## **Supplementary Material**

Title: The Feasibility of a Novel School Peer-led Mentoring Model to Improve the Physical Activity Levels and Sedentary Time of Adolescent Girls: The Girls' Peer Activity (G-PACT) Project

Michael B. Owen <sup>1,\*</sup>, Charlotte Kerner <sup>1,2</sup>, Sarah L. Taylor <sup>1</sup>, Robert J. Noonan <sup>1</sup>, Lisa Newson <sup>3</sup>, Maria-Christina Kosteli <sup>1</sup>, Whitney B. Curry <sup>4</sup>, and Stuart J. Fairclough<sup>1,5</sup>

- 1. Physical Activity and Health Research Group, Department of Sport and Physical Activity, Edge Hill University, St Helens Road, Ormskirk, Lancashire, L39 4QP, UK; Michael.Owen@edgehill.ac.uk (M.B.O.); Sarah.Taylor11@go.edgehill.ac.uk (S.L.T.); Robert.Noonan@edgehill.ac.uk (R.J.N.); Maria-Christina.Kosteli@edgehill.ac.uk (M.C.K.); Stuart.Fairclough@edgehill.ac.uk (S.J.F.)
- 2. Department of Life Sciences, Brunel University, London, UB8 3PH, UK; Charlotte.Kerner@brunel.ac.uk (C.K.)
- 3. Natural Sciences and Psychology, Research Centre for Brain and Behaviour, Liverpool John Moores University, Liverpool, L3 5AF, UK; L.M.Newson@ljmu.ac.uk (L.N.)
- 4. Wellbeing and Public Health, Cornwall Council, Truro, TR1 3AY, UK; whitney.curry@cornwall.gov.uk (W.B.C.)
- 5. Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland
- \* Correspondence: Michael.Owen@edgehill.ac.uk; Tel.: +44-016956-57344

## **S1:** Educational leadership sessions theory map and session aims

Session Focus	Session Overview / LO's	Behaviour Change Techniques	SCT / SDT Constructs	
Workshop Day Part 1; Introduction to programme and leadership Information	<ul> <li>What is the purpose of the project?</li> <li>Provide information about leadership and the role of peer leaders</li> <li>What do the students think about leadership?</li> <li>What are the traits of good leaders?</li> </ul>	<ul> <li>Participation in *fun*         workshop activities</li> <li>Prompt identification as role         model/ position advocate</li> <li>General communication         skills training</li> </ul>	<ul> <li>Autonomy</li> <li>Competence</li> <li>Relatedness</li> <li>Intrinsic</li></ul>	
Workshop Day Part 2; PA and health knowledge	<ul> <li>What is PA?</li> <li>What are the different type of PA?</li> <li>What physical activities do the students do?</li> <li>Importance of PA for good health, physical, psychological and social</li> <li>Communication task</li> </ul>	<ul> <li>Provide information on consequences of behaviour in general</li> <li>Provide information on consequences of behaviour to the individual</li> <li>Provide normative information about others' behaviour</li> <li>Prompt identification as role model/ position advocate</li> </ul>	<ul> <li>Autonomy</li> <li>Competence</li> <li>Outcome     expectations</li> <li>Outcome     expectations</li> <li>Outcome     expectations</li> <li>Role modelling</li> </ul>	

School Workshop 1;	- What is motivation?	- Plan social support/ social	- Autonomy
Motivation	- How to motivate others?	change	- Competence
	- Review of first PA session	- Barrier	- Social support
		identification/Problem	
		solving	
School Workshop 2;	- What is goal setting?	- Goal setting (behaviour)	- Autonomy
Goal setting	- How to set effective goals? - Prompt self-mo		- Competence
	- Develop goal setting skills /	behaviour including; setting	- Social support
	set targets to achieve	goals, reviewing goals,	- Self-regulation
		specifying action plans and	
		feedback on performance	
School Workshop 3;	- Identify barriers to PA	- Barrier	- Self-efficacy
Barriers to PA and	- Methods to break down	identification/Problem	- Autonomy
methods to increase	barriers	solving	- Competence
PA	- More in-depth benefits of	- Provide information on	- Intrinsic
	physical activity	where and when to perform	Motivation
	- Problem solving task	the behaviour (Prompts	
		cues)	
School Workshop 4;	- How to provide social	- Plan social support/ social	- Social support
Social support and	support to friends	change	- Self-efficacy
review of programme	- How to encourage friends	- Barrier	- Autonomy
	- How to engage with peers	identification/Problem	- Competence
		solving	- Relatedness

	<ul> <li>Review previously covered content for information booklet</li> <li>Problem solving task</li> </ul>		
School Support Sessions 5 and 6; Leadership support and mentoring	<ul> <li>Revisit previously set goals</li> <li>Re-set goals for future weeks</li> <li>Provide the leaders support and advice on their role</li> <li>Discuss the new after school PA club an probe for feedback on the club</li> <li>Encourage peer leaders in their role</li> </ul>	<ul> <li>Review behaviour goals (goal setting)</li> <li>Prompt self-monitoring of behaviour</li> <li>Prompt review of behavioural goals</li> <li>Barrier identification/Problem solving</li> <li>Provide information on where and when to perform the behaviour (Prompts cues)</li> </ul>	<ul> <li>Autonomy</li> <li>Competence</li> <li>Relatedness</li> <li>Intrinsic Motivation</li> <li>Social support</li> <li>Self-regulation</li> <li>Self-efficacy</li> </ul>

**S2:** After-school club period adjusted means (SE) for ST and MVPA at baseline, post-INT and mean difference

0.1.1	Time	ST (Minu	ıtes)	Adjusted	MV	PA	Adjusted
School				difference in	(Minu	ıtes)	difference
		Mean	SE	means	Mean	SE	in means
				(95% CI)			(95% CI)
1.Class	Baseline	62.9	0.0	-1.4	5.1	0.0	0.0
	Post-INT	61.5	1.1	(-4.5 to -0.7)	5.1	0.4	- (-0.1 to 1.2)
2.Choice	Baseline	62.9	0.0	2.7	5.1	0.0	0.0
	Post-INT	65.6	1.6	(-0.3 to 5.8)	5.1	0.6	- (-1.2 to 1.2)
3.No	Baseline	62.9	0.0	1.1	5.1	0.0	-1.2
Club	Post-INT	64.0	1.4	(-2.3 to 4.2)	3.9	0.5	- (-2.6 to -0.1)

Notes: Mean Difference = change baseline to post-INT