

A Summary of Research Studies Included in the Review

Author (Year) Country Intervention Name	Sample Size	Age Range (years) Mean/ Median Age (years)	Key Target Behaviour	Intervention Platform	Outcome Measure(s)	QualSyst Score (%)
Randomised Controlled Trials						
Sabel et al., 2016 Not Reported Not Reported	N =13	7-17 Mean age: 12.5±2.9	Physical Activity	Nintendo Wii	Physical Activity Levels Physical Functioning	96
Mendoza et al., 2017 USA Not Reported	N =59	14-18 Mean age: 16.6±1.5	Physical Activity	Fitbit Flex Facebook Support Group	Feasibility Physical Activity Quality of Life Motivation Facebook Engagement	62
Kunin-Batson et al., 2016 USA Not Reported	N =52	15-28 Mean age: 21.3±3.9	Cancer Knowledge and Understanding	Website e-Journal Messaging System	Cancer Knowledge Anxiety Multidimensional Health Locus of Control	65
Jones et al., 2010 USA Conquering Cancer Network	N =65 I =35 C =30	12-18 Mean age: 14.8±1.96	Education	CD-ROM	Frequency and Duration of Use Multidimensional Health Locus of Control Quality of Life Self-Efficacy Avoidance Coping Strategies Approach Help Cancer Knowledge	69

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Akard et al., 2015 Not Reported Not Reported	N =28	7-17 Mean age: Parents =36 Children =11	Symptom Management Quality of Life	Digital Story Telling	PedsQL V4.0	81
Beale et al., 2007; Kato et al., 2008 USA, Canada, Australia Re-Mission	N =375 I =197 C =178	13-29 Mean age: I =15.79 C =16.06	Cancer Knowledge Adherence to Treatment	Video Game (Re-Mission)	Treatment Adherence Self-Efficacy Cancer Knowledge Perceived Stress Health Locus Control Quality of Life FACT-G	81, 100
Burns et al., 2009 USA SMART Study	N =12	11-24 Mean age: 17.5	Building Resilience	Therapeutic Music Video	Feasibility Symptom Experience Symptom Related Risk Individual Risk Individual Protective Resilience Quality of Life	73
Emmons et al., 2013 USA, Canada	N =374 I =132 C =242	18-55 Mean age: 32±7.9	Smoking Cessation	Website	Smoking Cessation Quit Attempts	92

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PFH-2					Readiness to Change	
Huang et al., 2014 USA Fit4Life	N =38	10-16 Median age: 13	Obesity Treatment	Website SMS	Weight BMI-Z Physical Activity Diet Psychological Behaviours	79
Rabin et al., 2011 USA Not Reported	N =18	18-39 Mean age: 32.17	Physical Activity	Website	Feasibility and Acceptability Physical Activity POMS Fatigue	46
Valle et al., 2013; Valle et al., 2015 USA Not Reported	N =86	21-29 Mean age: 31.7	Physical Activity	Facebook	Physical Activity BMI FACT-G	68,58
Non-Randomised Controlled Trials						
Wint et al., 2002 USA VR Glasses	N =30 I =17 C =13	10-19 Mean age: 13.6	Pain	VR Glasses	Pain VR Evaluation	71
Single-Group Repeated Measures						
Seitz et al., 2014a; Seitz et al., 2014b Not Reported Onco-STEP	N =20	20-36 Mean age: 27.3±4.8	PTSD	Website	Intervention Satisfaction PTSF Symptoms Anxiety Depression	85, 85

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					Fear	
Hardy et al., 2011 USA Captain's Log	N =9	10-17 Mean age: 13.3±2.4	Memory Attention Behavioural Function	Game	Feasibility Working Memory Index Digit Span Letter Numbering Sequencing Inattention Index	50
Gilliam et al., 2011 USA Not Reported	N =12	6-18 Mean age: 12.75	Physical Function Quality of Life	Website	Adherence Endurance Strength Functional Mobility Quality of Life	73
Berg et al., 2014 USA Not Reported	N =24	18-34 Mean age: 23.38	Health Promotion Behaviours	e-Mail	Intervention Acceptability and Feasibility	77
Baggott et al., 2012 USA mOST	N =11	13-21 Mean age: 18.2±2.9	Symptom Management	App	Feasibility Adherence	94
Rodgers et al., 2013; Rodgers et al., 2014 USA EAT!	N =16	11-18	Symptom Management	App	Memorial Symptom Assessment Scale Albumin Prealbumin	43

