The PARKINSON'S[UK] Scale of Perceived Control
Further Validation

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BACKGROUND

Perceived control is an important concept in influencing how people with a chronic condition such as Parkinson's adapt to life. Evidence suggests that the more control we have, the better we feel about ourselves. Control is a widely used concept within health psychology and a number of generic measures exist. However, no specific measure has been validated for people with Parkinson's, despite the condition having far-reaching effects on so many domains of life – e.g., movement, mood, cognition and quality of life generally.

AIM

This project aimed to develop the first psychometrically valid scale to measure the concept of perceived control in people with Parkinson's.

DEVELOP
Participants

2032 people with Parkinson's provided complete data for the 15 item, provisionally validated, version of the new Parkinson's UK Scale of Perceived Control (PUKSoPC). Participants completed the scale through a survey link hosted by Parkinson's UK.

Ethics

The analysis protocol was reviewed and approved at Lancaster University.

Validity

The initial version of the scale was created after discussion with people with Parkinson's at events hosted by Parkinson's UK. The initial analysis was conducted on 231 participants. Using exploratory factor analysis, a five factor solution was created (reported in Simpson et al., 2015).

Conceive
Develop
Validation
Test
Analyze

TEST
Confirmatory Factor Analysis (CFA)

In order to confirm the exploratory factor solution, a second stage of validation was conducted using data from the 2032 people with Parkinson's. Minimisation was successful and the data were considered an acceptable fit to the model ([n = 2031] χ^2=195.42 p<0.001; CMIN/d.f. = 2.96, RMSEA = 0.03 [90% CI 0.03–0.04], CFI = 0.96). Figure 1 displays the final model, including correlations, explained variance, and standardised path coefficients for each path. This confirms the robustness of the initial five factor solution & allows confidence in the proposed factor (subscale) model.

ANALYSE

The final questionnaire comprises a five-factor 15-item scale. Factor 1: "think positive" is about how well people are able to manage their mood & focus on the positives in life. Factor 2: "do things" is about taking part in activities as much as is possible for the individual. Factor 3: "get informed" is getting information about all areas of life relating to Parkinson's and knowing one's rights in order to make the best possible choices. Factor 4: "make plans" is about having plans, but also being able to change them. Factor 5 "be involved" is about being involved with organizations such as Parkinson's UK and sharing expertise with family and friends.

CONCLUSION

This report provides further validation of a new measure of perceived control specifically designed for people with Parkinson's. The factor structure initially outlined provides an appropriate model structure but one which could benefit from further analysis. A number of associations with other factors exist, which strengthen claims that the scale acts in a meaningful way when compared to other collected data.

FUTURE WORK

It is hoped this work will provide a useful scale for both individuals with Parkinson's and professionals and can be used as a suitable outcome measure for interventions designed to increase control. Parkinson's UK, also, plans to use the scale to measure the impact of the strategy's Taking Control work. This will involve annual data collection of a large population of people affected.
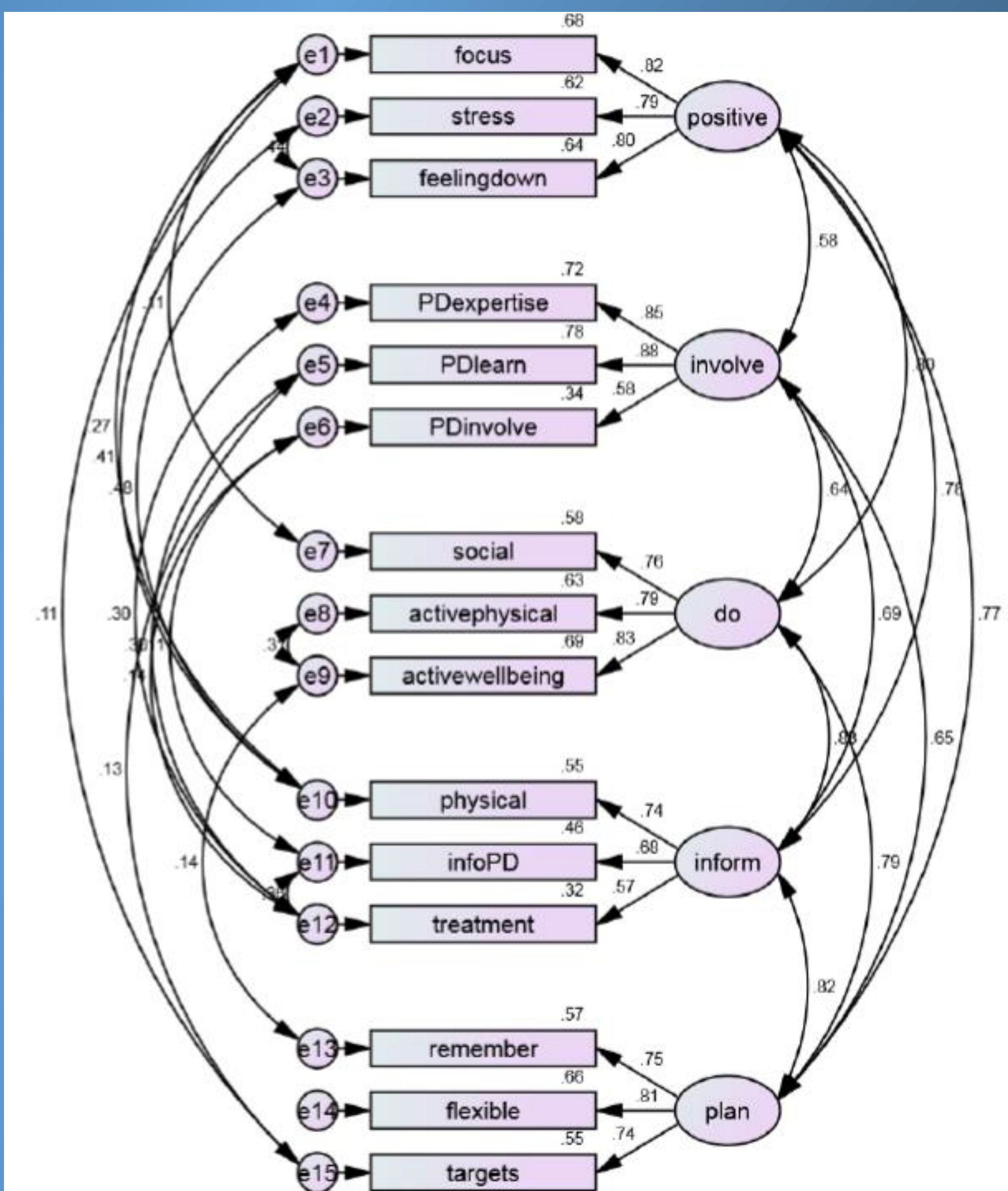

Figure 1: The five factor confirmatory factor analysis.

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