Supplementary Material

School-based Physical Activity Interventions in Children and Adolescents: A Systematic Review

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Supplementary Table S1

Theoretical Concepts	Intervention Variables	Study (Year)[Reference]	Sizes Effects x time (η^2; η^2p; Clif delta; Cohen's *d*; R^2)	Sizes Effects Between Groups (η^2, Clif delta, Cohen's *d*; R^2)
Motivation	Intrinsic Regulation	Cuevas et al. (2016)[48]	$\eta^2 = 0.075$	
		Fernández-Rio et al. (2016)[49]	Cohen's $d = 0.12$	
		Franco and Coteron (2017)[50]	Cliff's delta = 0.10	
		Lubans et al. (2016)[64]	Cohen's $d = 0.53$	
		Nicaise et al. (2013)[65]	Cohen's $d = 0.02$	
		González-Cutre et al. (2016)[53]	Cliff's delta = 0.51	
		Sevil et al. (2015)[74]		$\eta^2p = 0.62$
		Sevil et al. (2016)[75]		$\eta^2p = 0.061$
		Sevil et al. (2018)[76]		$\eta^2p = 0.165$
	Integrated Regulation	González-Cutre et al. (2016) [54]	Cliff's delta = 0.36	
	Identified Regulation	Amado et al. (2014)[21]	$\eta^2 = 0.08$	
		Cuevas et al. (2016)[48]	$\eta^2 = 0.056$	
		Fernández-Rio et al. (2016)[49]	Cohen's $d = 0.17$	
		González-Cutre et al. (2014)[53]	Cliff's delta = 0.54	

Supplementary Table S1. *Cont.*

		González-Cutre et al. (2016)[55]	Cliff's delta = 0.53	
		Lubans et al. (2016)[64]	Cohen's d = 0.40	
		Nicaise et al. (2014)[65]	Cohen's d = 0.26	
		Sevil et al., (2016)[75]		η^2p = 0.034
		Sevil et al. (2018)[76]		η^2p = 0.092
	Autonomous Motivation	Bechter et al. (2019)[44]	Cohen's *d* = 0.11	
		Cuevas et al. (2016)[48]	η^2 = 0.050	
		Perlman et al. (2013)[67]	η^2 *p* = 0.157	
		Piipari et al. (2018)[68]	η^2 = 0.06	
		Riiser et al. (2014)[40]	Cohen's *d* = 0.11	
		Sánchez-Oliva et al. (2017)[73]	η^2 = 0.08	
		Sevil et al. (2015)[74]		η^2p = 0.62
	Interjected Regulation	González-Cutre et al. (2014)[53]	Cliff's delta = 0.38	
		Lubans et al. (2016)[64]	Cohen's *d* = 0.56	
	External Regulation	Fernández-Rio et al. (2016)[49]	Cohen's *d* = 0.03	
		González -Cutre et al. (2014)[53]	Cliff's delta = 0.20	
		Lubans et al. (2016)[64]	Cohen's *d* = 0.49	
		Nicaise et al. (2014)[65]	Cohen's *d* = 0.32	
	Controlled Motivation	Sánchez-Oliva et al. (2017)[73]	(η^2 = 0.06)	
	Amotivation	Cheon et al. (2016)[22]	N/A	
		Kanlanyanee et al. (2017)[59]	N/A	
Need satisfaction	Competence	Bechter et al. (2019)[44]	Cohen's *d* = 0.08	
		Franco and Coteron (2017)[50]	Cliff's delta = 0.38	
		Sevil et al. (2015)[74]	η^2p = 0.034	
		Sevil et al. (2016)[75]		η^2p = 0.055
		Sevil et al. (2018)[76]	η^2p = 0.149	
		Tilga et al. (2019) [80]	η^2p = 0.03	
	Autonomy	Amado et al. (2014)[21]	η^2 = 0.08	
		Bechter et al. (2019)[44]	Cohen's *d* = 0.30	
		Franco and Coteron (2017)[80]	Cliff's delta = 0.31	
		González-Cutre et al. (2016)[54]	Cliff's delta = 0.45	

