Circular Economy Behaviours

How should we measure change?

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Introduction

This research project focuses on understanding the social and behavioural aspects of transition to a circular economy in Scotland. The project aims to better understand the dynamics of behaviour change over time from the perspective of individuals, households and organisations. A lack of data on uptake of household circular economy behaviours and an absence of available validated instruments to measure uptake across relevant behaviours led to the development of the Circular Behaviours Scale, drawing on knowledge of best practice in psychometric methods.

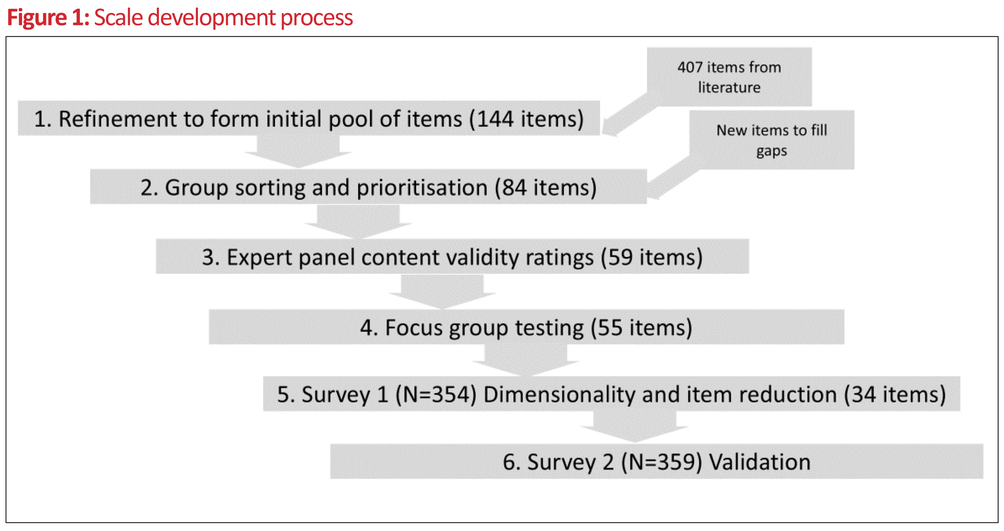
This scale has been used in a national representative survey of the Scottish Population and provides a useful baseline against which any future change can be measured. The research is informing development of the Scottish Government's Circular Economy Monitoring and Indicator Framework.

Methods

Development of Scottish Circular Behaviours Scale

Our starting point was that there was a lack of theoretical understanding related to circular economy behaviours, and associated scales to measure them. We followed a 6-step process to create, test, and validate a new circular economy behaviours scale.

Figure 1: Scale development process



National survey

In the Scottish Circular Behaviours Survey, we set out to answer the following research questions:

1. What are the key types of behaviours of the general public relevant to circular economy policy and how can we measure these types of circular behaviour in a robust way?
2. What is the level of uptake of different circular behaviours in the Scottish population? Which groups are more/less likely to perform different behaviours?
3. What other factors influence the extent to which people perform different types of circular behaviours?

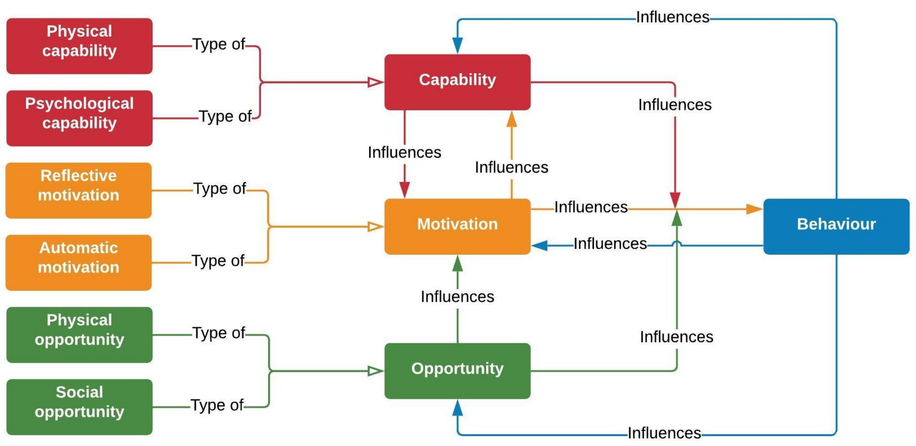


Figure 2: Exploring relationships between motivational factors and circular behaviours

