

# Supplementary Files

## Growing Resilience through Interaction with Nature: Can Group Walks in Nature Buffer the Effects of Stressful Life Events on Mental Health?

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**Table S1.** Characteristics of the matched<sup>a</sup> Nature Group Walkers (main sample) on demographics, health, and past stressful life events.

Demographics, health status, and past stressful life events and physical activity	Nature group walkers (n = 1081)	Comparison Group (n = 435)	Statistic	p-value
Gender (female %)	65.5%	68.1%	$\chi^2 (1) = 0.952$	0.329
Age (55+ %)	88.3%	88.4%	$\chi^2 (1) = 0.000$	0.995
Marital status (in a relationship %)	71.3%	70.4%	$\chi^2 (1) = 0.122$	0.727
Qualification (tertiary education %)	52.2%	54.9%	$\chi^2 (2) = 3.560$	0.169
Ethnicity (white %)	96.7%	97.2%	$\chi^2 (1) = .314$	0.575
Deprivation (least deprived %)	50.9%	51.5%	$\chi^2 (2) = .224$	0.894
Health condition (with condition) %	16.2%	20.5%	$\chi^2 (1) = 4.039$	0.044
Medical condition (with condition) %	34.8%	38.5%	$\chi^2 (1) = 1.904$	0.168
Disability (with disability) %	8.9%	6.7%	$\chi^2 (1) = 2.033$	0.154
GP recommend WfH (yes) %	6.2%	7.9%	$\chi^2 (1) = 1.369$	0.242
Past stressful life events <sup>b</sup> (none) %	32.9%	32.5%	$\chi^2 (2) = 0.061$	0.970
Past Physical activity <sup>c</sup> M (SD)	3.50 (1.94)	3.32 (2.13)	$t(740.02) = 1.502$	0.134

*Note.* Data reproduced from Marselle et al. (2014). <sup>a</sup>Propensity matched sample; all analyses weighted by propensity score weight. <sup>b</sup>Stressful life events experienced in the past year. <sup>c</sup> Number of days in the week prior to first WfH group walk took part in 30 minutes or more of physical activity.

**Table S2.** Characteristics of the matched <sup>a</sup> Frequent Nature Group Walkers <sup>b</sup> (subsample) on demographics, health status, past stressful life events and past physical activity.

Demographics, health status, and past stressful life events and physical activity	Frequent green group walkers (n = 631)	Comparison Group (n = 306)	Statistic	p-value
Gender (female %)	62.8%	61%	X <sup>2</sup> (1) = 0.266	0.606
Age (55+ %)	92.7%	92.7%	X <sup>2</sup> (1) = 0.000	1.00
Marital status (in a relationship %)	71.6%	71.6%	X <sup>2</sup> (1) = 0.000	1.00
Qualification (tertiary education %)	46%	46%	X <sup>2</sup> (2) = 0.968	0.616
Ethnicity (white %)	96.5%	96.2%	X <sup>2</sup> (1) = 0.058	0.810
Deprivation (least deprived %)	49.4%	49.1%	X <sup>2</sup> (2) = 0.178	0.915
Health condition (with condition) %	17.6%	18.4%	X <sup>2</sup> (1) = 0.088	0.766
Medical condition (with condition) %	36.6%	38.5%	X <sup>2</sup> (1) = 0.319	0.572
Disability (with disability) %	9%	9%	X <sup>2</sup> (1) = 0.000	1.00
GP recommend WfH (yes) %	7%	9.2%	X <sup>2</sup> (1) = 1.428	0.232
Past stressful life events <sup>c</sup> (none) %	33.3%	34.7%	X <sup>2</sup> (2) = 2.552	0.279
Past Physical activity <sup>d</sup> M (SD)	3.54 (1.89)	3.49 (1.96)	t(935) = -0.357	0.721

*Note.* <sup>a</sup>Propensity matched sample; all analyses weighted by propensity score weight. <sup>b</sup>The Frequent Nature Group Walkers subsample consists of participants from the main sample who attended a group walk in the natural environment at least once per week in the previous three months. <sup>c</sup>Stressful life events experienced in the past year. <sup>d</sup>Number of days in the week prior to first WfH group walk took part in 30 minutes or more of physical activity.

