

# Experiential avoidance longitudinally impacts IBD patients' physical health: A latent growth analysis

Inês A. Trindade<sup>1</sup>, Cláudia Ferreira, & José Pinto-Gouveia

Cognitive and Behavioural Centre for Research and Intervention (CINEICC), University of Coimbra, Portugal

## Aims

Inflammatory bowel disease (IBD) is a group of chronic and incurable autoimmune illnesses (comprising Crohn's Disease and Ulcerative Colitis) that present debilitating symptoms such as abdominal pain, diarrhoea, urgent and frequent evacuations, and fatigue) (Marks et al., 2006). IBD significantly impacts on patients' ability to perform daily routines and has been vastly associated with decreased mental health and physical quality of life (e.g., Graff et al., 2009; Guthrie et al., 2002). The adverse and relapsing symptomatology and associated extra intestinal complications (such as arthritis) that may arise are considered the main contributors to low physical health in IBD patients. Nevertheless, recent literature points out the relevance of examining the role of emotion regulation on the determination of chronic patients' health (Song et al., 2015). The current study thus aims to explore the influence of experiential avoidance (a maladaptive emotion regulation process defined as the tendency to attempt to control or avoid internal experiences) on physical health in patients with IBD.

## Methods

The sample includes **116 IBD patients** (35 males and 81 females), with ages comprised between 18 and 75 ( $M = 36.76$ ;  $SD = 11.39$ ). Participants were assessed on an online platform in three different waves during an **18-month period**. These waves of assessment occurred at baseline (Wave 1), and 9 months (Wave 2) and 18 months (Wave 3) later. Participants filled medical and demographic data and completed the Portuguese validated versions of the following self-report measures:

- Acceptance and Action Questionnaire-7 to measure participants' level of **experiential avoidance** (Bond et al., 2011);
- WHO Quality of Life-BREF (WHOQOL-BREF; WHOQOL Group, 1998) to assess self-reported physical health.

Latent growth curve models (LGMs) were conducted using structural equation modelling (with IBM Amos Software, Arbuckle, 2006) to estimate the growth trajectory of physical health (WHOQOL-Bref) conditioned by experiential avoidance (AAQ-II).

