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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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AppendixB PositiveAffect 30april16

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Appendix B. MEDIATION RESULTS POSITIVE AFFECT

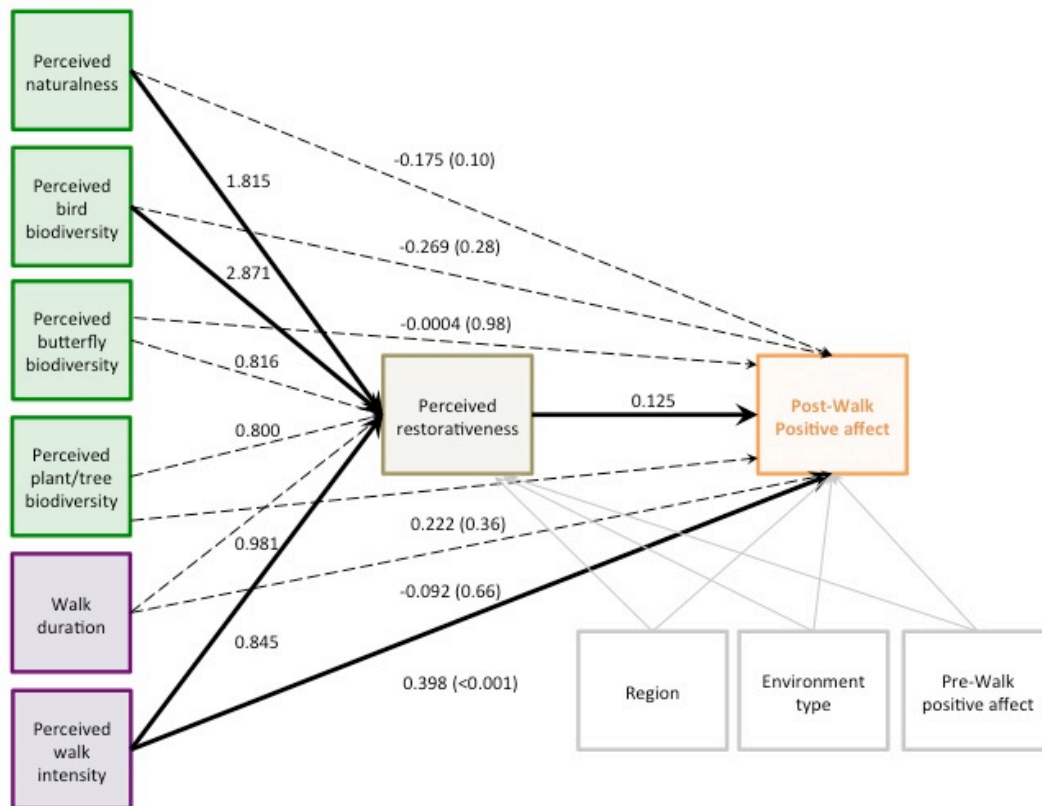


Figure B.1. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration, and perceived walk intensity as predictors of post-walk positive affect via perceived restorativeness. Unstandardized regression coefficients are reported for the *a*, *b* and *c'*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

