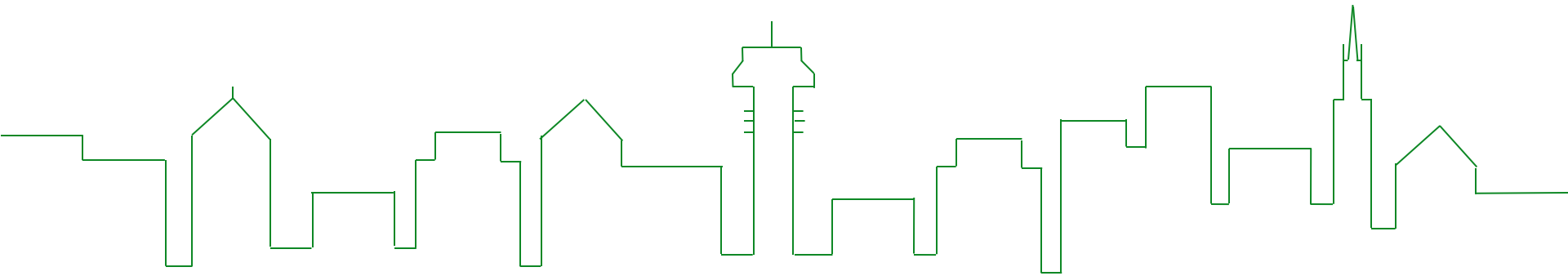


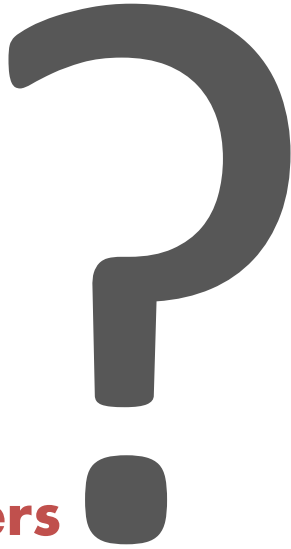
Use of **Bio-based** Building Materials

*Perceptions of Swedish Architects,
Contractors, and developers*