## Results

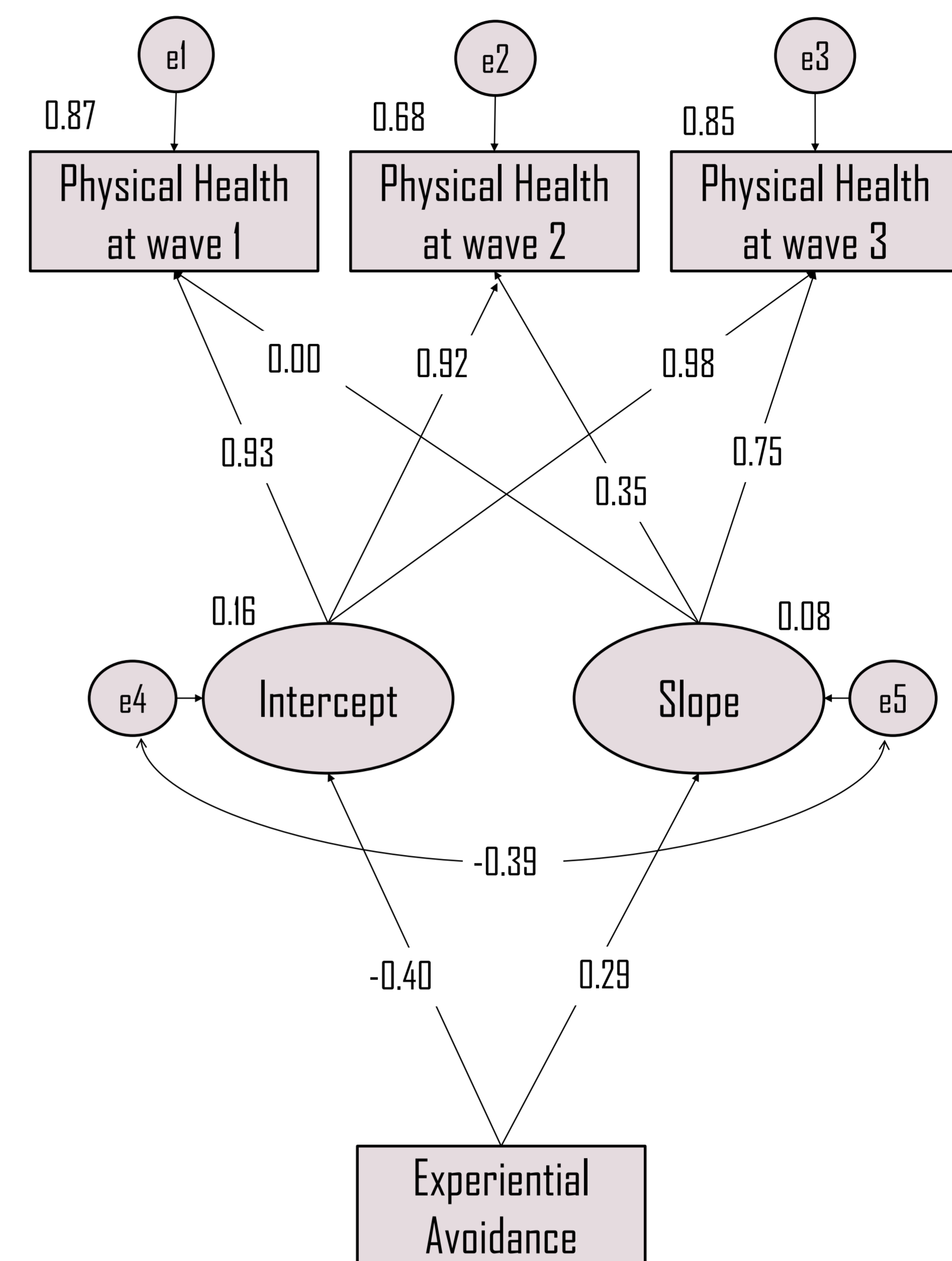


Figure 1. The influence of experiential avoidance on physical health growth rate.

The conditional LGM model (Figure 1) showed an excellent fit (CFI = 1.00; TLI = 1.00; IFI = 1.00; SRMR = 0.01) to the empirical data.

This model demonstrated that experiential avoidance presented a significant negative effect on basal (intercept) physical health levels ( $\beta = -0.40$ ,  $p < 0.001$ ). This finding indicates that individuals presenting higher levels of experiential avoidance show lower levels of physical health.

Furthermore, experiential avoidance presented a significant effect on the growth rate (slope) of physical health ( $\beta = 0.28$ ,  $p = 0.015$ ). That is, in this sample, this maladaptive emotion regulation process predicted individual differences in the growth and evolution of physical health.

## Conclusion

This study significantly adds to literature by demonstrating the longitudinal impact of experiential avoidance on IBD patients' physical health. These novel findings may indicate that experiential avoidance, by being associated with paradoxical consequences and further negative affect, may cause physiological alterations that may be detrimental to physical health. Furthermore, experiential avoidance may compromise the engagement in health promoting behaviours (such as taking the prescribed medications, going to medical appointments, or following a certain data) that can in turn impact on patients' physical health. The present study adds an important contribution to literature by implying that promoting adaptive forms of emotion regulation might improve IBD patients' health. The inclusion of psychotherapeutic interventions in the healthcare of IBD should thus be considered. ACT-based interventions would arguably provide effective results due to their focus on the promotion of acceptance abilities.

## REFERENCES

- Bond, F. W. et al. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire-II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*, 42, 676-688. doi: 10.1016/j.beth.2011.03.007
- Graff, L. A., Walker, J. R., & Bernstein, C. N. (2009). Depression and anxiety in inflammatory bowel disease: a review of comorbidity and management. *Inflammatory Bowel Diseases*, 14, 1105-1118. doi: 10.1002/ibd.20873
- Guthrie, E., et al. (2002). Psychological disorder and severity of inflammatory bowel disease predict health-related quality of life in ulcerative colitis and Crohn's disease. *American Journal of Gastroenterology*, 97, 1994-1999. doi: 10.1111/j.1572-0241.2002.05842.x
- Marks, D. J., et al. (2006). Defective acute inflammation in Crohn's disease: a clinical investigation. *Lancet*, 367(9511), 668-678. doi: 10.1016/S0140-6736(06)8265-2
- Song, Y., et al. (2013). Regulating emotion to improve physical health through the amygdala. *Social Cognitive and Affective Neuroscience*, 10(4), 523-530. doi: 10.1093/scan/nsu083
- The WHOQOL Group. (1998). The World Health Organization Quality of Life Assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine*, 46, 1569-1585. doi:10.1016/S0277-9536(98)00009-4

FCT Grant: SFRH/BD/101906/2014