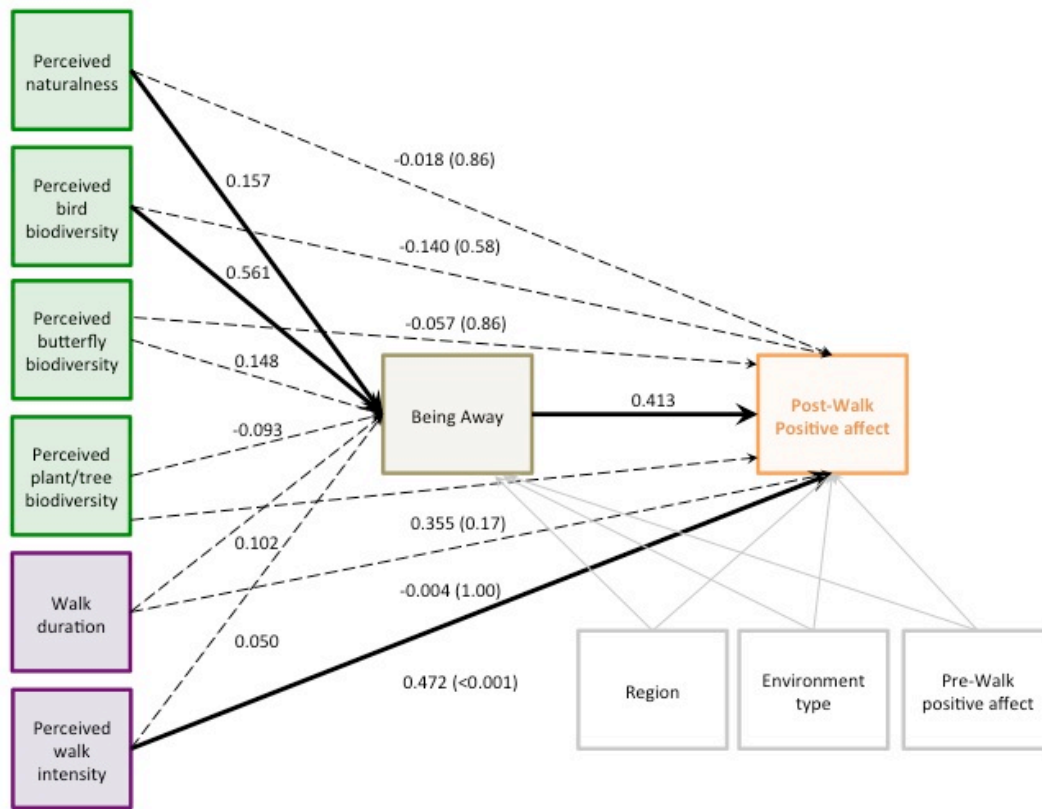


Figure B.2. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration, and perceived walk intensity as predictors of post-walk positive affect via being away. Unstandardized regression coefficients are reported for the a , b and c' paths. Statistically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

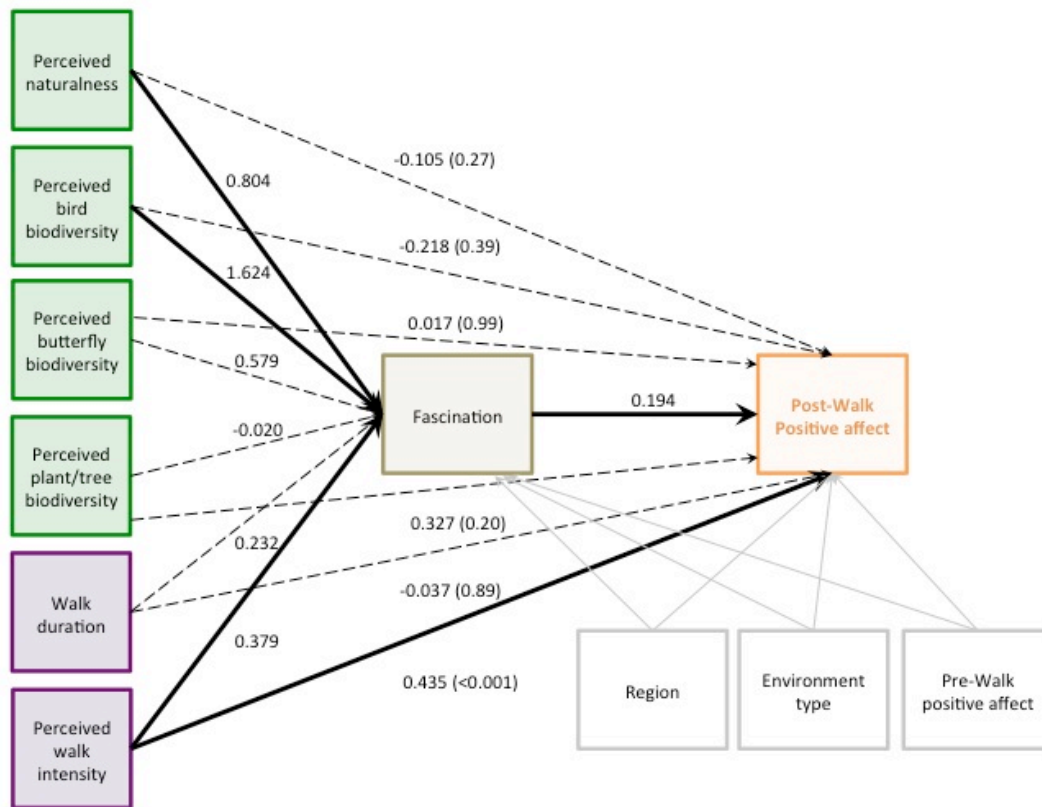


Figure B.3. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration, and perceived walk intensity as predictors of post-walk positive affect via fascination. Unstandardized regression coefficients are reported for the a , b and c' paths. Statistically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

