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Does perceived restorativeness mediate the effects of perceived biodiversity and perceived naturalness on emotional well-being following group walks in nature?

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Appendix D. MEDIATION RESULTS FOR NEGATIVE AFFECT

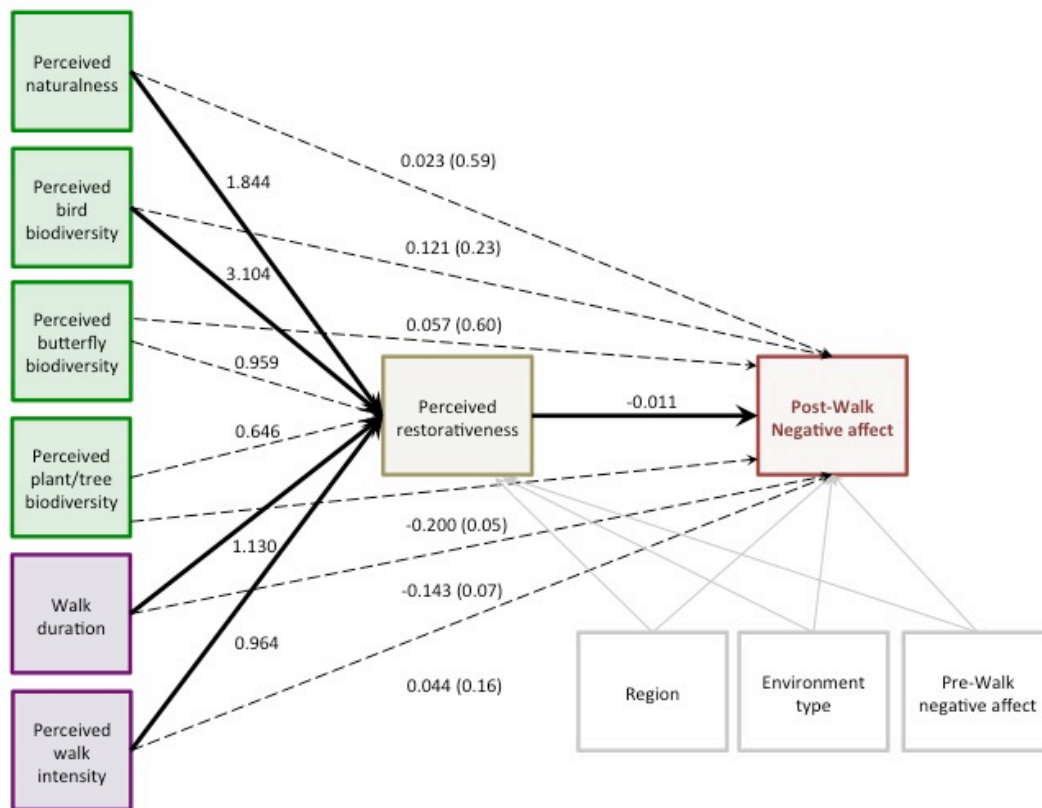


Figure D.1. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration and perceived walk intensity as predictors of post-walk negative affect by perceived restorativeness. Unstandardized regression coefficients are reported for the a , b and c' paths. Statistically significant paths are highlighted in bold; nonsignificant paths in portrayed in dotted lines. Parentheses for c' path indicate p -values.

