Examining the effectiveness of the Theory of Planned Behaviour in explaining exercise intention and behaviour during pregnancy: Preliminary findings of a random effects meta-analysis.

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Introduction

Several studies have supported the efficacy and predictive utility of the Theory of Planned Behaviour (TPB; Ajzen,1991) in explaining a variety of behaviours including physical activity. However, the relative contribution of the theory's components in describing intention and behaviour may differ depending on the context, time and population being studied. Such evidence is necessary to inform exercise advice and interventions aimed at pregnant women. The purpose of this study was therefore to review the existing literature surrounding the application of the TPB in explaining exercise intentions and behaviour during pregnancy and to evaluate the magnitude of relationships between TPB constructs within this context.

Figure 1: Schematic Representation of the TPB.

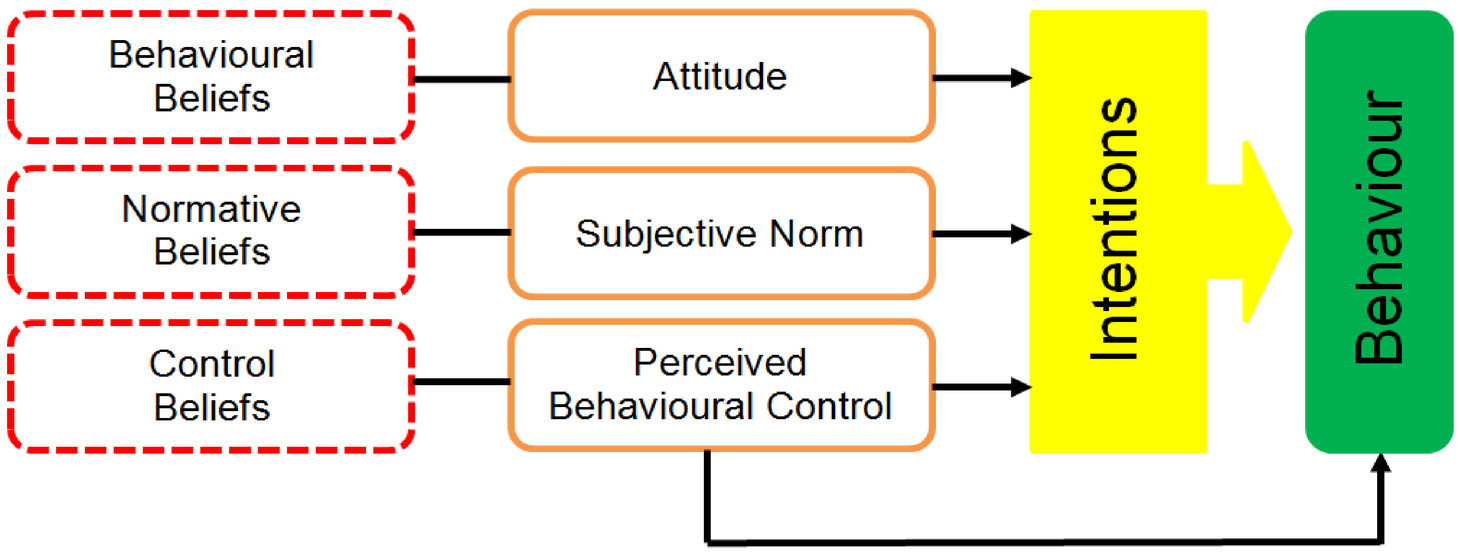
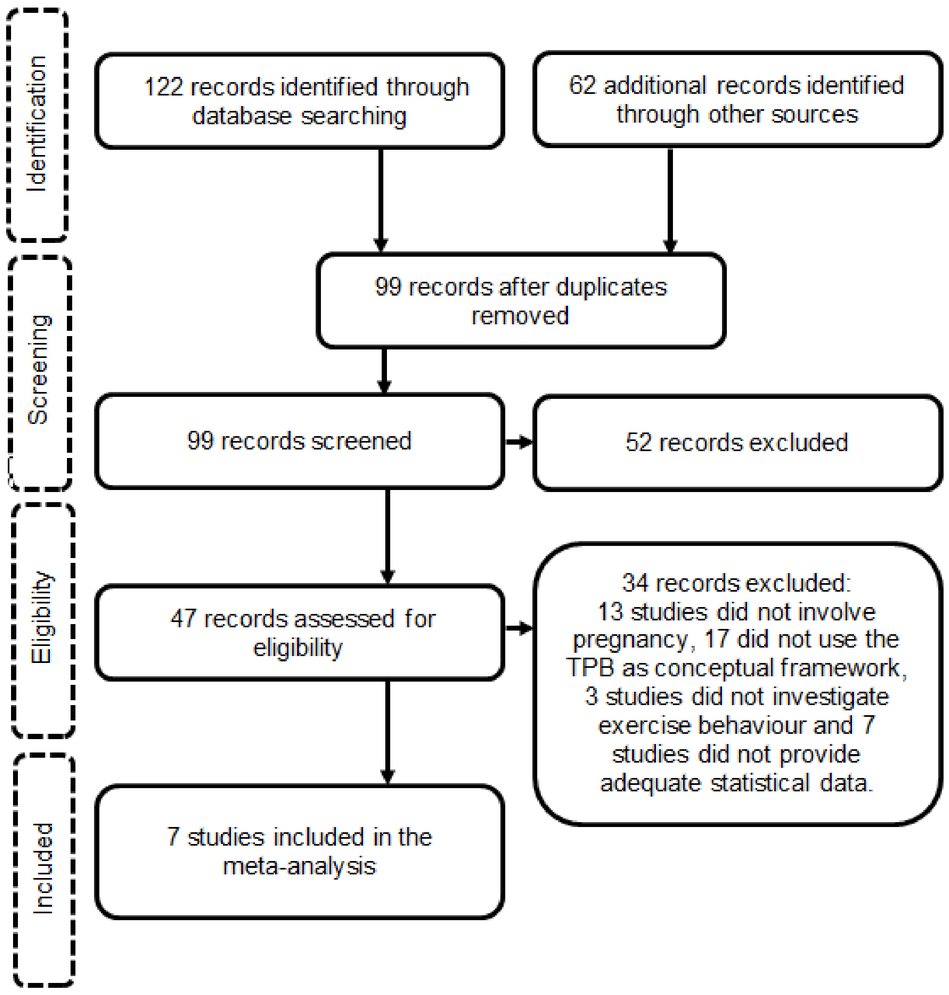


