

Study Intervention BCIO and BCT Characteristics

Study	Mode of Delivery Ontology (MoD)					Setting Ontology					Intervention Source Ontology	# of Behaviour Change Techniques
	Sub-Level 1	Sub-Level 2	Sub-Level 3	Sub-Level 4	Sub-Level 1	Sub-Level 2	Sub-Level 3	Sub-Level 4	Sub-Level 5	Sub-Level 6		
Nollen et al (2014)	Informational MoD AND Individual-based MoD AND Gamification MoD AND Asynchronous MoD AND Push and Pull MoD	Electronic MoD AND Human Interactional MoD AND Audio Informational MoD AND Textual MoD	At-a-distance MoD AND Mobile digital device MoD AND Mobile digital application MoD		Physical Setting	Site Setting	Facility Setting AND Country of Intervention	Low-income Area AND Urban Area AND Educational Facility AND Residential Facility	School Facility AND Household Residence	Primary School	Unclear	Total = 7 1.1 Goal Setting 1.2 Problem solving 1.4 Action Planning 2.3 Self-monitoring 2.2 Feedback on behaviour 7.1 Prompts/cues 5.1 Information about health consequences
Baranowski et al (2011)	Informational MoD AND Individual-based MoD AND	Electronic MoD AND Human Interactional MoD	At-a-distance MoD AND Computer MoD		Physical Setting	Site Setting	Facility Setting AND Within-country location	Low-Income Area AND Urban Area	School Facility	Middle School	Researcher	Total = 8 1.1 Goal Setting 1.2 Problem Solving 1.4 Action Planning 1.5 Review behavioural goals

	Gamification MoD AND Asynchro- us MoD AND Push MoD		AND Video Game MoD AND Website MoD					AND Rural Area				3.1 Social Support 4.1 Instruction on how to perform behaviour 5.1 Information about health consequences 8.7 Graded Tasks
Thompson et al (2015)	Informationa- l MoD AND Pair-based MoD AND Asynchro- us MoD AND Push and Pull MoD AND Gamification MoD	Electronic MoD AND Human Interactional MoD AND Visual Informational MoD AND Textual MoD	At-a- distance MoD AND Computer MoD AND Website MoD AND Email MoD AND Video Game MoD	N/A	Physical Setting	Site Setting	Facility Setting AND Country of Intervention	Low- Income Area AND Urban Area AND Suburban Area AND Residential Facility	Household residence	N/A	Researcher	Total = 10 1.1 Goal Setting 1.2 Problem Solving 1.4 Action Planning 2.2 Feedback on Behaviour 2.3 Self- monitoring of behaviour 4.1 Instruction on how to perform a behaviour 6.1 Demonstration of behaviour 8.7 Graded Tasks 9.1 Credible Source 10.3 Non-specific award
Bakirci- Taylor et al (2019)	Informationa- l MoD: AND	Electronic MoD AND	At-a- Distance MoD AND	Messag- ing MoD	Physical Setting	Site Setting	Facility Setting AND	Low- Income Area AND	Household residence	N/A	Researcher	Total = 4 1.2 Problem Solving 2.7 Feedback on outcome of behaviour

	Individual- Based MoD AND Asynchronous AND Push and Pull MoD	Human Interactive MoD AND Visual Informational MoD AND Textual MoD	Website MoD AND Mobile Digital device MoD AND Computer MoD AND Website MoD				Within- Country Location	Urban Area AND Suburban Area AND Residential Facility				4.1 Instruction on how to perform a behaviour 7.1 prompts/cues
Wengreen (2021)	Informational MoD AND Group- Based MoD AND Uni- directional AND Synchronous AND Push MoD AND	Human Interactive MoD AND Electronic MoD AND Visual Informational AND Textual	Face-to-Face MoD AND Electronic Billboard MoD AND Electronic environmental object MoD AND Virtual Reality MoD		Physical Setting	Site Setting	Facility Setting AND Within- Country location	Low- Income Area AND Urban area AND Educational Facility	School Facility	Primary School	Primary School Teacher AND Researcher	Total = 9 1.1 Goal Setting 7.1 Prompts/cues 8.7 Graded Tasks 9.1 Credible Source 10.6 Non-specific Incentive 12.6 Adding objects to the environment 13.4 Valued self- identity 14.3 Remove Reward 14.6 Situation- specific reward

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