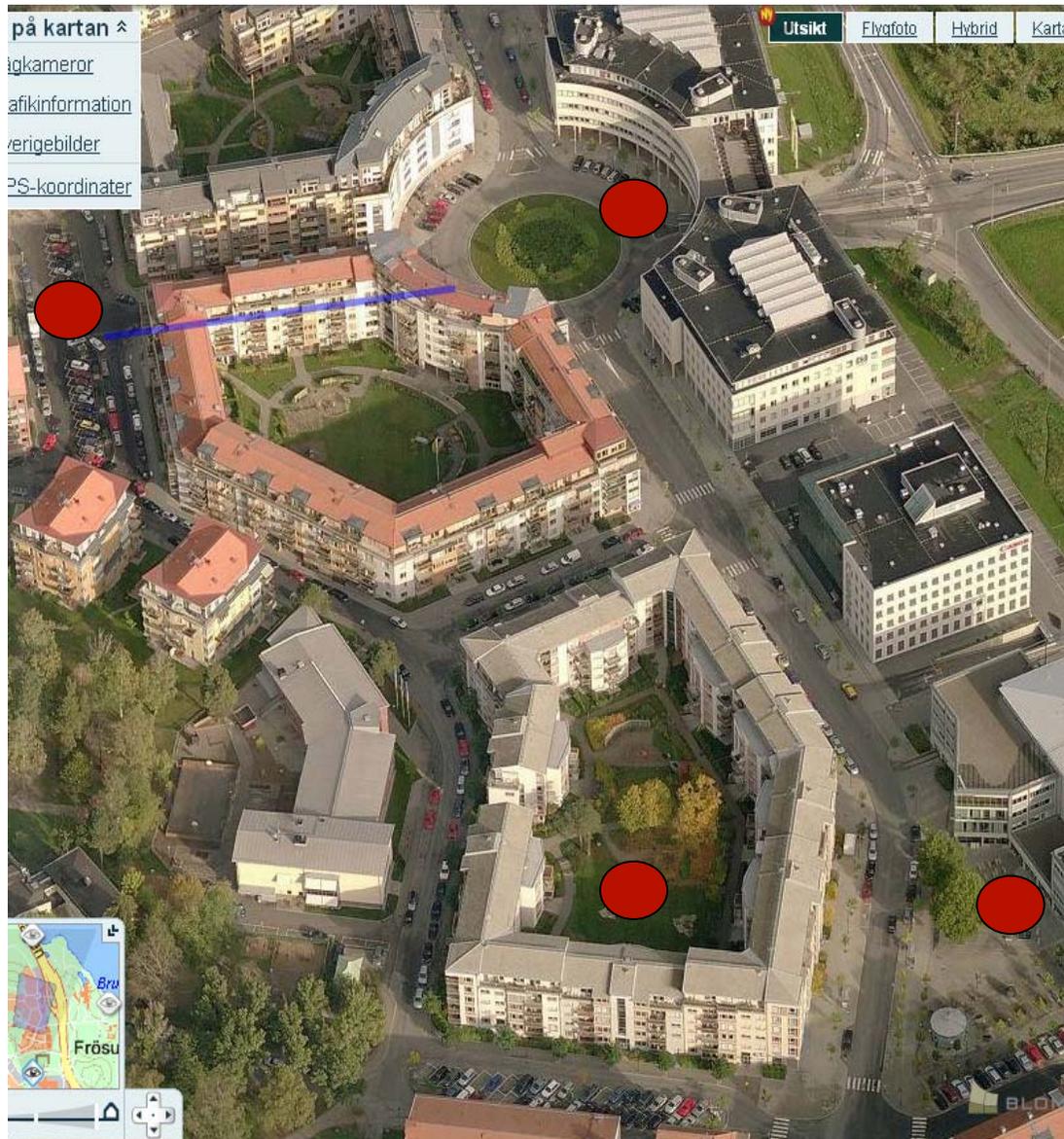
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**Research question:** So, why do some people buy in certain residential developments and others do not? Can the means-end chain theory and the laddering technique guide developers to an improved understanding on how to design and build more attractive residential developments?

**Hypothesis:** We hypothesise that there exists a difference between bidders and non-bidders regarding their beliefs of functional and psychological consequences and abstract personal values.

- **Results:** The hypothesis was confirmed. There is a difference in previous buyers', bidders and non-bidders cognitive profiles with respect to desired functional and psychological consequences and their personal values.