Emilia Markström, Anders Bystedt, Magnus Fredriksson, Dick Sandberg

Probability, drivers, barriers



Semi-structured interviews

architects

contractors

developers

**Theory of
Planned
Behaviour**

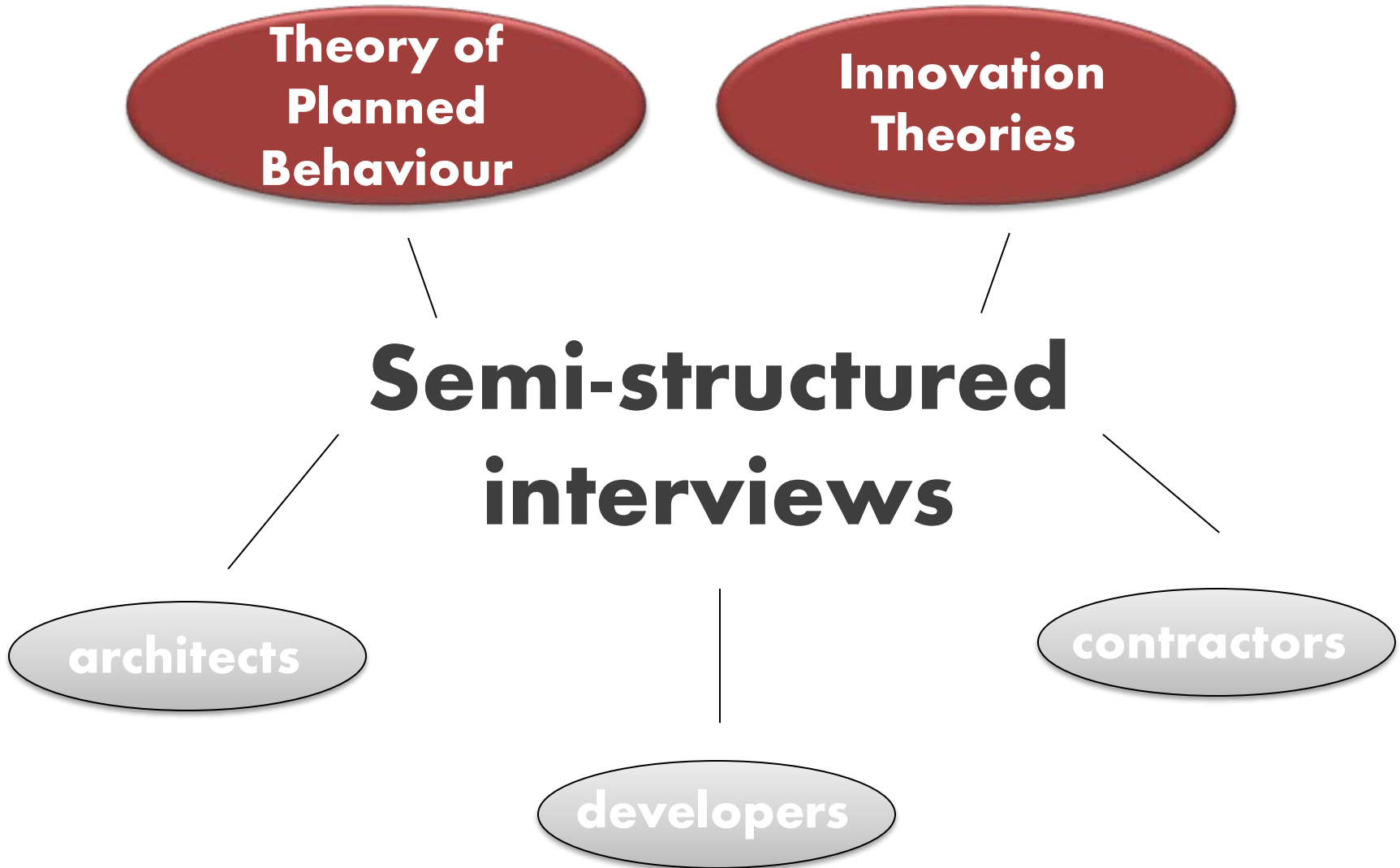
**Innovation
Theories**