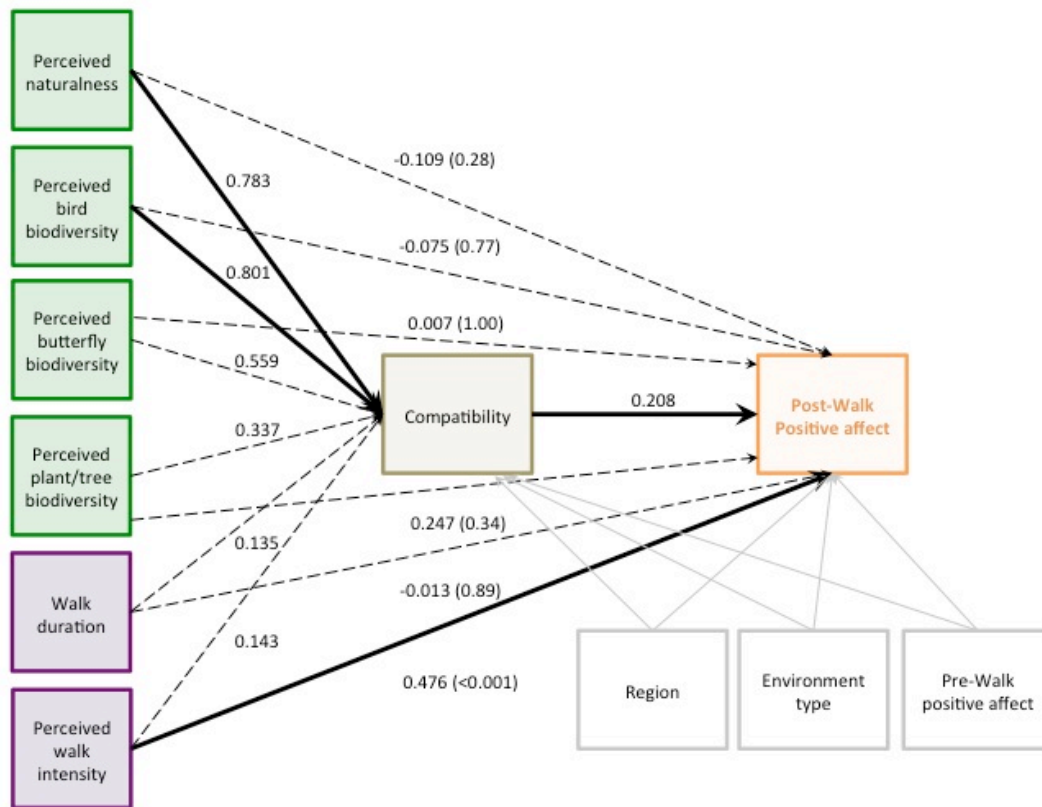


Figure B.4. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration, and perceived walk intensity as predictors of post-walk positive affect via compatibility. Unstandardized regression coefficients are reported for the *a*, *b* and *c*' paths. Statistically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