# The residential development, Frösunda



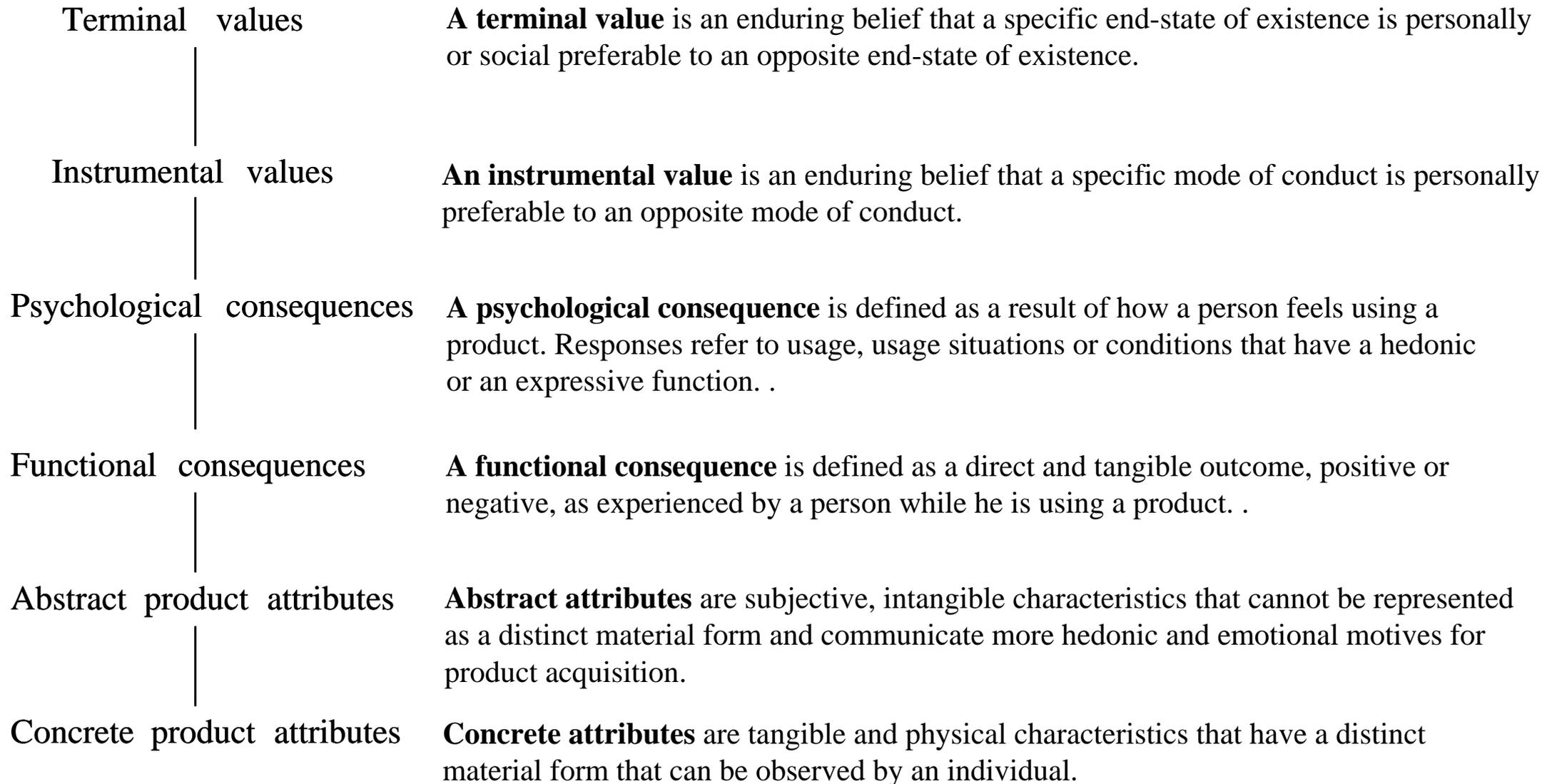
# Part one: Research methods and procedures