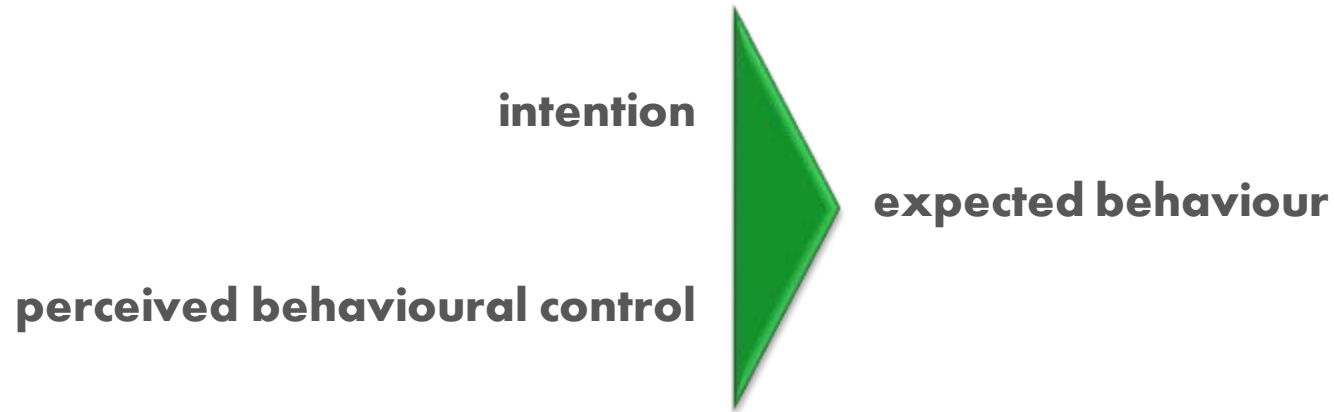
**Semi-structured
interviews**

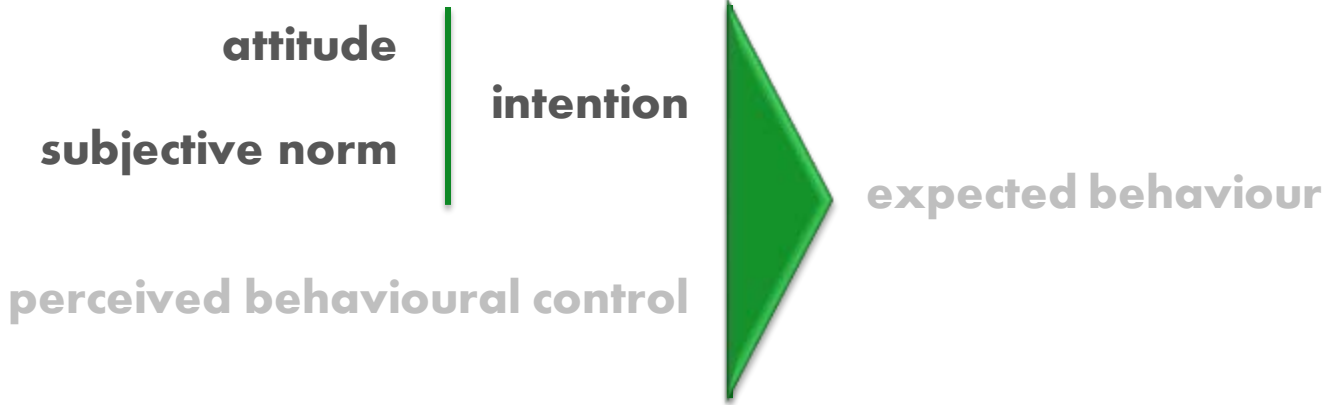
architects

contractors

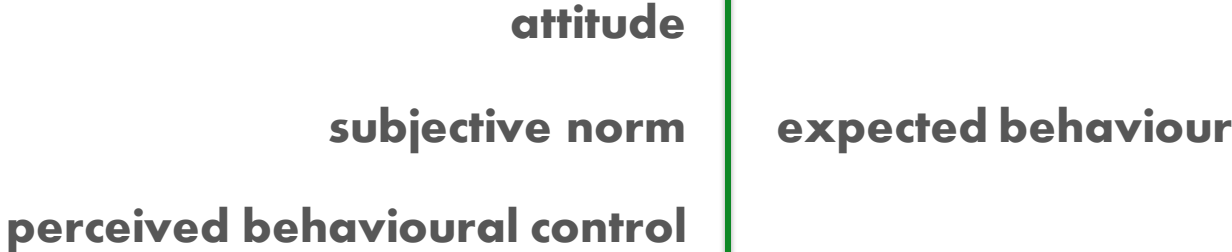
developers







TPB



results ?

