

Beyond the water efficiency calculators

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Introduction

Part of a wider research plan which hopes to:

- Understanding behavioural determinants for optimised design and implementation of shower efficiency solutions in homes
- Integrate this knowledge into existing water assessment calculators and toolkits

Aim:

- To understand how water consuming behaviour is formed

Overview

- Climate change and population growth is increasing water stress in some areas of the UK
- Water shortages are in part rooted in human behaviour
- Linking psychological variables to consumption patterns is essential for a robust demand forecasting

Non-
discretionary

Amount of water
considered
necessary for the
given task

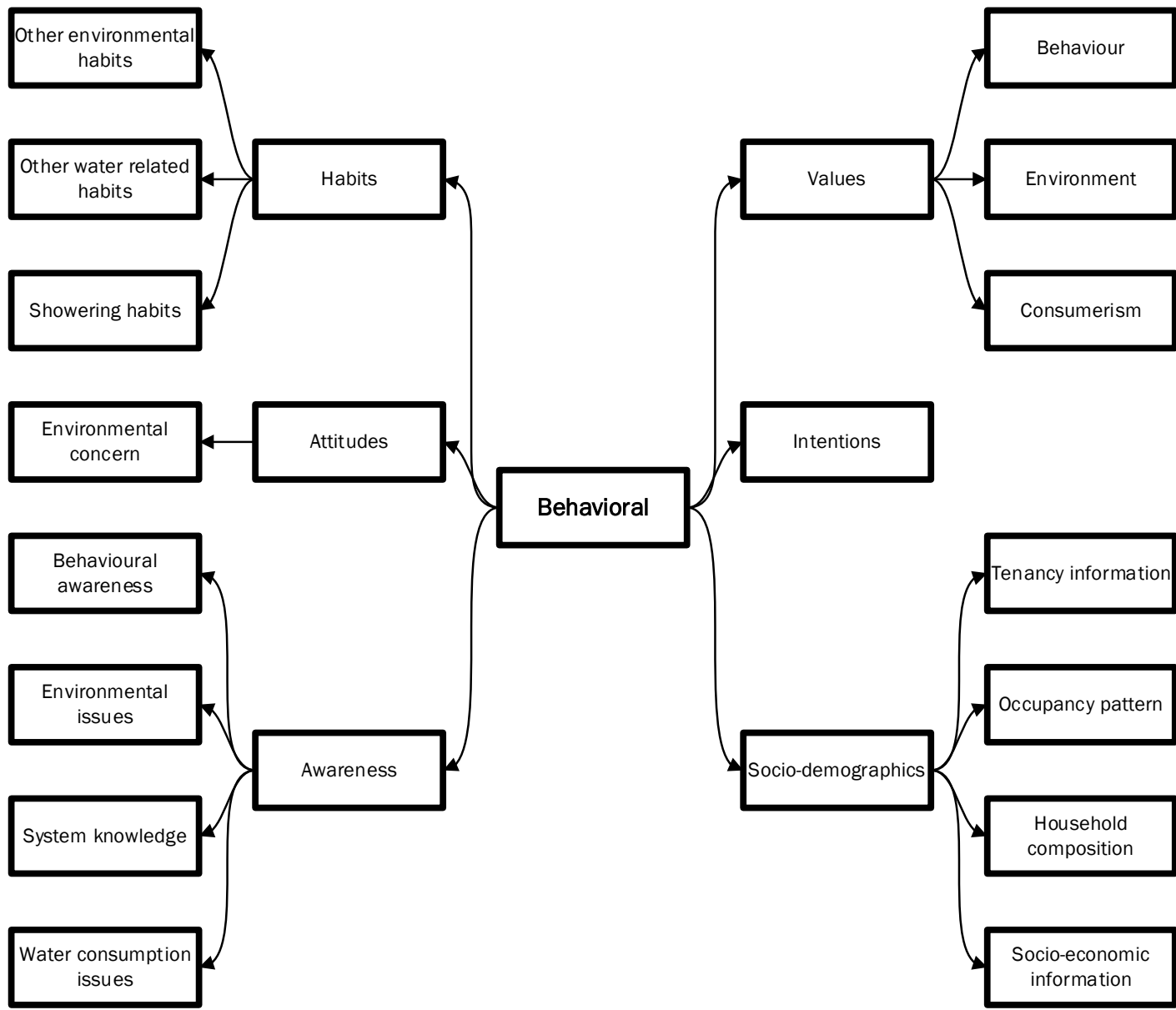
Discretionary

The amount of
water consumed
surplus than
necessary for the
given task

Behavioural models

- Rational choice model
- Reasoned choice model
- Interpersonal model
- Gregory model

