

Background Research

Keeping three separate constructs, and using a 5 item scale for self-efficacy

This report has been informed by research conducted by Queens University Belfast which was supported and contributed to by the ONS Methodological Advisory service funded through the Quality Improvement Fund (QIF). The research was titled 'Investigating Locus of Control, Self-efficacy and Wellbeing – The relationship between all items across 3 instruments for a single item scale'.

This report examined the key constructs of locus of control and self-efficacy and how they relate to individual wellbeing, through analysis of data from the Belfast City Council Resident Survey and the Continuous Household Survey. Previous research suggested that both internal locus of control and self-efficacy are important constructs which predict higher wellbeing and life satisfaction among individuals and the Queen's research supported this.

The aim of this research was to assess if self-efficacy, locus of control and life satisfaction were linked and whether they were significant predictors of one another and assess the feasibility of developing one overall scale of measurement which encompassed the three metrics. Despite finding that higher wellbeing is partially mediated by self-efficacy and internal locus of control, it was concluded that these three metrics could not be measured on the same scale and must be treated as the three separate constructs they are.

The research conducted by Queens University has also influenced the use of a five item scale to measure self-efficacy rather than an alternative number of items. For self-efficacy, an exploratory factor analysis revealed that on the five item scale all items loaded highly and consistently onto a single underlying latent factor. For example, the self-efficacy scale when utilising the data from the CHS and Belfast City Council recorded loadings of 0.66-0.81 and 0.81-0.86 respectively, on a scale of 0 to 1 with higher being stronger. The exploratory factor analysis suggests that the self-efficacy scale functioned as a coherent and strong scale with the five items, this is further reflected in the good internal consistency, highlighted by the scales high Cronbach's alpha score (0.84 or above in each dataset from 2014/15 to 2020/21).

Academic references

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