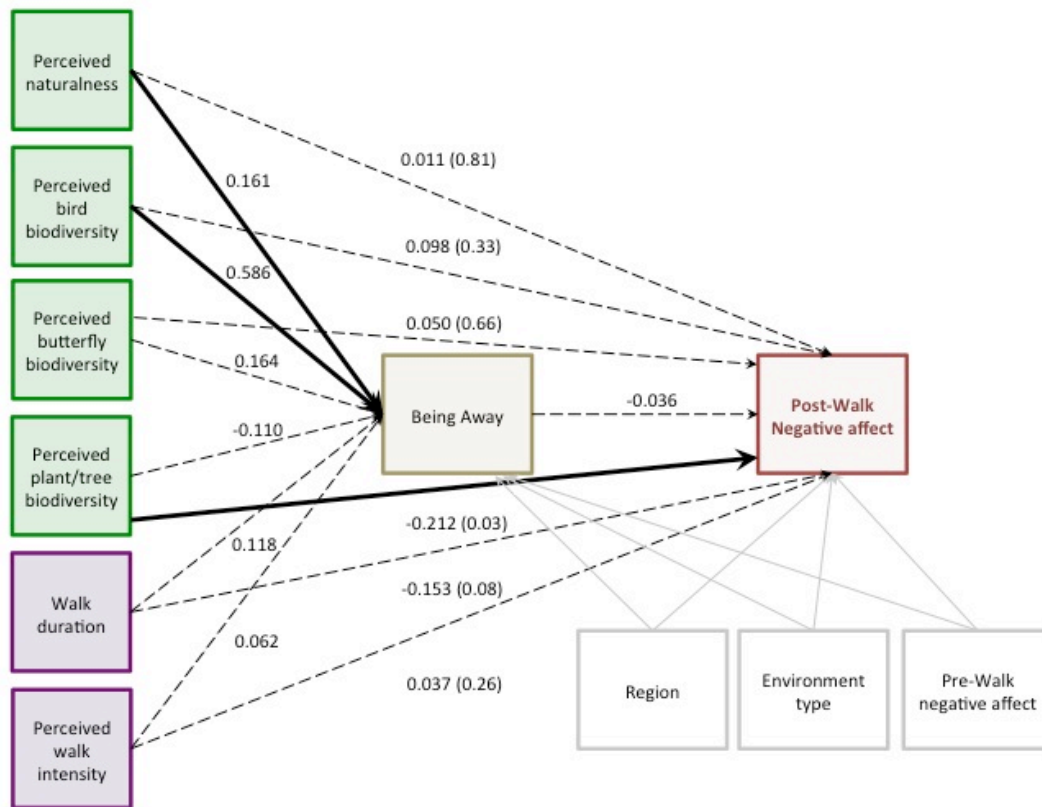


Figure D.2. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration and perceived walk intensity as predictors of post-walk negative affect by being away. Unstandardized regression coefficients are reported for the a , b and c' paths. Statistically significant paths are highlighted in bold; nonsignificant paths in portrayed in dotted lines. Parentheses for c' path indicate p -values.