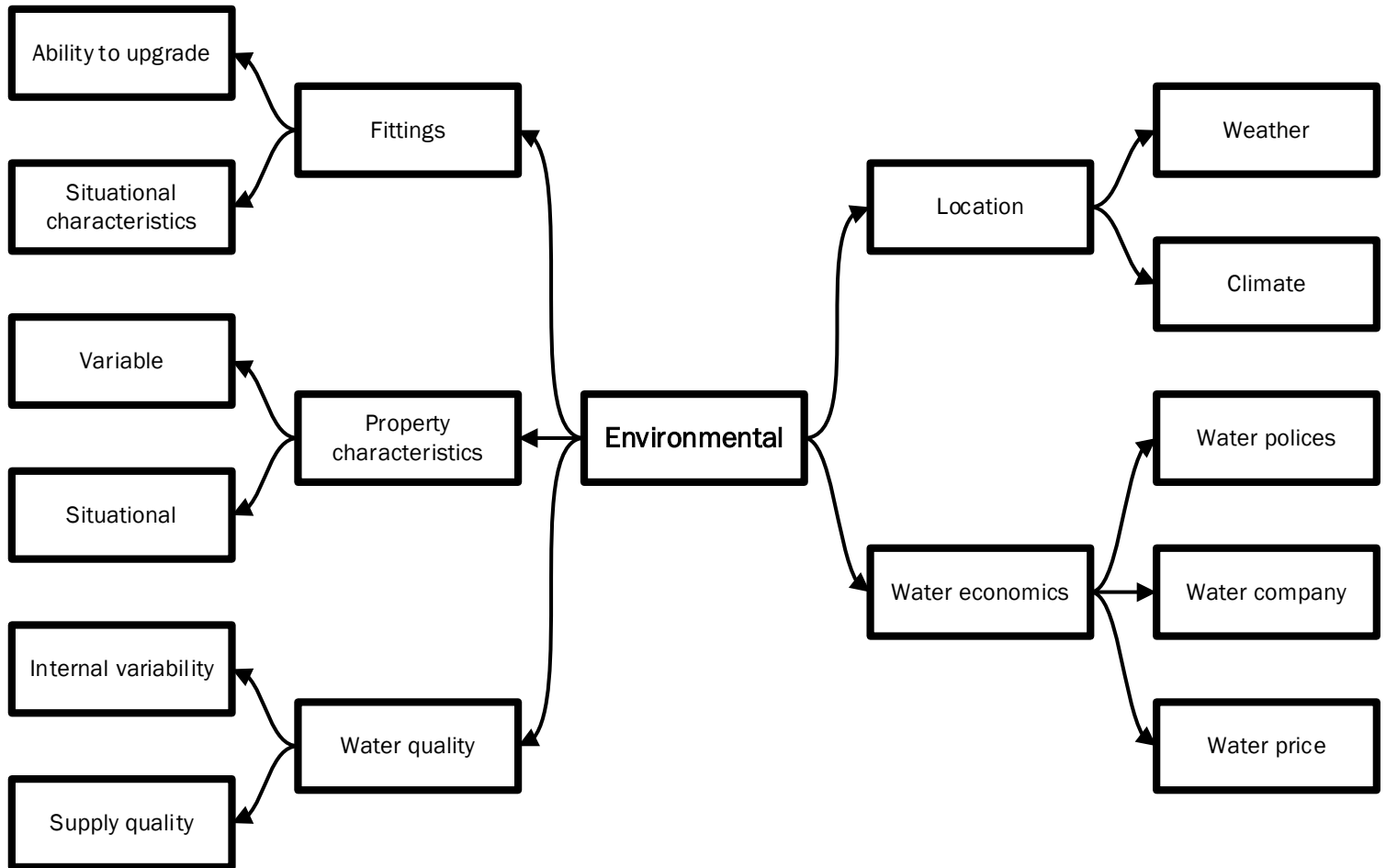
	Rational choice	Reasoned	Interpersonal	Gregory
Attitude		✓	✓	✓
Intention	✓	✓	✓	✓
Subjective norm		✓	✓	✓
Social factors		✓	✓	✓
Affect			✓	✓
Habits		✓	✓	✓
Facilitating conditions	✓		✓	✓
Reflexes				✓
Awareness	✓			✓
Involvement				✓

