## Keep it brief and make a plan? Investigating whether explanation length and implementation intentions influence adherence to weight management strategies.

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**Background**: Adherence to weight management strategies can be poor, weakening intervention efficacy. Adherence may be undermined where lengthy strategy explanations limit engagement and understanding. By contrast, implementation intentions have been shown to promote adherence across a range of health behaviours. This study therefore investigated the impact of explanation length and implementation intentions on adherence to brief weight management strategies.

**Methods**: Participants (*n* = 200) were recruited from the database of a commercial digital weight loss service provider. Eligibility criteria included a BMI above 25 and interest in losing weight. Participants were randomly assigned to receive information about one of four weight management strategies on a smartphone application. They received either a brief or detailed version of the information and were asked to either plan their use of the strategy with implementation intentions or were given tips on strategy use. Participants received daily prompts over a 2-week period to report whether they used their assigned strategy. Proposed moderators (planning skills and need for cognition) were measured at baseline. Data were analysed using a series of regression models.

**Results**: Contrary to predictions, neither explanation length (*b*=-5.99, 95% CI [-21.08, 9.10], *p*=.14) nor implementation intentions (*b*=-.50, 95% CI [-7.63, 6.63], *p*=.89) had a main effect on strategy adherence. However, as predicted, planning skills moderated the effect of implementation intentions (*b*=-1.21, 95% CI [-2.34, -0.07], *p*=.04); individuals with poorer planning skills reported greater adherence when forming implementation intentions compared to receiving tips. The reverse effect was observed among participants with greater planning skills.

**Conclusions and implications**: Among this group of participants, there was no evidence that explanation length affected adherence. However, as predicted, implementation intentions helped increase adherence among poor planners. This insight could help healthcare providers more effectively personalise behaviour change interventions according to individual characteristics.