**Table S3.** Comparison of mean scores of social support, connectedness to nature and resiliency for matched <sup>a</sup> Nature Group Walkers and Comparison Group (main sample) and matched <sup>a</sup> Frequent Nature Group Walkers <sup>b</sup> and Comparison group (subsample).

Outcomes <sup>c</sup>	Nature Group Walkers (M (SD))	Comparison Group (M (SD))	<i>t</i> -test <sup>d</sup>	<i>p</i> -value
<b>Nature Group Walkers (Main sample)<sup>1</sup></b>				
Recent physical activity <sup>e</sup>	3.46 (1.79)	2.94 (2.11)	<i>t</i> (689.96) = -4.50	< 0.001
Social support	22.94 (6.44)	22.82 (6.47)	<i>t</i> (1514) = -0.33	0.74
Connectedness to nature <sup>e</sup>	51.75 (7.67)	50.79 (8.51)	<i>t</i> (732.47) = -2.05	0.04
Resiliency <sup>e</sup>	28.60 (6.05)	27.85 (6.96)	<i>t</i> (711.87) = -1.97	0.05
<b>Frequent Nature Group Walkers (Subsample)<sup>2</sup></b>				
Recent physical activity <sup>e</sup>	3.65 (1.76)	3.03 (2.06)	<i>t</i> (523.88) = -4.52	< 0.001
Social support	22.83 (6.57)	22.36 (6.50)	<i>t</i> (935) = -1.02	0.31
Connectedness to nature <sup>e</sup>	51.51 (7.62)	51.24 (8.29)	<i>t</i> (560.75) = -0.49	0.63
Resiliency <sup>e</sup>	28.68 (6.06)	27.73 (6.93)	<i>t</i> (537.24) = -2.05	0.04

*Note.* <sup>a</sup>Propensity score matched sample; analysis weighted by propensity score weight. <sup>b</sup> The Frequent Nature Group Walkers subsample consists of participants from the main sample who attended a group walk in the natural environment at least once per week in the previous three months. <sup>c</sup>Higher scores indicate greater: social support (range 0-30), connection to nature (range 14-70), and resiliency (range 0-40). <sup>d</sup>Independent samples *t*-test. <sup>e</sup>Equal variances not assumed. <sup>1</sup>Nature Group Walkers *n* = 1081; Comparison Group *n* = 435. <sup>2</sup> Frequent Nature Group Walkers *n* = 631; Comparison Group *n* = 306.

**Table S4.** Number of recent stressful life events experienced by Nature Group Walkers or Propensity-matched Comparison group (main sample).

<b>Stressful life events</b>	<b>Comparison group (<i>n</i> = 435)</b>	<b>Nature Group Walkers (<i>n</i> = 1081)</b>
No life event	56.9% ( <i>n</i> = 248)	58.1% ( <i>n</i> = 628)
1 or more life event	43.1% ( <i>n</i> = 187)	41.9% ( <i>n</i> = 453)
<i>M</i> ( <i>SD</i> )	0.43 (0.50)	0.42 (0.49)

*Note.* Propensity score matched sample; analysis weighted by propensity score weight. There was a no significant difference between number of stressful life events experienced and group membership,  $t(1514) = 0.414$ ,  $p = 0.68$ .

**Table S5.** Number of recent stressful life events experienced by Frequent Nature Group Walkers or Propensity-matched Comparison group (subsample).

<b>Stressful life events</b>	<b>Comparison group (<i>n</i> = 306)</b>	<b>Frequent Nature Group Walkers (<i>n</i> = 631)</b>
No life event	51.8% ( <i>n</i> = 159)	58.8% ( <i>n</i> = 371)
1 or more life event	48.2% ( <i>n</i> = 147)	41.2% ( <i>n</i> = 260)
<i>M</i> ( <i>SD</i> )	0.48 (0.50)	0.41 (0.49)

*Note.* Propensity score matched sample; analysis weighted by propensity score weight. There was a marginally significant difference between number of stressful life events experienced and group membership,  $t(595.27) = 2.010$ ,  $p = 0.05$ .