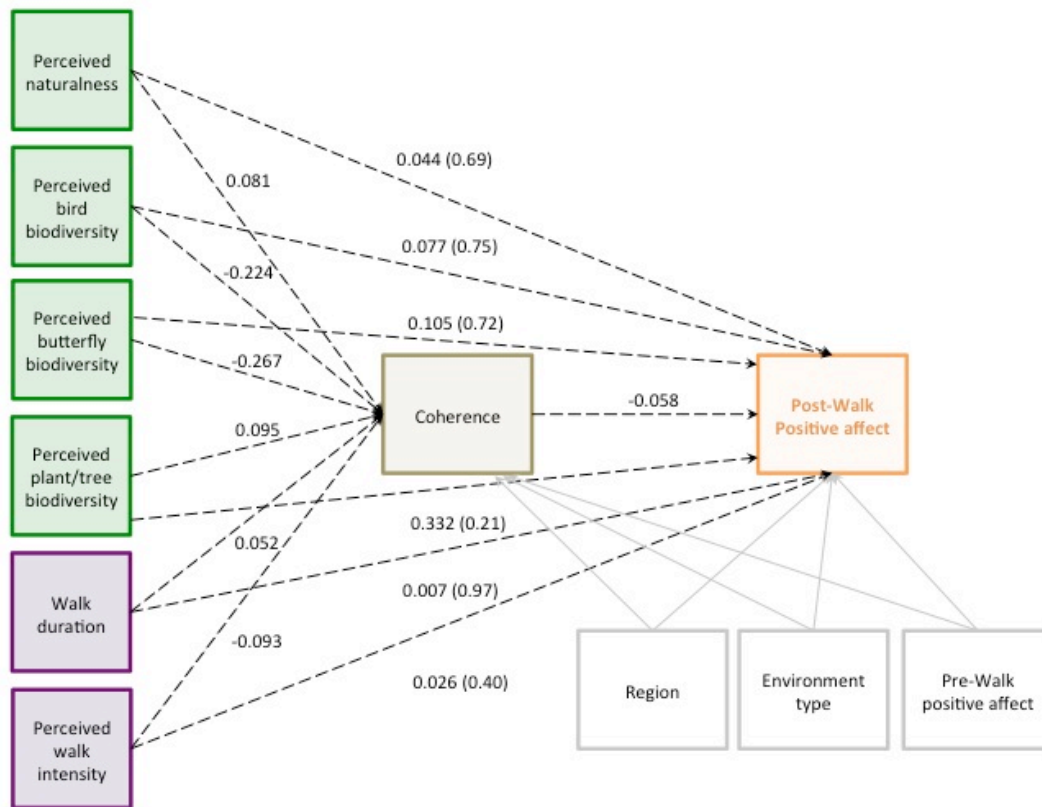


Figure B.5. Mediation model of perceived naturalness, perceived bird, butterfly and plant/tree biodiversity, walk duration, and perceived walk intensity as predictors of post-walk positive affect via coherence. Unstandardized regression coefficients are reported for the *a*, *b* and *c'* paths. Statistically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

Perceived Naturalness

Table B.1. Mediation results of perceived naturalness on positive affect via PRS

Antecedent	Consequent									
	Coeff.	M (PRS)			p	Coeff.	Y (POSITIVE AFFECT)			p
		CI lower	CI upper				CI lower	CI upper		
X (NATURALNESS)	a	1.815	1.342	2.289	c'	-0.175	-0.384	0.039	0.10	
M (PRS)		-	-	-	b	0.125	0.099	0.153		
Indirect effect					ab	0.224	0.153	0.302	<0.001	

Table B.2. Mediation results of perceived naturalness on positive affect via being away

Antecedent	Consequent									
	Coeff.	M (BEING AWAY)			p	Coeff.	Y (POSITIVE AFFECT)			p
		CI lower	CI upper				CI lower	CI upper		
X (NATURALNESS)	a	0.157	0.063	0.253	c'	-0.018	-0.224	0.180	0.86	
M (BEING AWAY)		-	-	-	b	0.413	0.282	0.553		
Indirect effect					ab	0.066	0.024	0.115	<0.001	

Table B.3. Mediation results of perceived naturalness on positive affect via fascination

Antecedent	Consequent									
	Coeff.	M (FASCINATION)			p	Coeff.	Y (POSITIVE AFFECT)			p
		CI lower	CI upper				CI lower	CI upper		
X (NATURALNESS)	a	0.804	0.557	1.049	c'	-0.105	-0.316	0.090	0.27	
M (FASCINATION)		-	-	-	b	0.194	0.143	0.250		
Indirect effect					ab	0.155	0.099	0.224	<0.001	

Table B.4. Mediation results of perceived naturalness on positive affect via compatibility

Antecedent		Consequent								
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (NATURALNESS)	<i>a</i>	0.783	0.550	1.014	<i>c'</i>	-0.109	-0.320	0.085	0.28	
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect						<i>ab</i>	0.161	0.101	0.228	<0.001

Table B.5. Mediation results of perceived naturalness on positive affect via coherence

Antecedent		Consequent								
		<i>M</i> (coherence)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (NATURALNESS)	<i>a</i>	0.081	-0.039	0.203	<i>c'</i>	0.044	-0.171	0.254	0.69	
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.058	-0.171	0.049	
Indirect effect						<i>ab</i>	-0.005	-0.021	0.005	0.43

Perceived bird biodiversity

Table B.6. Mediation results of perceived bird biodiversity on positive affect via overall PRS

Antecedent		Consequent							
		M (PRS)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (BIRDS)	<i>a</i>	2.871	1.746	4.013	<i>c'</i>	-0.269	-0.742	0.228	0.28
M (PRS)		-	-	-	<i>b</i>	0.125	0.099	0.153	
Indirect effect					<i>ab</i>	0.358	0.204	0.520	<0.001

Table B.7. Mediation results of perceived bird biodiversity on positive affect via being away