Supplementary Table S1. *Cont.*

		Sánchez-Oliva et al. (2017)[73]	(η^2 = 0.08)	
		Sevil et al. (2016)[75]		η^2p = 0.022
		Sevil et al. (2018)[76]		η^2p = 0160
		Shanon et al. (2018)[77]	N/A	
		Tilga et al. (2019)[80]	η^2 p = 0.04	
	Relatedness	Bechter et al. (2019)[44]	Cohen's d = 0.22	
		González-Cutre et al. (2016)[54]	Cliff's delta = 0.53	
		Tilga et al. (2019)[80]	η^2p = 0.03	
		Cheon et al. (2018)[47]	Cohen's d = 0.56	
Need support	Competence	Abos et al. (2016)[41]	η^2p = 0.177	
		Fu et al. (2016)[51]	N/A	
		Perlman et al. (2013)[67]	η^2p = 0.131	
		Sevil et al. (2015)[74]	η^2p = 0.055	
		Sevil et al. (2016)[75]		η^2p = 0.62
		Sevil et al. (2018)[76]		η^2p = 0.088
	Autonomy	Cheon et al. (2018)[47]	Cohen's d = 0.99	
		González-Cutre et al. (2014)[53]	Cliff's delta = 0.44	
		Piipari et al. (2018)[68]	η^2 = 0.09	
		Sánchez-Oliva et al. (2017)[73]	(η^2 = 0.08)	
		Sevil et al. (2015)[74]		η^2p = 0.62
		Sevil et al. (2018)[76]		η^2p = 0.088
		Shanon et al. (2018)[77]	N/A	
	Relatedness	Sánchez-Oliva et al. (2017)[73]	(η^2 = 0.05)	
		Sevil et al. (2015)[74]		η^2p = 0.62
		Bronikowski et al. (2013)[46]	η^2 = 0.58	
Need frustration	Competence	Cuevas et al. (2016)[48]	η^2 = 0.031	
		Sevil et al. (2018)[76]		η^2p = 0.209
	Autonomy	Sevil et al. (2018)[76]		η^2p = 0.192
		Tilga et al. (2019)[80]	η^2 p = 0.04	

Supplementary Table S1. *Cont.*

	Relatedness	Cuevas et al. (2016)[48]	$\eta^2 = 0.037$	
		Sevil et al. (2018)[76]		$\eta^2p = 0.062$
	Frustration	Cheon et al., (2018)[47]	Cohen's $d = 0.63$	
Achievement Goal Theory	Task-oriented Climate	Bortoli et al. (2015)[45]	Cohen's $d = 0.80$	
		Grasten et al. (2015)[55]	$R^2 = 0.37$	
		Kokonen et al. (2018)[60]	$\eta^2 = 0.05$	
		Rokka et al. (2019)[72]	$\eta^2 = 0.04$	
		Sevil et al. (2016)[75]		$\eta^2p = 0.090$
		Sevil et al. (2018)[76]		$\eta^2p = 0.178$
	Ego-oriented Climate	Bortoli et al. (2015)[45]	Cohen's $d = 0.55$	
		Grasten et al. (2015)[55]	$R^2 = 0.16$	
		Kokonen et al. (2018)[60]	$\eta^2 = 0.02$	
		Rokka et al. (2019)[72]	$\eta^2 = 0.06$	
		Sevil et al. (2016)[75]		$\eta^2p = 0.074$
		Sevil et al. (2018)[76]		$\eta^2p = 0.036$
Behaviours	Intention to be Physically Active	Abos et al. (2016)[41]	$\eta^2p = 0.365$	
		Cuevas et al. (2016)[48]	$\eta^2 = 0.015$	
		Franco and Coteron (2017)[50]	Cliff's delta = 0.22	
		González-Cutre et al. (2014)[53]	Cliff's delta = 0.45	
		Rhodes et al. (2018)[70]	$R^2 = 0.41$	
		Sánchez-Oliva et al. (2019)[73]	($\eta^2 = 0.04$)	
		Sevil et al. (2018)[76])		$\eta^2p = 0.064$
	Sedentary	Girelli et al. (2016)[52]	$\eta^2p = 0.05$	
		Lonsdale et al. (2013)[62]	Cohen's $d = 0.72$	
		Lonsdale et al. (2017)[63]	Cohen's $d = 0.13$	
		Lubans et al. (2016)[64]	Cohen's $d = -32.2$	
	Lifestyle	Girelli et al. (2016)[52]	$\eta^2p = 0.06$	
	Physical Activity	Bronikowski et al. (2013)[46]	$\eta^2 = 0.05$	
		Fu et al. (2016)[51]	N/A	
		González-Cutre et al. (2014)[53]	Cliff's delta = 0.53	