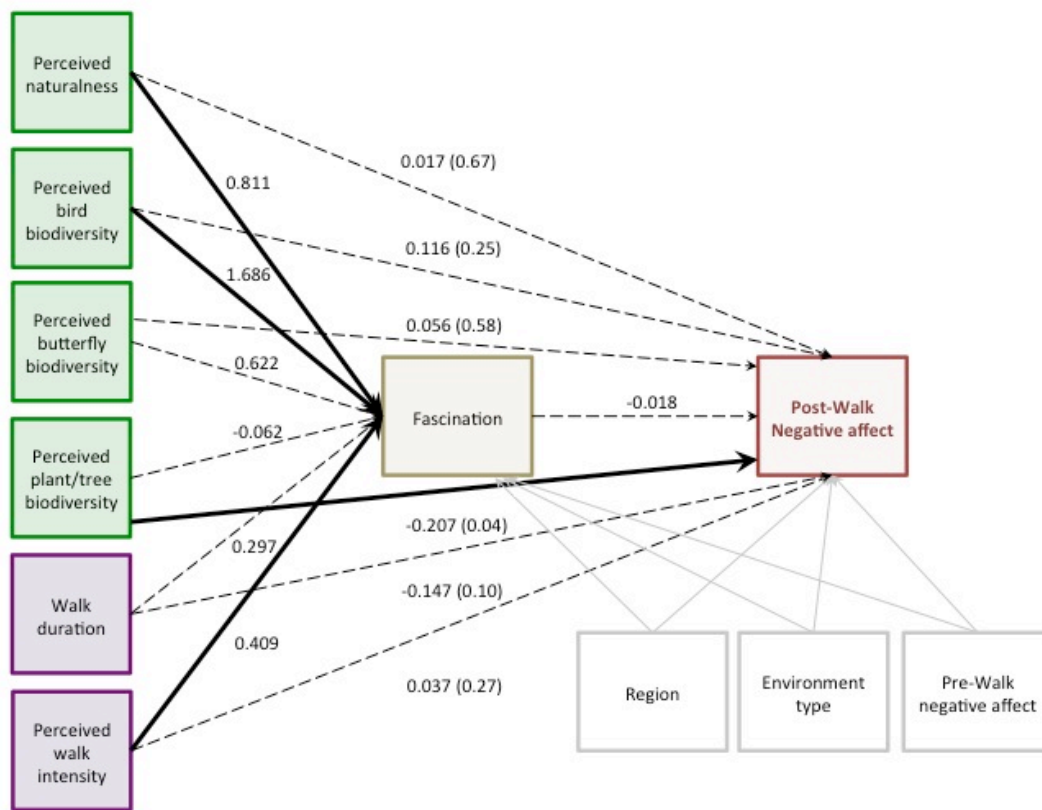


Figure D.3. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration and perceived walk intensity as predictors of post-walk negative affect by fascination. Unstandardized regression coefficients are reported for the *a*, *b* and *c'* paths. Statistically significant paths are highlighted in bold; nonsignificant paths in portrayed in dotted lines. Parentheses for *c'* path indicate *p*-values.

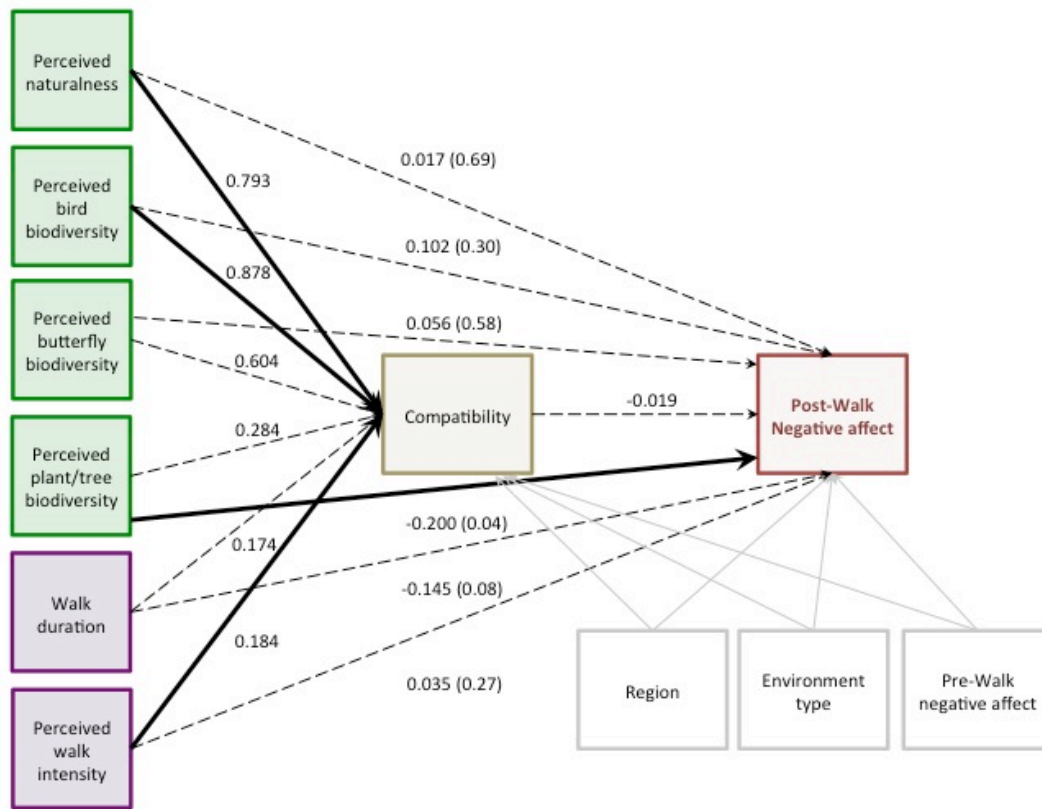


Figure D.4. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration and perceived walk intensity as predictors of post-walk negative affect by compatibility. Unstandardized regression coefficients are reported for the *a*, *b* and *c'* paths. Statistically significant paths are highlighted in bold; nonsignificant paths in portrayed in dotted lines. Parentheses for *c'* path indicate *p*-values.