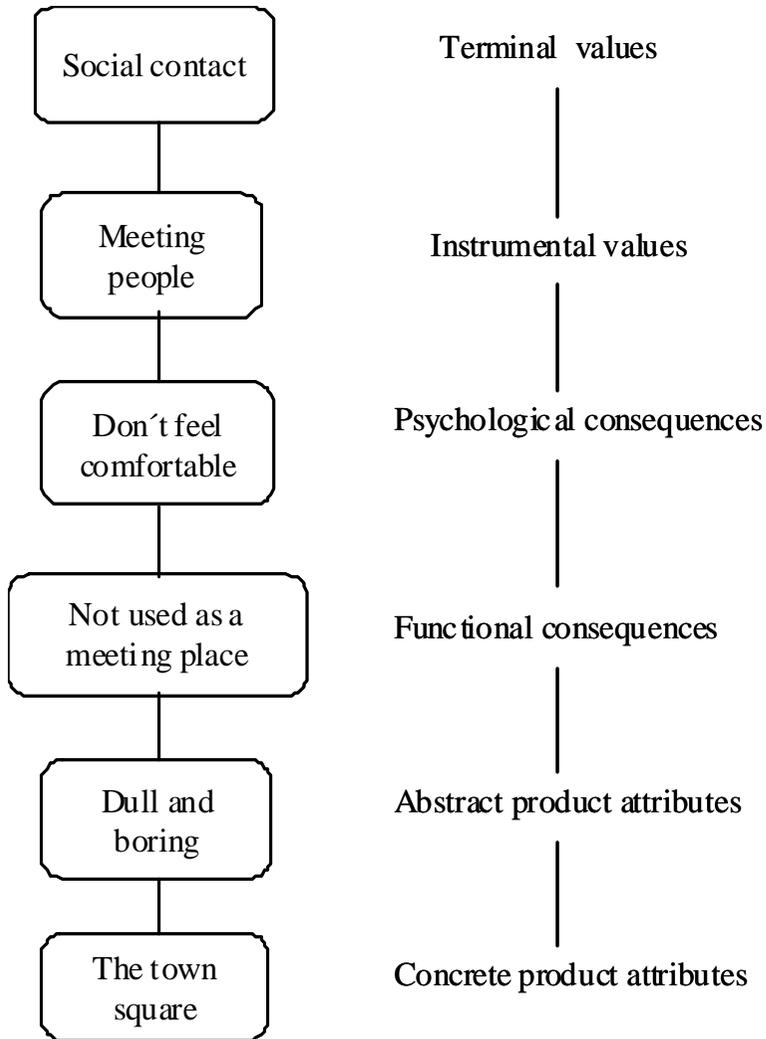
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- The means-end chain theory and the laddering technique were used to elicit beliefs of residents and potential buyers.
- Interviews were made with 32 respondents that visited open house sales of tenant-owned apartments on sale in the residential development Frösunda.
- Mean-end chains that we found were categorised into a set of beliefs reflecting attitudes towards the locations that were chosen in Frösunda.

