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Predicting outcomes from engagement with specific components of an internet-based physical activity intervention with financial incentives: process analysis of a cluster randomized controlled trial

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Multimedia Appendix 4. Univariable and multivariable Cox regression analyses.

Table 4.1. Univariable and multivariable Cox regression showing association of non-usage attrition risk for recording daily activity via the physical activity monitoring system with baseline socio-demographic, psychosocial and environmental variables, and physical activity

OUTCOME	Univariable analysis			Multivariable analysis ^a		
	n	Hazard ratio (95% CI)	P value	n	Hazard ratio (95% CI)	P value
<i>Socio-demographic variables</i>						
Age (decades)	421	0.94 (0.84, 1.06)	.32			
Gender (Female vs Male)	422	0.99 (0.69, 1.40)	.94			
BMI (kg/m ²)	406	1.00 (0.98, 1.02)	.79			
Income (>£20k vs ≤£20k)	411	1.11 (0.78, 1.59)	.55			
Some higher education (Yes vs No)	412	0.94 (0.57, 1.55)	.81			
Married/co-habiting (Yes vs No)	412	1.30 (0.95, 1.79)	.10			
SF-8: Mental Component Score	415	0.99 (0.98, 1.00)	.03			
SF-8: Physical Component Score	415	0.99 (0.98, 1.00)	.08			
EQ5D: Health State	367	1.00 (0.99, 1.00)	.68			
EQ5D: Weighted Health Index	368	0.50 (0.19, 1.32)	.16			
WEMWBS: Mental wellbeing scale	413	1.00 (0.99, 1.01)	.43			
<i>Mediator variables</i>						
Physical activity self-efficacy	410	0.94 (0.83, 1.07)	.34			
Intentions	405	1.00 (0.95, 1.06)	.93			
Outcome expectations	389	1.05 (0.83, 1.32)	.70			
Financial motivation	409	0.99 (0.91, 1.07)	.77			
Planning	386	0.96 (0.82, 1.11)	.56			
Social norms	389	0.94 (0.86, 1.04)	.24			
Identified regulation	409	0.87 (0.79, 0.96)	.005	407	0.88 (0.81, 0.97)	.009
Integrated regulation	409	0.93 (0.85, 1.02)	.14			
Intrinsic motivation	408	0.91 (0.83, 0.99)	.04			
Habit	407	0.96 (0.89, 1.04)	.32			
Workplace norms	409	1.05 (0.92, 1.19)	.47			
Recovery self-efficacy	408	0.86 (0.77, 0.96)	.005	407	0.88 (0.80, 0.98)	.02
Maintenance self-efficacy	408	0.96 (0.83, 1.10)	.55			
Outcome satisfaction	377	0.95 (0.80, 1.13)	.57			
<i>Environmental variables</i>						
WE: Attractiveness	409	1.06 (0.98, 1.14)	.17			
WE: Safety	410	1.06 (1.01, 1.11)	.02	407	1.07 (1.02, 1.11)	.008
WE: Accessibility	410	1.00 (0.95, 1.05)	.99			
WE: Availability	410	0.97 (0.93, 1.01)	.11			
<i>Physical activity</i>						
Pedometer steps/day	388	1.00 (1.00, 1.00)	.15			

NB. Time variable = number of days until first two week lapse from recording daily activity via physical activity monitoring system; Event variable = 1 (non-usage attrition occurred) or 0 (non-usage attrition did not occur).

^aUnivariable analyses were conducted on all predictor variables and those with $P < .05$ were included in a multivariable model with backwards elimination of the predictor with the highest P value until all included predictors had $P < .05$.

Table 4.2. Univariable and multivariable Cox regression showing association of website non-usage attrition risk with baseline socio-demographics, psychosocial and environmental variables, and physical activity

OUTCOME	Univariable analysis			Multivariable analysis ^a		
	n	Hazard ratio (95% CI)	P value	n	Hazard ratio (95% CI)	P value
<i>Socio-demographics</i>						
Age (decades)	417	0.95 (0.87, 1.03)	.18			
Gender (Female vs Male)	418	1.01 (0.84, 1.20)	.94			
BMI (kg/m ²)	403	0.99 (0.98, 1.01)	.29			
Income (>£20k vs ≤£20k)	407	1.17 (0.95, 1.43)	.14			
Some higher education (Yes vs No)	408	0.82 (0.62, 1.09)	.18			
Married/co-habiting (Yes vs No)	408	1.22 (0.94, 1.58)	.14			
SF-8: Mental Component Score	411	1.00 (0.99, 1.01)	.42			
SF-8: Physical Component Score	411	1.00 (0.99, 1.02)	.83			
EQ5D: Health State	366	1.00 (0.99, 1.00)	.29			
EQ5D: Weighted Health Index	367	0.34 (0.13, 0.87)	.02	366	0.33 (0.12, 0.91)	.03
WEMWBS: Mental wellbeing scale	409	1.00 (0.99, 1.02)	.84			
<i>Mediator variables</i>						
Physical activity self-efficacy	406	0.95 (0.88, 1.03)	.24			
Intentions	401	1.03 (0.96, 1.09)	.44			
Outcome expectations	388	1.10 (0.93, 1.32)	.27			
Financial motivation	405	0.94 (0.88, 0.99)	.02	366	0.93 (0.87, 0.99)	.02
Planning	382	0.92 (0.80, 1.06)	.26			
Social norms	384	1.04 (0.93, 1.17)	.47			
Identified regulation	405	1.01 (0.88, 1.16)	.88			
Integrated regulation	405	1.02 (0.92, 1.12)	.75			
Intrinsic motivation	404	1.02 (0.91, 1.14)	.74			
Habit	403	0.99 (0.92, 1.07)	.78			
Workplace norms	405	1.07 (0.95, 1.21)	.26			
Recovery self-efficacy	404	0.93 (0.81, 1.07)	.32			
Maintenance self-efficacy	404	1.07 (0.94, 1.22)	.29			
Outcome satisfaction	372	0.93 (0.78, 1.12)	.46			
<i>Environmental variables</i>						
WE: Attractiveness	405	1.04 (0.99, 1.10)	.12			
WE: Safety	405	1.04 (0.99, 1.10)	.09			
WE: Accessibility	406	0.99 (0.96, 1.01)	.32			
WE: Availability	406	0.96 (0.93, 0.99)	.003	366	0.96 (0.93, 0.99)	.02
<i>Physical activity</i>						
Pedometer steps/day	383	1.00 (1.00, 1.00)	.09			

NB. Time variable = number of days until first two week lapse from logging onto the website; Event variable = 1 (non-usage attrition occurred) or 0 (non-usage attrition did not occur).

^aUnivariable analyses were conducted on all predictor variables and those with $P < .05$ were included in a multivariable model with backwards elimination of the predictor with the highest P value until all included predictors had $P < .05$.