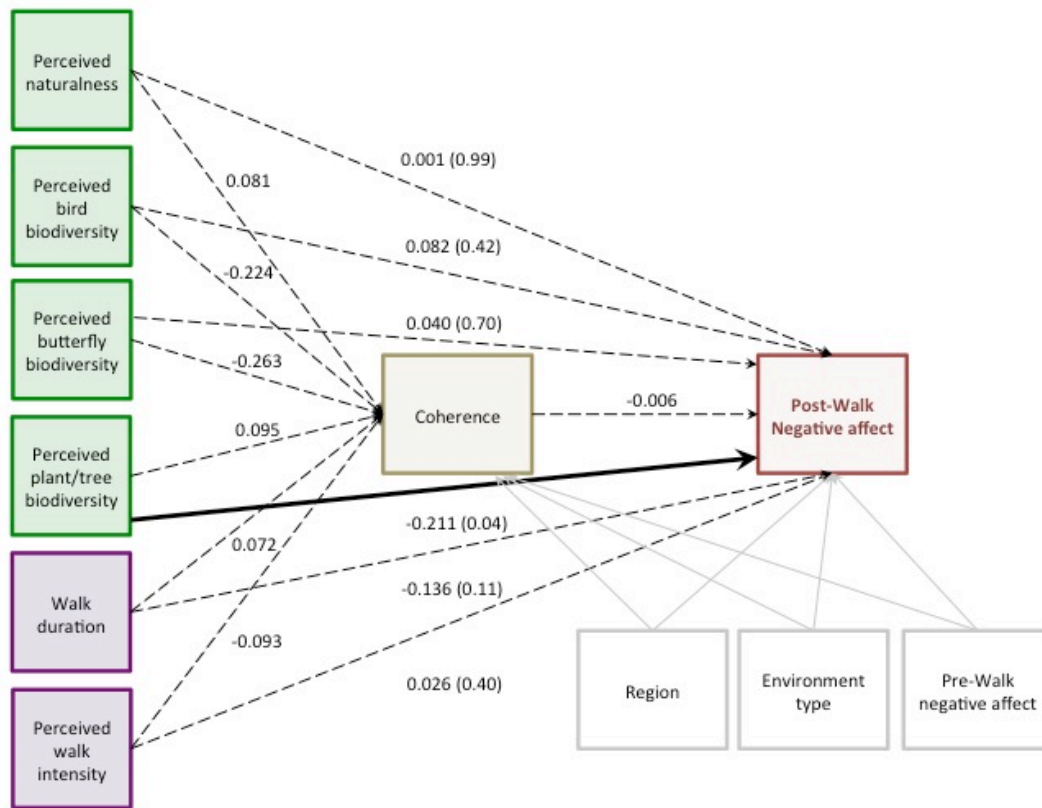


Figure D.5. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration and perceived walk intensity as predictors of post-walk negative affect by coherence. Unstandardized regression coefficients are reported for the a , b and c' paths. Statistically significant paths are highlighted in bold; nonsignificant paths in portrayed in dotted lines. Parentheses for c' path indicate p -values.

Perceived Naturalness

Table D.1. Mediation results of perceived naturalness on negative affect via overall PRS

Antecedent		Consequent								
		M (PRS)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (NATURALNESS)	<i>a</i>	1.844	1.366	2.323		<i>c'</i>	0.023	-0.057	0.104	0.59
<i>M</i> (PRS)		-	-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect						<i>ab</i>	-0.021	-0.041	-0.004	0.01

Table D.2. Mediation results of perceived naturalness on negative affect via being away

Antecedent		Consequent								
		M (BEING AWAY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (NATURALNESS)	<i>a</i>	0.161	0.066	0.256		<i>c'</i>	0.011	-0.067	0.092	0.81
<i>M</i> (BEING AWAY)		-	-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect						<i>ab</i>	-0.006	-0.015	0.001	0.08