expected behaviour

attitude



subjective norm

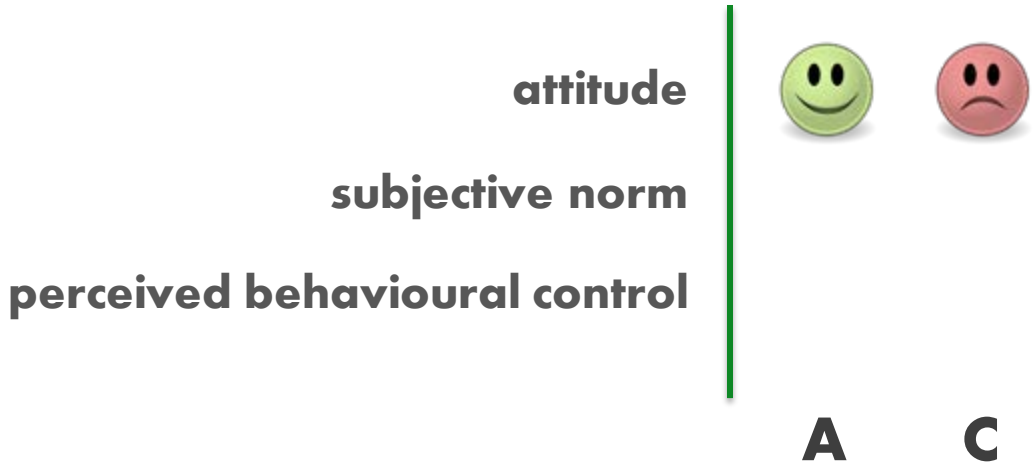
perceived behavioural control

A

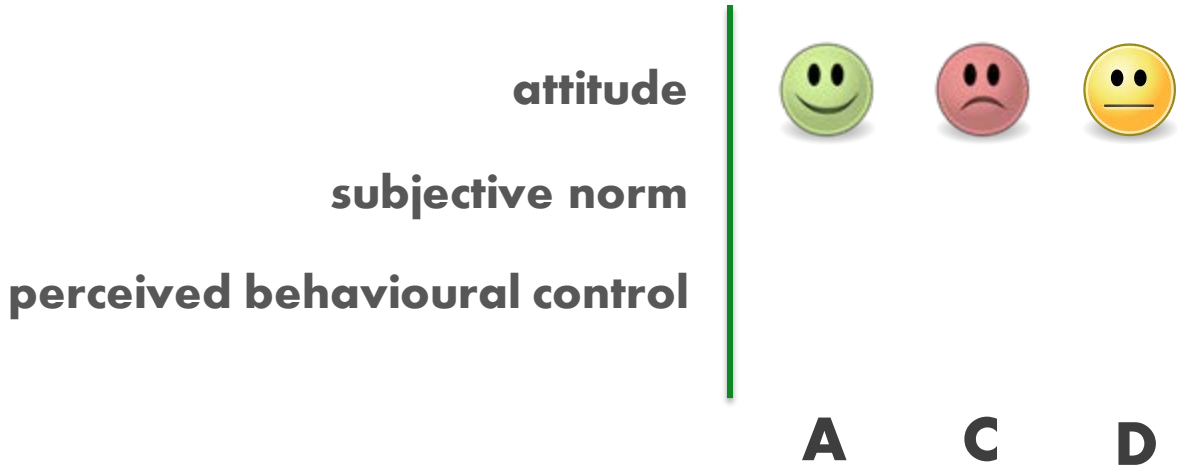
**“It is nice to have at least some part of
the exterior made in wood since it
provides a warmth.”**

(Architect)







expected behaviour



expected behaviour










expected behaviour

attitude			
subjective norm			
perceived behavioural control			
	A	C	D










"Today, one is more willing to use bio-based materials than before but there also exists a resistance."

(Developer)

expected behaviour

attitude			
subjective norm			
perceived behavioural control			
	A	C	D

expected behaviour

attitude			
subjective norm			
perceived behavioural control			
	A	C	D

Barriers

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**tradition in building with concrete
new and not tested**

Barriers

tradition in building with concrete

new and not tested

bad examples

lack of knowledge

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shortage of construction workers
local plan
insurance issues

Drivers

Drivers

faster construction

Drivers

faster construction

social benefits
green building certification
political pressure

Drivers

faster construction

social benefits

green building certification










political pressure

lack of labour



conclusions

expected behaviour

attitude			
subjective norm			
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	A	C	D

Barriers

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tradition in building with concrete
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conclusions

1. Probability = low

conclusions

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2. Key barriers:
 - culture and habits
 - material properties

conclusions

1. Probability = low
2. Key barriers:
 - culture and habits
 - material properties
3. Key drivers:
 - environmental performance

conclusions

1. Probability = low
2. Key barriers:
 - culture and habits
 - material properties
3. Key drivers:
 - environmental performance
4. Barriers tend to outweigh the drivers

thanks

