





Behavioural Sciences Contribution to Suppressing Transmission of Covid-19 in the UK: A Systematic Literature Review

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INTRODUCTION

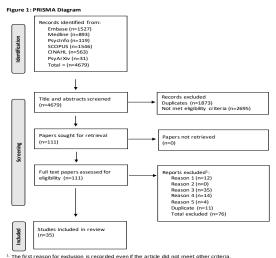
Governments relied on their citizens to adhere to a variety of transmission-reducing behaviours (TRBs) to suppress the Covid-19 pandemic.

AIM

To conduct a systematic review of UK behavioural science research conducted during the COVID-19 pandemic.

METHOD

The study design is registered on Prospero. Studies were eligible if they included people of any age, gender and ethnicity. The Appraisal tool for Cross-Sectional Studies was used to assess study quality. Data extraction forms were created using Microsoft Excel. Identified theoretical constructs were coded to the Theoretical Domains Framework.



1. The first reason for exclusion is recorded even if the article did not meet other criteria.

RESULTS

35 papers were brought forward for data extraction. The quality appraisal showed that in the 35 papers risk of sampling bias was high.

TRB's most investigated

TRBs most frequently investigated during the first wave of the pandemic were two avoidant behaviours that were social gatherings and leaving the house and two preventive behaviours that were hand hygiene and face covering. Sociodemographic Associations with Behaviour

Fifty sociodemographic independent variables were included in the analyses to determine their association with TRBs/intentions. Twenty (57%) studies investigated gender, 20 (57%) age, 11 (31%) ethnicity, 10 (28%) employment and 10 (28%) education. There is no clearly consistent pattern of statistically significant association between these variables and behaviour.

Behaviour Theoretical Frameworks

The most common theories used in studies were Protection Motivation Theory (n = 5) and the Theory of Planned Behaviour and its derivative, Reasoned Action Approach (n = 5). The TDF domains 'social influences' and 'beliefs about consequences' were the most investigated behavioural theoretical domains. No studies investigated the theoretical domains 'reinforcement' or 'optimism'. Only the 'intentions' domain was consistently positively associated with adherence to TRBs with all five studies reporting an association with adherence to TRBs.

Number of studies reporting an association between a theoretical domain and behaviour / intentions

Theoretical domain	Nos studies investigating a construct categorised in the domain	Nos of studies reporting an association with behaviour / intentions	Nos of studies NOT report an association with behaviour/intentions
Knowledge	7	5	4
Skills	3	3	1
Social / professional role & identity	7	3	6
Beliefs about capabilities	10	10	7
Optimism	0	-	-
Beliefs about	15	14	9
consequences			
Reinforcement	0	-	-
Intentions	5	5	0
Goals	1	1	0
Memory, attention &	2	1	
decision processes			
Environmental context	6	3	5
Social influences	17	13	10
Emotion	4	4	0
Behavioural regulation	2	1	1
Personality	2	2	0

CONCLUSIONS

Behavioural scientists in the UK generated a significant and varied body of work to understand TRBs during the pandemic. However, more use of theories that do not rely on deliberative processes to effect behaviour change and study designs better able to support causal inferences should be used in future to inform public health policy and practice.

INFORMATION

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