Table D.3. Mediation results of perceived naturalness on negative affect via fascination

Antecedent		Consequent								
		M (FASCINATION)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (NATURALNESS)	<i>a</i>	0.811	0.564	1.057		<i>c'</i>	0.017	-0.059	0.094	0.67
<i>M</i> (FASCINATION)		-	-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect						<i>ab</i>	-0.015	-0.032	0.0003	0.06

Table D.4. Mediation results of perceived naturalness on negative affect via compatibility

Antecedent		Consequent								
		M (COMPATIBILITY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (NATURALNESS)	<i>a</i>	0.793	0.560	1.025	<i>c'</i>	0.017	-0.063	0.102	0.69	
M (COMPATIBILITY)		-	-	-	-	<i>b</i>	-0.019	-0.038	0.000	
Indirect effect						<i>ab</i>	-0.016	-0.033	-0.001	0.04

Table D.5. Mediation results of perceived naturalness on negative affect via coherence

Antecedent		Consequent								
		M (COHERENCE)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (NATURALNESS)	<i>a</i>	0.081	-0.039	0.203	<i>c'</i>	0.001	-0.078	0.084	0.99	
M (COHERENCE)		-	-	-	-	<i>b</i>	-0.006	-0.044	0.033	
Indirect effect						<i>ab</i>	-0.001	-0.005	0.003	0.81

Perceived bird biodiversity

Table D.6. Mediation results of perceived bird biodiversity on negative affect via overall PRS

Antecedent		Consequent							
		M (PRS)				Y (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	3.104	1.973	4.255	<i>c'</i>	0.121	-0.088	0.332	0.23
<i>M</i> (PRS)		-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect					<i>ab</i>	-0.035	-0.069	-0.006	0.01

Table D.7. Mediation results of perceived bird biodiversity on negative affect via being away

Antecedent		Consequent							
		M (BEING AWAY)				Y (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	0.586	0.359	0.812	<i>c'</i>	0.098	-0.106	0.306	0.33
<i>M</i> (BEING AWAY)		-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect					<i>ab</i>	-0.022	-0.053	0.002	0.08

Table D.8. Mediation results of perceived bird biodiversity on negative affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	1.686	1.103	2.281	<i>c'</i>	0.116	-0.084	0.319	0.25
<i>M</i> (FASCINATION)		-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect					<i>ab</i>	-0.031	-0.070	0.001	0.06

Table D.9. Mediation results of perceived bird biodiversity on negative affect via compatibility

Antecedent		Consequent							
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	0.878	0.328	1.438	<i>c'</i>	0.102	-0.090	0.306	0.30
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	-0.019	-0.038	0.000
Indirect effect					<i>ab</i>	-0.017	-0.041	-0.001	0.04

Table D.10. Mediation results of perceived bird biodiversity on negative affect via coherence

Antecedent		Consequent							
		<i>M</i> (COHERENCE)				<i>Y</i> (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	-0.224	-0.508	0.068	<i>c'</i>	0.082	-0.112	0.290	0.42
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.006	-0.044	0.033
Indirect effect					<i>ab</i>	0.001	-0.008	0.014	0.79

Perceived butterfly biodiversity

Table D.11. Mediation results of perceived butterfly biodiversity on negative affect via overall PRS

Antecedent		Consequent								
		M (PRS)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (BUTTERFLIES)	<i>a</i>	0.959	-0.331	2.271		<i>c'</i>	0.057	-0.159	0.268	0.60
<i>M</i> (PRS)		-	-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect						<i>ab</i>	-0.011	-0.034	0.004	0.14

Table D.12. Mediation results of perceived butterfly biodiversity on negative affect via being away

Antecedent		Consequent								
		M (BEING AWAY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (BUTTERFLIES)	<i>a</i>	0.164	-0.093	0.424		<i>c'</i>	0.050	-0.161	0.247	0.66
<i>M</i> (BEING AWAY)		-	-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect						<i>ab</i>	-0.006	-0.024	0.004	0.27