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					Acceptability and Usability Competency	
Jibb et al., 2017; Stinson et al., 2013 Canada Pain Squad+	N =40	12-18 Mean age: 14.2±1.7	Pain	App	Feasibility Pain	82, 80
Cross-Sectional, Single Group Studies						
Hooke et al., 2016 USA FitBit	N =17	8-15 Mean age: 8.69	Physical Activity Fatigue	FitBitR	Validity and Reliability Responsiveness	68
Stinsen et al., 2015b Canada PainSquad	Study 1 N =92 Study 2 N =14	8-18 Mean age: Study 1 13.1±2.9 Study 2 14.8±2.8	Pain	App	Acceptability Compliance	100
Lai et al., 2015 USA SyMon-SAYS	N =57	7-21 Mean age: 11.9	Fatigue	Website	Feasibility Acceptability	80
Knijnenburg et al., 2013 Netherlands DCOG	N =98	17-55 Mean age: 31	Medical Decision Making	Website	Usability Website Content	60
Kesler et al., 2011 USA	N =25	7-19 Mean age: 12.6	Cognitive Function	Computer Program	Compliance Cognitive Function	77

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No Reported						
Wiklander et al., 2017 Sweden Fex-Can	N =23	18-43 Mean age: 30	Sexual Problems Fertility	Website	Demand Acceptability Preliminary Efficacy Functionality	80
Blaauwbroek et al., 2012 Netherlands SCP	N =73	19-56 Mean age: 38	Information Provision	Website	Website Evaluation	64
Cantrell and Conte, 2008 USA HIP	N =6	21-39 Mean age: Not Reported	Psychosocial Function	Website	Intervention Evaluation	35
Macpherson et al., 2014 USA C-SCAT	N =72	13-29 Median age: Adolescent 15 Adults 22	Symptom Management	App	Feasibility and Acceptability	70
McLaughlin et al., 2011 USA LIFE Community	N =14	18-29	Social Support	App	Social Support Bridging Social Capitol	85
Suzuki and Beale, 2006 USA	N =21	13-22 Mean age: 19.3±2.4	Purpose of Website use	Website	Cancer-Related Information Dissemination	50

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					Interpersonal Connection	
Wu et al., 2011 USA ESRA-CAF	N =40	13-20	Monitoring Symptoms	Website	Completion Rates	73
Platform Development						
Phelps et al., 2016 Not Reported C:EVOLVE	N =12	15-23	VR Counselling System Development	VR	System Development System Pilot	55
Winterling et al., 2017 Sweden Fex-Can	N =13	20-41	Website Development	Website	Co-Design Success	60
Qualitative Studies						
Donovan et al., 2014 USA Not Reported	N = Not Reported	15-39	Social Support	Website	Types of Social Support	70
Gonzalez-Morkos et al., 2014 USA TI Webcast	N =6	15-18	Social Therapy	Live Webcasting	User Experience and Satisfaction	70
Griffiths et al., 2015 Not Reported Realshare	N =12	16-30 Mean 21.08±4.15	Website Development and Usage	Website	Experience of Using Realshare Acceptability	45

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Stinson et al., 2015a Canada Teens Taking Charge: Managing Cancer Online	N =22	12-18 Mean age: 15.2±1.8	Self-management	Website	User Satisfaction Design Content Functionality and Features Sociability Desire	75
Mixed-Methods Studies						
Ameringer et al., 2015 Not Reported mOST	N =72	13-29 Mean age: 18.5	Symptom Management	App	Symptoms Symptom Clusters	95

Note. SD = Standard Deviation, I = Intervention Group, C = Control Group, BMI – Body Mass Index, VR = Virtual Reality, CD-ROM = Compact Disc Read-Only Memory, PTSD = Post-Traumatic Stress Disorder