Supplementary Table S1. *Cont.*

		González-Cutre et al. (2016)[54]	Cliff's delta = 0.27	
		Grasten et al. (2018)[56]	$R^2 = 0.34$	
		Grasten et al. (2015)[55]	$\eta^2 = 0.020$	
		How et al. (2013)[58]	$\eta^2p = 0.20$	
		Lonsdale et al. (2013)[62]	Cohen's $d = 0.45$	
		Lonsdale et al. (2017)[63]	Cohen's $d = 0.85$	
		Nation Grainger et al. (2017)[79]	Small size < 0.01	
		Nicaise et al. (2014)[65]	Cohen's $d = 0.07$	
		Piipari et al. (2018)[68]	$\eta^2 = 0.06$	
		Riiser et al. (2014)[40]	Cohen's $d = 0.55$	
		Shanon et al. (2018)[77]	N/A	
	Attitude	Abos et al. (2016)[41]	$\eta^2p = 0.251$	
		Fernández-Rio et al. (2016)[49]	Cohen's d = 0.05	
		Girelli et al. (2016)[52]	$\eta 2p = 0.04$	
		Gonzalez-Cutre et al. (2014)[53]	Cliff's delta = 0.34	
		González-Cutre et al. (2016)[54]	Cliff's delta = 0.34	
		Hajar et al. (2019)[57]	$\eta^2 = 0.043$	
		Sevil et al. (2015)[74]		$\eta^2p = 0.62$
		Tilga et al. (2019)[80]	$\eta 2\ p = 0.06$	
	Effort	Bechter et al. (2019)[44]	Cohen's $d = 0.30$	
		Rokka et al. (2019)[72]	$\eta^2 = 0.09$	
	Behavioral Perceived Control	García-Calvo et al. (2015)[23]	N/A	
		Laroche et al. (2015)[61]	N/A	
	Engagement	Cheon et al. (2016)[22]		
Anthropometric variables	Cardiorespiratory Fitness	Lubans et al. (2016)[64]	Cohen's $d = 5.9$	
	BMI/Adiposity	Lubans et al. (2016)[64]	N/A	
		Riiser et al. (2014)[40]	Cohen's $d = -0.70$	
		Sebire et al. (2016)[39]	N/A	
		Smith et al. (2016)[78]	N/A	

Supplementary Table S1. *Cont.*

Psychosocial variables	Body Image	Riiser et al. (2014)[40]	Cohen's d = 0.56	
	Quality Life	Riiser et al. (2014)[40]	Cohen's d = 0.45	
		Shanon et al. (2018)[77]	R^2 = 0.21	
	Well-being	Babic et al. (2016)[43]	Small size < 0.01	
	Funny/Enjoy	Abos et al. (2016)[41]	η^2 p = 0.155	
		Franco and Coteron (2017)[50]	Cliff's delta = 0.40	
		Fu et al. (2016)[51]	N/A	
		Hajar et al. (2019)[57]	η^2 = 0.043	
		Nicaise et al. (2014)[65]	Cohen's d = 0.99	
		Perlman et al. (2013)[67]	η^2 p = 0.122	
		Sevil et al. (2015)[74]		η^2p = 0.62
		Sevil et al. (2016)[75]		η^2p = 0.070
		Sevil et al. (2018)[76]		η^2p = 0.180
	Boredom	Cuevas et al. (2016)[48]	η^2 = 0.050	
		Sevil et al. (2015)[74]		η^2p = 0.31
	Usefulness	Amado et al. (2017)[42]	N/A	
	Self-efficacy	Abos et al. (2016)[41]	η^2p = 0.111	
		Bechter et al. (2019)[44]	Cohen's d = 0.41	
		Bronikowski et al. (2013)[46]	η^2 = 0.10	
		Tilga et al. (2019)[80]	η^2p = 0.04	
	Appearance	Hajar et al. (2019)[57]	η^2 = 0.043	
	Psychological Condition	Hajar et al. (2019)[57]	η^2 = 0.043	
		Tilga et al. (2019)[80]	η^2p = 0.09	
	Subjective Norms	González-Cutre et al. (2014)[53]	Cliff's delta = 0.34	
		Laroche et al. (2019)[61]	R^2 = 0.09	
	Social Support	Robbins et al., (2019)[71]	R = 0.28	
	Prosocial Behavior	Abos et al. (2016)[41]	η^2p = 0.144	
		Bortoli et al. (2015)[45]	Cohen's d = 0.45	
		Cheon et al. (2018)[47]	Cohen's d = 0.56	
	Antisocial Behavior	Bortoli et al. (2015)[45]	Cohen's d = 0.64	
		Cheon et al. (2018)[47]	Cohen's d = 0.72	

Sevil et al. (2018))[76]		η^2 p = 0.149