Table D.13. Mediation results of perceived butterfly biodiversity on negative affect via fascination

Antecedent		Consequent								
		M (FASCINATION)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (BUTTERFLIES)	<i>a</i>	0.622	-0.042	1.296		<i>c'</i>	0.056	-0.150	0.274	0.58
<i>M</i> (FASCINATION)		-	-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect						<i>ab</i>	-0.011	-0.033	0.002	0.11

Table D.14. Mediation results of perceived butterfly biodiversity on negative affect via compatibility

Antecedent		Consequent							
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BUTTERFLIES)	<i>a</i>	0.604	-0.024	1.240	<i>c'</i>	0.056	-0.165	0.267	0.58
<i>M</i> (COMPATIBILITY)		-	-	-	<i>b</i>	-0.019	-0.038	0.0001	
Indirect effect					<i>ab</i>	-0.012	-0.034	0.001	0.09

Table D.15. Mediation results of perceived butterfly biodiversity on negative affect via coherence

Antecedent		Consequent							
		<i>M</i> (COHERENCE)				<i>Y</i> (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BUTTERFLIES)	<i>a</i>	-0.263	-0.059	0.070	<i>c'</i>	0.040	-0.176	0.253	0.70
<i>M</i> (COHERENCE)		-	-	-	<i>b</i>	-0.006	-0.044	0.033	
Indirect effect					<i>ab</i>	0.002	-0.011	0.017	0.80

Perceived plant and tree biodiversity

Table D.16. Mediation results of perceived plant/tree biodiversity on negative affect via overall PRS

Antecedent		Consequent								
		M (PRS)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (PLANTS/TREES)	<i>a</i>	0.646	-0.509	1.810		<i>c'</i>	-0.200	-0.384	0.003	0.05
<i>M</i> (PRS)		-	-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect						<i>ab</i>	-0.008	-0.027	0.005	0.24

Table D.17. Mediation results of perceived plant/tree biodiversity on negative affect via being away

Antecedent		Consequent								
		M (BEING AWAY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (PLANTS/TREES)	<i>a</i>	-0.110	-0.340	0.121		<i>c'</i>	-0.212	-0.399	-0.019	0.03
<i>M</i> (BEING AWAY)		-	-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect						<i>ab</i>	0.004	-0.005	0.018	0.40

Table D.18. Mediation results of perceived plant/tree biodiversity on negative affect via fascination

Antecedent		Consequent								
		M (FASCINATION)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (PLANTS/TREES)	<i>a</i>	-0.062	-0.653	0.541		<i>c'</i>	-0.207	-0.393	-0.017	0.04
<i>M</i> (FASCINATION)		-	-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect						<i>ab</i>	0.001	-0.011	0.015	0.89

Table D.19. Mediation results of perceived plant/tree biodiversity on negative affect via compatibility

Antecedent	Consequent							
	<i>M</i> (COMPATIBILITY)				<i>Y</i> (NEGATIVE AFFECT)			
	Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (PLANTS/TREES)	<i>a</i> 0.284	-0.274	0.853	<i>c'</i>	-0.200	-0.391	-0.013	0.04
<i>M</i> (COMPATIBILITY)	-	-	-	- <i>b</i>	-0.019	-0.038	0.0001	
Indirect effect				<i>ab</i>	-0.006	-0.020	0.005	0.35

Table D.20. Mediation results of perceived plant/tree biodiversity on negative affect via coherence

Antecedent	Consequent							
	<i>M</i> (COHERENCE)				<i>Y</i> (NEGATIVE AFFECT)			
	Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (PLANTS/TREES)	<i>a</i> 0.095	-0.199	0.386	<i>c'</i>	-0.211	-0.396	-0.008	0.04
<i>M</i> (COHERENCE)	-	-	-	- <i>b</i>	-0.006	-0.044	0.033	
Indirect effect				<i>ab</i>	-0.001	-0.009	0.006	0.91

Walk duration

Table D.21. Mediation results of walk duration on negative affect via overall PRS