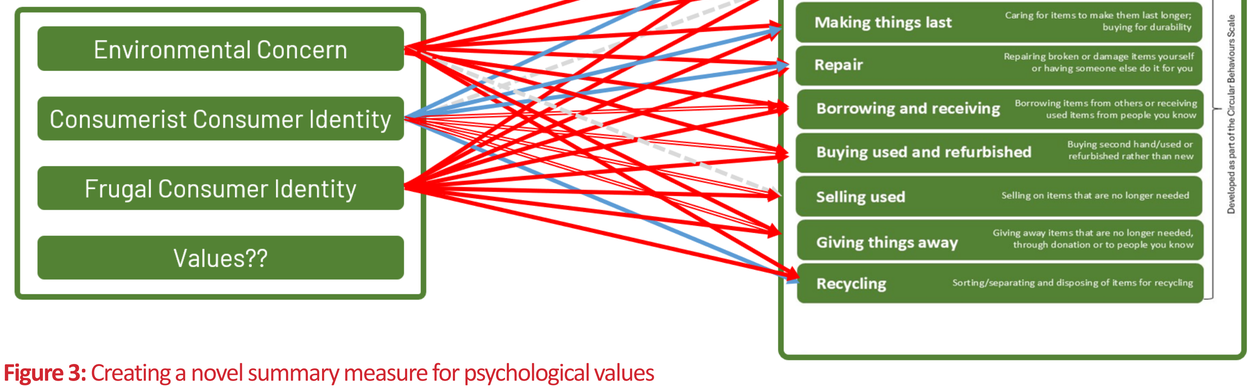
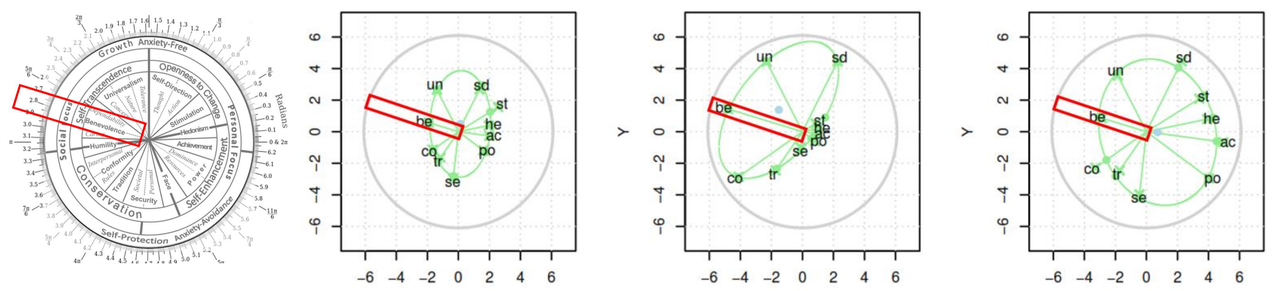


Figure 3: Creating a novel summary measure for psychological values



Findings and next steps

The new Circular Behaviours Scale was successfully validated and was deployed in the first Scottish National Survey (N = 1508) . Results demonstrate high levels of certain behaviours (e.g. recycling), and low levels of others (e.g. re-use or sharing).

- Continued analysis and publication of results are now underway, and should achieve good scientific impact.
- The research is informing development of the Circular Economy Monitoring and Indicator Framework (CEMIF), specifically indicators measuring social outcomes of the forthcoming Circular Economy Strategy.

Acknowledgement

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