# Modell over the means- end chain theory



# The laddering technique



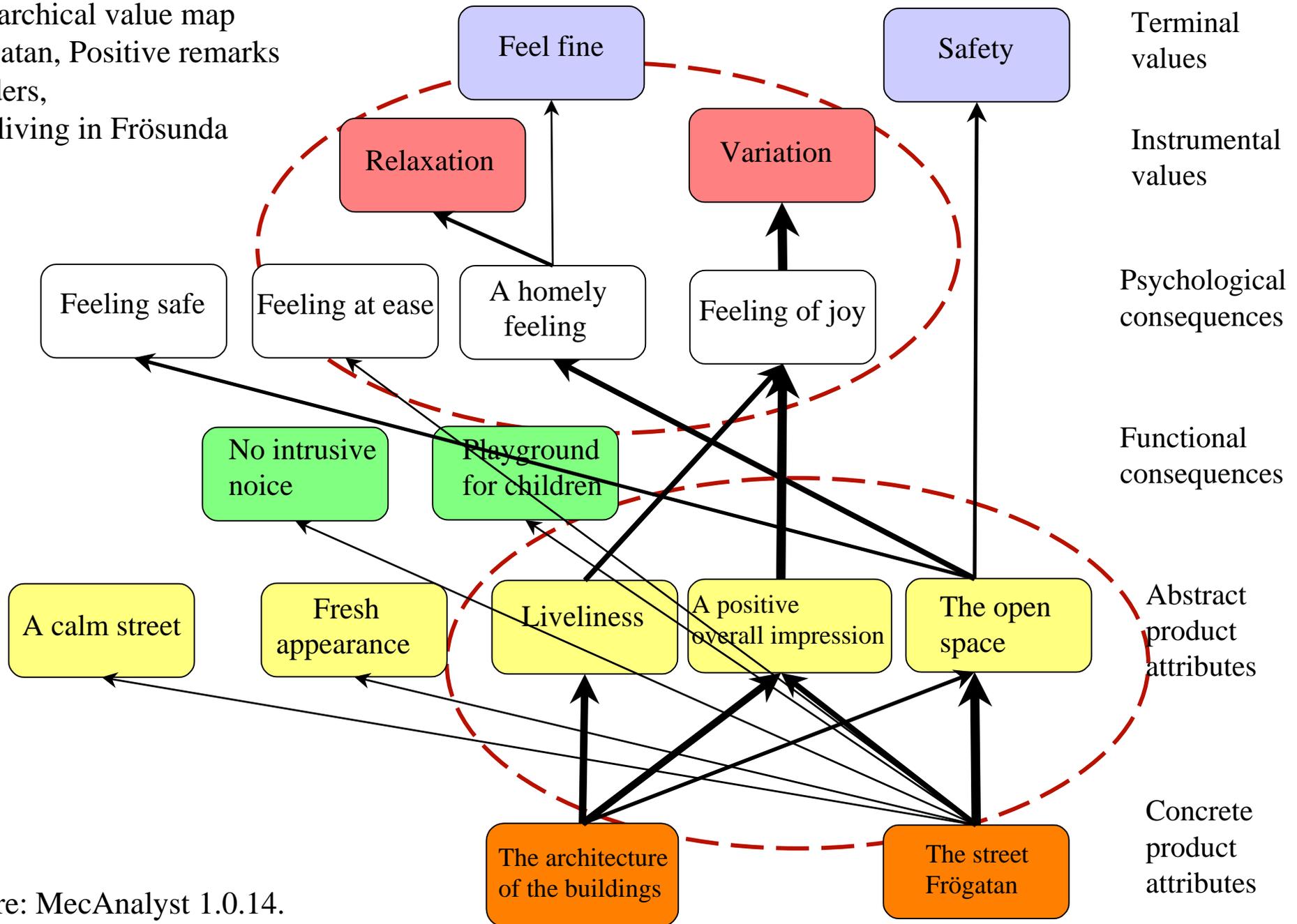
The laddering technique is developed as an in-depth interview technique to elicit means-end chains from a respondent (Reynolds and Gutman, 1988).

Laddering data is visualised as categorised meta-data by hierarchical value maps (Reynolds, Dethloff and Westberg, 2001).

Laddering probes:

- Why is that important to you?
- How does that help you out?
- What do you get from that?
- What's wrong with that?
- Why do you want to avoid that?

Hierarchical value map  
Frögatan, Positive remarks  
Bidders,  
Not living in Frösunda



Software: MecAnalyst 1.0.14.

# Evaluation of the research hypothesis



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- Hypothesis 1: “If a bid is made, then the beliefs of those individuals who bid will differ from those of those individuals who prefer not to make a bid with respect to product attributes, functional and psychological consequences and personal values”.
- Within the group of bidders the advisory board found a larger number of positive abstract attributes and functional and psychological consequences than within HVMs for non-bidders.
- Bidders had fewer negative abstract attributes and fewer negative functional and psychological consequences than non-bidders. Negative beliefs showed less variation between bidders and non-bidders, however negative beliefs were more frequent in the group of non-bidders.
- The hypothesis was not confirmed at the level of terminal values. The hierarchical value maps show different instrumental values and functional and psychological consequences in the group of bidders and non-bidders. This was also the case for abstract product attributes.

# Part two: Research question and objectives

- Research problem: Do beliefs and attitudes explain perceived quality and does perceived quality impact the willingness to buy? Perceived quality is defined by (Zeithaml, 1988) as a subjective and overall evaluation of a product.

Can we verify that some key dimensions have an impact on buyers perception of quality regarding how an existing residential development has been built?



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- Research methods:

A questionnaire is set up by using beliefs and attitudes of residents and potential buyers. The laddering study provides this information.

Exploratory Factor Analysis (EFA) is used to uncover the underlying structure (dimensions) of beliefs and attitudes.

Confirmatory Factor Analysis (CFA) and Structural equation modeling (SEM) is used for testing causal relationships between dimensions that we found and their effect on the latent variables perceived quality and willingness to buy.