Antecedent		Consequent								
		M (PRS)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (DURATION)	<i>a</i>	1.130	0.080	2.141		<i>c'</i>	-0.143	-0.314	0.020	0.07
M (PRS)		-	-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect						<i>ab</i>	-0.013	-0.032	-	0.05

Table D.22. Mediation results of walk duration on negative affect via being away

Antecedent		Consequent								
		M (BEING AWAY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (DURATION)	<i>a</i>	0.118	-0.091	0.319		<i>c'</i>	-0.153	-0.319	0.012	0.08
M (BEING AWAY)		-	-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect						<i>ab</i>	-0.004	-0.017	0.004	0.33

Table D.23. Mediation results of walk duration on negative affect via fascination

Antecedent		Consequent								
		M (FASCINATION)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (DURATION)	<i>a</i>	0.297	-0.244	0.815		<i>c'</i>	-0.147	-0.320	0.017	0.10
M (FASCINATION)		-	-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect						<i>ab</i>	-0.006	-0.020	0.005	0.32

Table D.24. Mediation results of walk duration on negative affect via compatibility

Antecedent		Consequent							
		M (COMPATIBILITY)				Y (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (DURATION)	<i>a</i>	0.174	-0.336	0.665	<i>c'</i>	-0.145	-0.316	0.022	0.08
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	-0.019	-0.038	0.0001
Indirect effect					<i>ab</i>	-0.003	-0.018	0.008	0.51

Table D.25. Mediation results of walk duration on negative affect via coherence

Antecedent		Consequent							
		M (COHERENCE)				Y (NEGATIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (DURATION)	<i>a</i>	0.072	-0.182	0.337	<i>c'</i>	-0.136	-0.303	0.021	0.11
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.006	-0.044	0.033
Indirect effect					<i>ab</i>	-0.0004	-0.007	0.005	0.93

Perceived walk intensity

Table D.26. Mediation results of perceived walk intensity on negative affect via overall PRS

Antecedent		Consequent								
		M (PRS)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (INTENSITY)	<i>a</i>	0.964	0.587	1.361		<i>c'</i>	0.044	-0.018	0.108	0.16
M (PRS)		-	-	-	-	<i>b</i>	-0.011	-0.020	-0.002	
Indirect effect						<i>ab</i>	-0.011	-0.022	-0.002	0.01

Table D.27. Mediation results of perceived walk intensity on negative affect via being away

Antecedent		Consequent								
		M (BEING AWAY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (INTENSITY)	<i>a</i>	0.062	-0.012	0.142		<i>c'</i>	0.037	-0.027	0.097	0.26
M (BEING AWAY)		-	-	-	-	<i>b</i>	-0.036	-0.078	0.007	
Indirect effect						<i>ab</i>	-0.002	-0.007	0.001	0.19

Table D.28. Mediation results of perceived walk intensity on negative affect via fascination

Antecedent		Consequent								
		M (FASCINATION)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (INTENSITY)	<i>a</i>	0.409	0.216	0.613		<i>c'</i>	0.037	-0.025	0.099	0.27
M (FASCINATION)		-	-	-	-	<i>b</i>	-0.018	-0.037	0.001	
Indirect effect						<i>ab</i>	-0.008	-0.018	0.0001	0.06

Table D.29. Mediation results of perceived walk intensity on negative affect via compatibility

Antecedent		Consequent								
		M (COMPATIBILITY)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (INTENSITY)	<i>a</i>	0.184	0.0004	0.376		<i>c'</i>	0.035	-0.025	0.097	0.27
M (COMPATIBILITY)		-	-	-	-	<i>b</i>	-0.019	-0.038	0.0001	
Indirect effect						<i>ab</i>	-0.004	-0.010	0.0004	0.09

Table D.30. Mediation results of perceived walk intensity on negative affect via coherence

Antecedent		Consequent								
		M (COHERENCE)				Y (NEGATIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
X (INTENSITY)	<i>a</i>	-0.093	-0.189	0.005		<i>c'</i>	0.026	-0.034	0.087	0.40
M (COHERENCE)		-	-	-	-	<i>b</i>	-0.006	-0.044	0.033	
Indirect effect						<i>ab</i>	0.001	-0.004	0.006	0.79