Figure 2: Flow diagram representing study selection (adapted from PRISMA, 2009).



Method

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher, Liberati, Tetzlaff & Altman, 2009) was used as a guideline for the development and reporting of this meta-analysis.

Relationships identified among TPB constructs were subjected to a random effects meta-analytic review using the Comprehensive Meta-Analysis (version 3.0) computer software package (cf. Borenstein, Hedges, Higgins & Rothstein, 2011).

Results

Results confirmed the existence of a medium to strong relationship between intention and behaviour (r = .44, P < .05, R^2 = 19.36, cf. Cohen, 1988) and also supported the existence of a direct relationship between behaviour and perceived behavioural control (PBC; r = .45, P < .05, R^2 = 20.25).

Pregnant women's attitude (r = .48, P < .05, R^2 = 23.04) had the strongest association with their intention to be physically active. However, both PBC (r = .47, P < .05, R^2 = 22.09) and subjective norm (r = .42, P < .05, R^2 = 17.64) revealed similar relationships with intention.

Figure 3: Intention-Behaviour

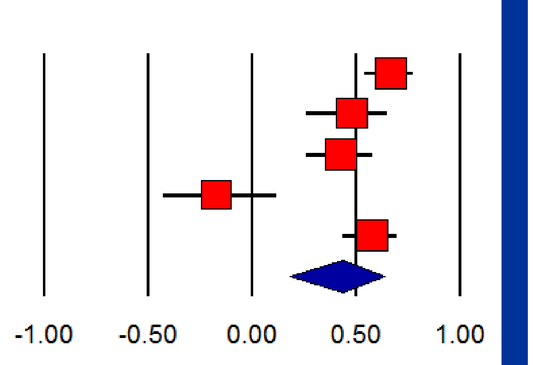


Figure 4: PBC-Behaviour

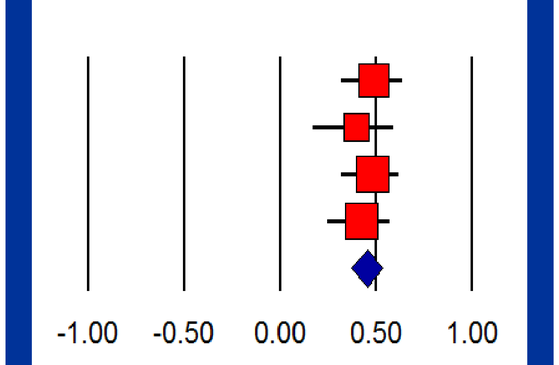


Figure 5: Attitude-Intention

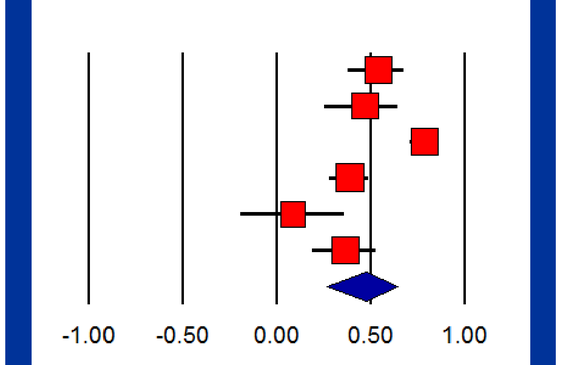


Figure 6: PBC-Intention

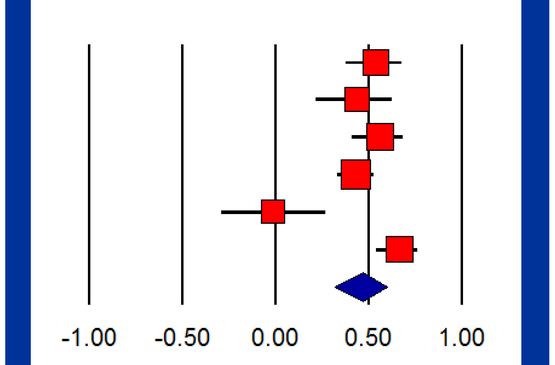
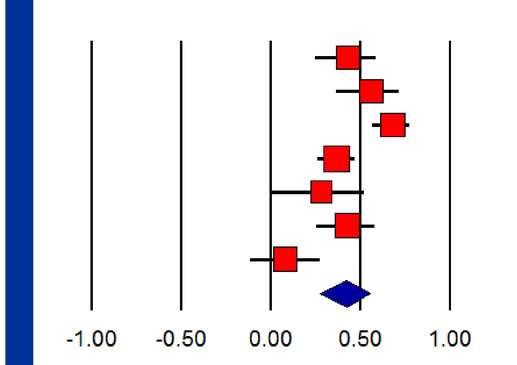


Figure 7: SN-Intention



Summary and Conclusion

The study supports the TPB as a relevant conceptual framework for the investigation of exercise intentions and behaviours during pregnancy. PBC carried slightly more weight in explaining behaviour than did intention thereby suggesting that exercise during pregnancy is not a behaviour that is under women's complete volitional control. Intention to exercise was influenced primarily by expectant mothers' beliefs about the positive and negative consequences of doing so. Contrary to previous meta-analytic reports in the exercise domain, this study supported the relevance of subjective norm as a construct to investigate exercise intentions and behaviour in a pregnant population. The perceived social pressure to conform to other people's opinion about physical activity during pregnancy may well be an important consideration for pregnant women. These findings present both researchers and practitioners with an opportunity for intervention and further research.

References:

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