# Research method: the questionnaire

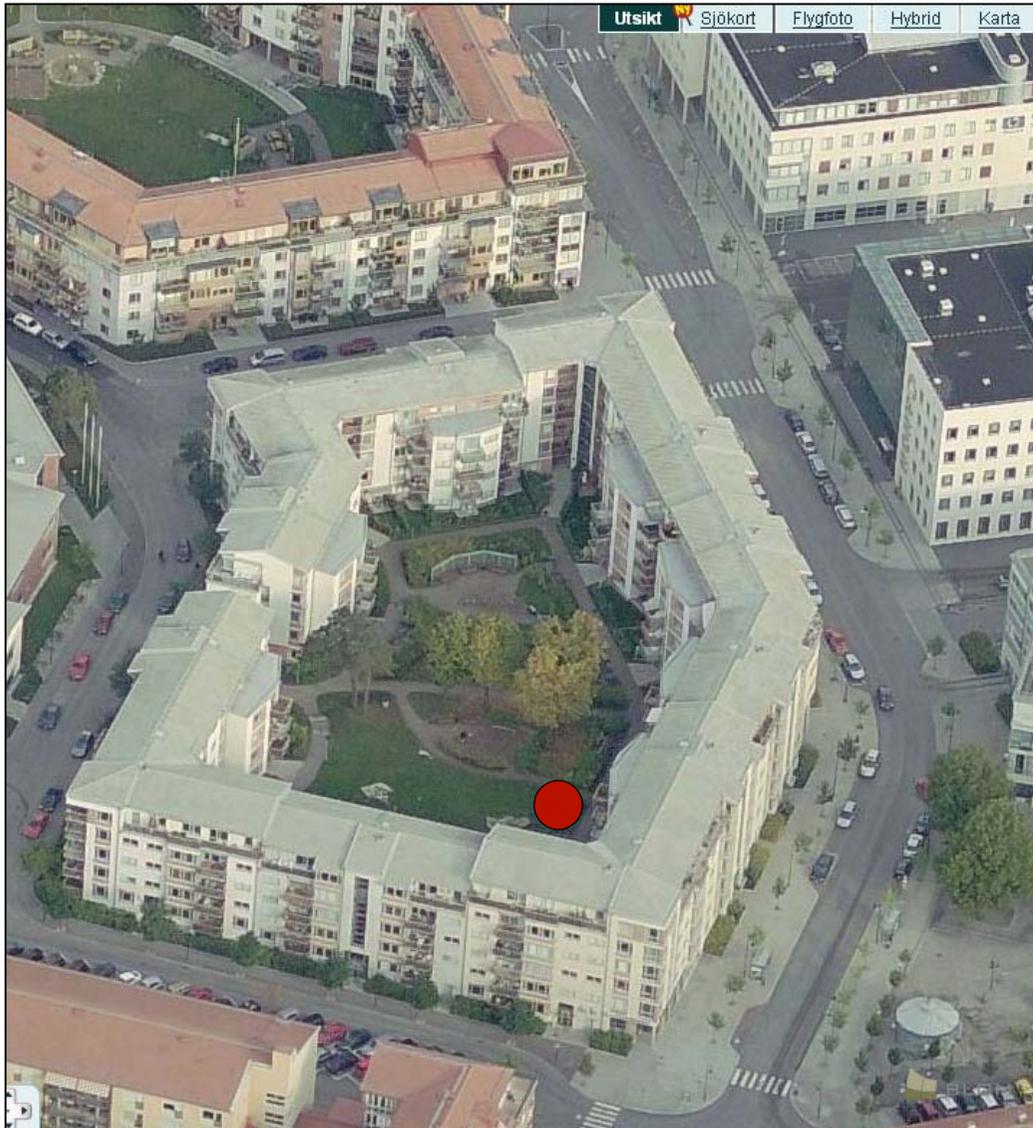
Group 1				
Number of questionnaires:	174			
Number of respondents	Bidders	Non-bidders	Total	Percentage
	58	33	91	52,3 %
Group 2				
Number of questionnaires:	153			
Number of respondents	Residents/buyers		Total	Percentage
	98		98	64 %
Total			189	57,8 %

Likert scale: 5 – 7 items is summed to a mean score. Explanatory Factor Analysis is used to

determine dimensions.

<input type="checkbox"/>	Frösunda-Entré-A	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1 <input type="checkbox"/>	This is really a nice town environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

# The survey in Frösunda



## Dimension: a town environment

Frösunda Entre´:	Bidders	Non-bidders
Mean:	3,9	3,5
T-value:	2,94	
Significant level 0,05	0,00 ***	

Frögatan:	Bidders	Non-bidders
Mean:	3,8	3,4
T-value:	2,93	
Significant level 0,05	0,00 ***	

The inneryard:	Bidders	Non-bidders
Mean:	<b>4,2</b>	<b>3,6</b>
T-value:	<b>4,18</b>	
Significant level 0,05	0,00 ***	