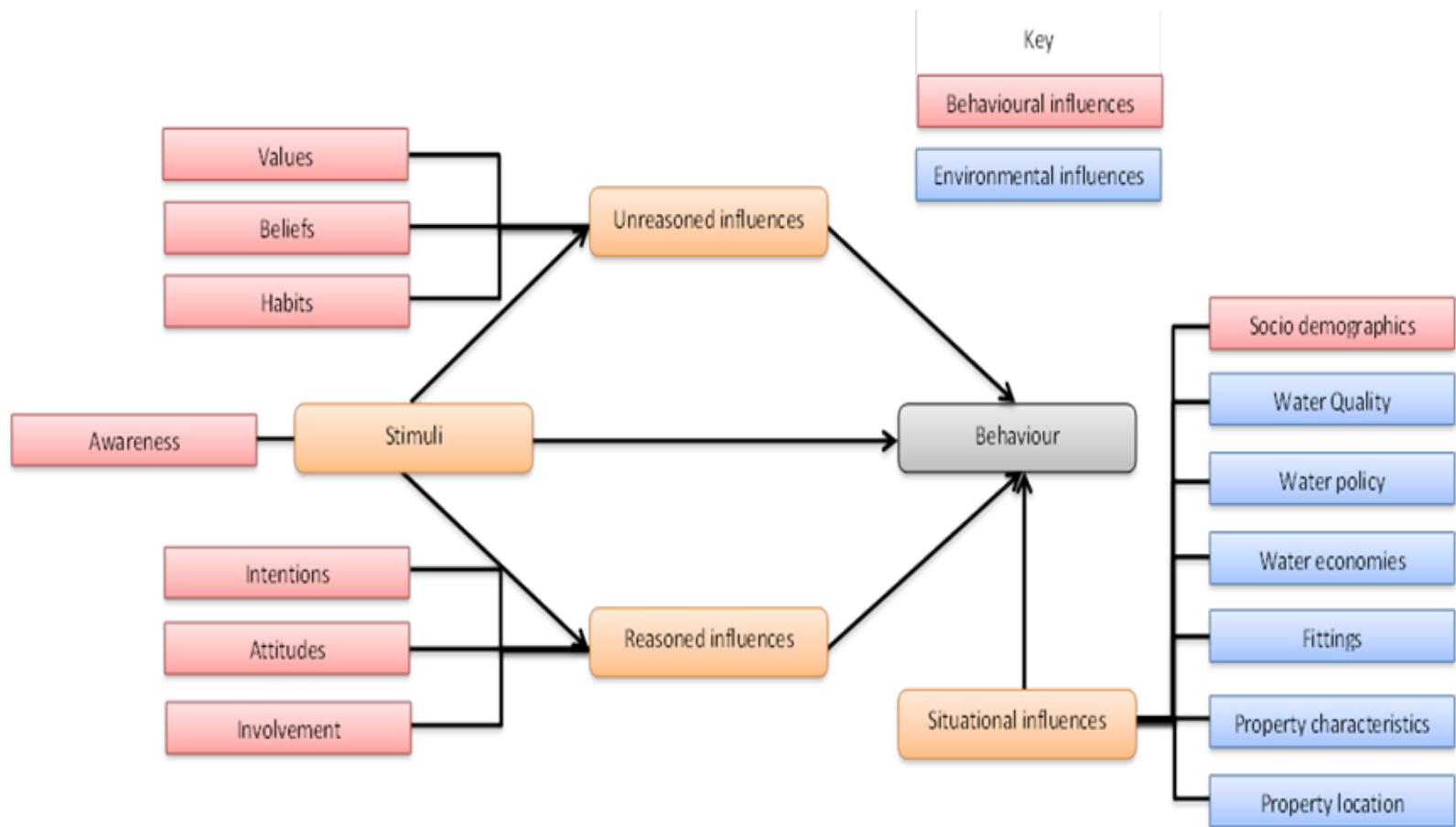


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Conclusion

- Expands on existing assessment methodologies
- Integrates behavioural characteristics
- Initial platform for understanding water consuming behaviour
- Further evidence is required to explore the efficacy of this model

Thank you

More information about the paper:
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www.waterefficientbuildings.co.uk