INPLASY PROTOCOL

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None.

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None declared.

A New Interpretation of the Role of Perceived Behavior Control in Planned Behavior Theory: Meta-analysis and Heterogeneity Test of Health-related Behavior Literature

Su, RH[1].

Review question / Objective: By collecting and screening 26 literatures in the field of health-related behaviors that meet the requirements, this paper examines the direct and indirect effects of the planned behavior theory by using the structural equation model of meta-analysis, focusing on the moderating effect of perceived behavior control in the planned behavior theory, and further analyzes the planned behavior theory by including 12 local samples with multi-group characteristics. The heterogeneity of application in different situations aims to provide boundary conditions for the theory of planned behavior and has heuristic significance for guiding future empirical research.

Condition being studied: Risk of chronic non-communicable diseases and all-cause mortality (Ford et al., 2012), while health risk behaviors such as drinking, drug abuse and unsafe sex.

INTRODUCTION

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of planned behavior and has heuristic significance for guiding future empirical research.

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METHODS

Participant or population: Junior high school student(k=4), high school students (k=9), college students (k=16), graduate students (k=2), university staff (k=3), enterprise employees (k=3),General population (k=2), the elderly (k=2), athletes (k=4) and pregnant women (k=1).

Intervention: None.

Comparator: None.

Study designs to be included: Based on the meta-analysis structural equation model, this study examined the direct and indirect effects of the theory of planned behavior (Ajzen, 1991) for 19 documents searched and screened in the database, focusing on the moderating effect of perceptual behavior control in the theory of planned behavior, and included 12 local samples with multi-group characteristics to further analyze the heterogeneity of the application of the theory of planned behavior in different situations.

Eligibility criteria: Literature retrieval forms include two aspects: First, the retrieval keywords are divided into: "Theory of Planned Behavior", and the corresponding regulation (Moderat*), regulation effect or effect ("modem effec *", "modem effec *") are paired and combined to complete accurate retrieval; Second, the search keywords are divided into: "Theory of Planned Behavior", and their corresponding health (Health*), health behavior ("Health Behavior*"), health promotion ("health promotion *") and risk behavior ("Risk Behavior*") are paired and combined to complete the accurate search. The first literature collation time is

September 2022, and the literature retrieval time range is from 1900 to 2022, and the literature retrieval adopts empirical method.

Information sources: In this study, we searched the published and published English literature of electronic original data in the databases of Web of Science, PsycINFO, PubMed, Elsevier, EBSCO and Wiley Online Library.

Main outcome(s): (1) Except the influence of perceived behavior control on behavior needs to be further investigated, the application of other path relationships in the planned behavior theory (Ajzen, 1991) in different situations of health-related behaviors is consistent; (2) The moderating effect of perceived behavior control between attitude and intention, subjective norm and intention, and intention and behavior varies with the change of specific environment or sample characteristics; (3) The application of planned behavior theory (Ajzen, 1991) in different age characteristics, domestic and foreign situations and different types of health-related behaviors has significant heterogeneity.

Quality assessment / Risk of bias analysis: But in this study, Begg and Mazumdar rank correlation method is used to objectively test the symmetry of funnel graph.(Begg & Mazumdar, 1994), combined with the method of loss of safety coefficient (Rosenthal, 1979) and Egger linearity.Regression method was used to diagnose the publication bias of this study.

Strategy of data synthesis: Structural equation model is used to examine the interaction between attitude, subjective norm and intention and perceived behavior control, and the consistency between the direct and indirect effects contained in the hypothetical model and the planned behavior theory. Monte Carlo simulation method is used to test the hypothetical model.

Subgroup analysis: Adolescent model and adult model, domestic model and foreign

model, health promotion model and health risk model.

Sensitivity analysis: Q50% is high heterogeneity, 25%~50% is medium heterogeneity and < 25% is low heterogeneity (Higgins & Thompson, 2002). From the test results, it can be seen that the overall research is highly heterogeneous (subjective norm× perceived behavior control behavior is in a medium heterogeneity), and the structural equation model of meta-analysis should choose the random effect model.

Country(ies) involved: China.

Keywords: Theory of planned behavior; Perceptual control; Intention; Health-related behaviors; Meta-structural equation model.

Contributions of each author:
Author 1 - Ronghai Su.