Frösunda square:	Bidders	Non-bidders
Mean:	3,8	3,5
T-value:	2,45	
Significant level 0;05	0,01 **	

# The survey in Frösunda



## Dimension: a town environment

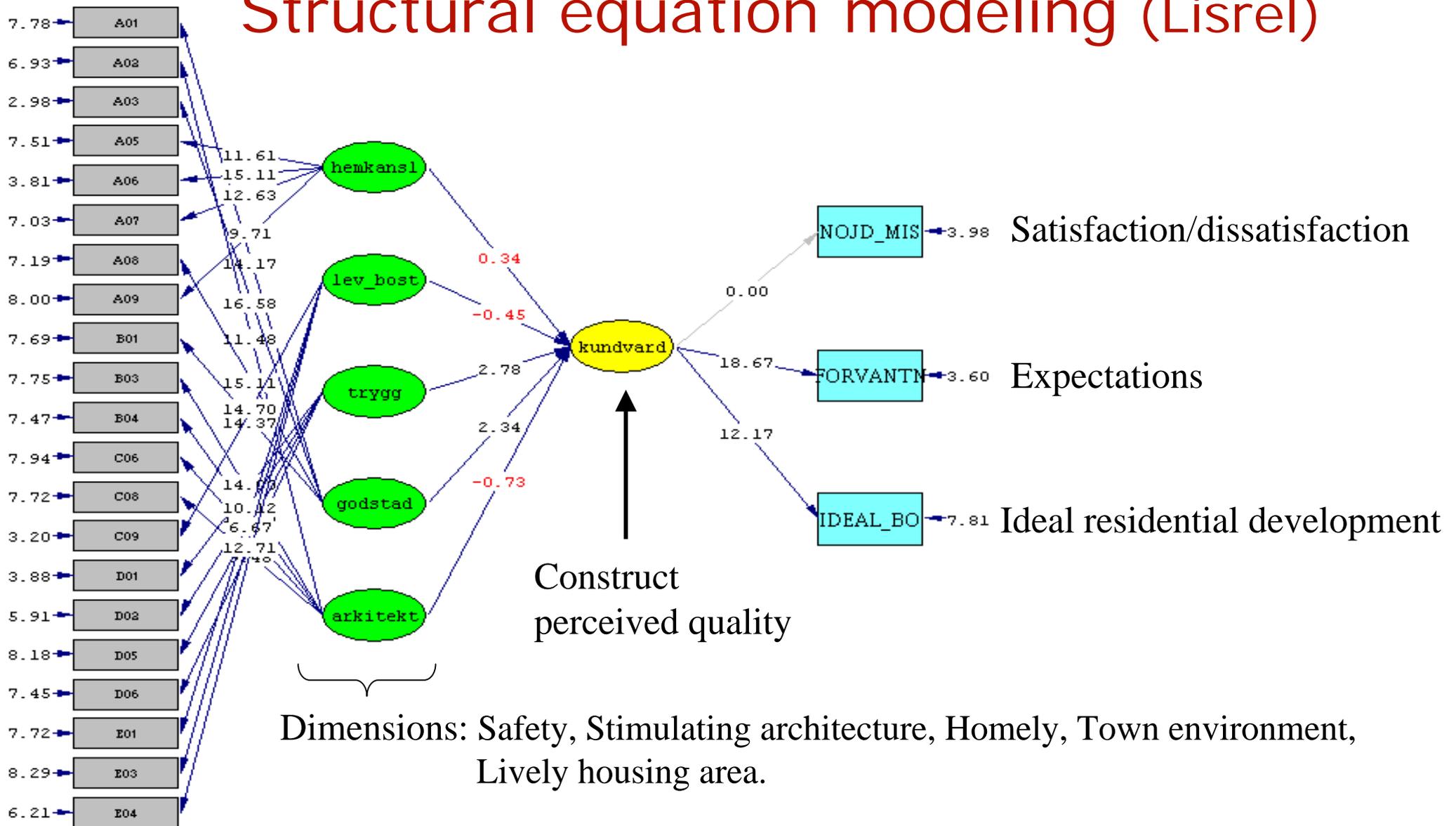
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# Structural equation modeling (Lisrel)



Chi-Square=997.23, df=237, P-value=0.00000, RMSEA=0.148

# Conclussion

Contribution to empirical research:

- We can identify and measure dimensions that effect residential buyers´decisions to buy or not.



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Contribution to practitioners:

- A tool that can be used to evaluate existing residential developments.
- A possibility to adapt the conceptual design of a new residential development to specific target groups preferences.