Antecedent		Consequent							
		M (BEING AWAY)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (BIRDS)	<i>a</i>	0.561	0.334	0.787	<i>c'</i>	-0.140	-0.664	0.349	0.58
M (BEING AWAY)		-	-	-	<i>b</i>	0.413	0.282	0.553	
Indirect effect					<i>ab</i>	0.234	0.131	0.368	<0.001

Table B.8. Mediation results of perceived bird biodiversity on positive affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (BIRDS)	<i>a</i>	1.624	1.040	2.219	<i>c'</i>	-0.218	-0.766	0.277	0.39
M (FASCINATION)		-	-	-	<i>b</i>	0.194	0.143	0.250	
Indirect effect					<i>ab</i>	0.314	0.182	0.467	<0.001

Table B.9. Mediation results of perceived bird biodiversity on positive affect via compatibility

Antecedent	Consequent								
	<i>M</i> (COMPATIBILITY)					<i>Y</i> (POSITIVE AFFECT)			
	Coeff.	CI lower	CI upper	<i>p</i>		Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BIRDS)	<i>a</i>	0.801	0.251	1.360	<i>c'</i>	-0.075	-0.609	0.416	0.77
<i>M</i> (COMPATIBILITY)	-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect					<i>ab</i>	0.169	0.055	0.288	<0.001

Table B.10. Mediation results of perceived bird biodiversity on positive affect via coherence

Antecedent	Consequent								
	<i>M</i> (COHERENCE)					<i>Y</i> (POSITIVE 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	-0.510	0.069	<i>c'</i>	0.077	-0.401	0.567	0.75
<i>M</i> (COHERENCE)	-	-	-	-	<i>b</i>	-0.058	-0.171	0.049	
Indirect effect					<i>ab</i>	0.013	-0.014	0.055	0.40

Perceived butterfly biodiversity

Table B.11. Mediation results of perceived butterfly biodiversity on positive affect via overall PRS

Antecedent		Consequent							
		M (PRS)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i>	<i>a</i>	0.816	-0.461	2.118	<i>c'</i>	-0.0004	-0.549	0.537	0.98
(BUTTERFLIES)									
<i>M</i> (PRS)		-	-	-	<i>b</i>	0.125	0.099	0.153	
Indirect effect					<i>ab</i>	0.101	-0.058	0.259	0.21

Table B.12. Mediation results of perceived butterfly biodiversity on positive affect via being away

Antecedent		Consequent							
		M (BEING AWAY)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i>	<i>a</i>	0.148	-0.109	0.408	<i>c'</i>	0.057	-0.489	0.620	0.86
(BUTTERFLIES)									
<i>M</i> (BEING AWAY)		-	-	-	<i>b</i>	0.413	0.282	0.553	
Indirect effect					<i>ab</i>	0.062	-0.050	0.167	0.26

Table B.13. Mediation results of perceived butterfly biodiversity on positive affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i>	<i>a</i>	0.579	-0.083	1.252	<i>c'</i>	0.017	-0.523	0.577	0.99
(BUTTERFLIES)									
<i>M</i> (FASCINATION)		-	-	-	<i>b</i>	0.194	0.143	0.250	
Indirect effect					<i>ab</i>	0.113	-0.006	0.257	0.07

Table B.14. Mediation results of perceived butterfly biodiversity on positive affect via compatibility

Antecedent		Consequent								
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>		Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BUTTERFLIES)	<i>a</i>	0.559	-0.067	1.193	<i>c'</i>	0.007	-0.538	0.567	1.00	
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect						<i>ab</i>	0.111	-0.022	0.253	0.10

Table B.15. Mediation results of perceived butterfly biodiversity on positive affect via coherence

Antecedent		Consequent								
		<i>M</i> (COHERENCE)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>		Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (BUTTERFLIES)	<i>a</i>	-0.267	-0.592	0.065	<i>c'</i>	0.105	-0.450	0.656	0.72	
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.058	-0.171	0.049	
Indirect effect						<i>ab</i>	0.016	-0.015	0.068	0.38

Perceived plant and tree biodiversity

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

Antecedent		Consequent							
		M (PRS)				Y (POSITIVE 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>	0.800	-0.344	1.954	<i>c'</i>	0.222	-0.263	0.678	0.36
<i>M</i> (PRS)		-	-	-	<i>b</i>	0.125	0.099	0.153	
Indirect effect					<i>ab</i>	0.098	-0.037	0.243	0.16

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

Antecedent		Consequent							
		M (BEING AWAY)				Y (POSITIVE 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>	-0.093	-0.323	0.137	<i>c'</i>	0.355	-0.135	0.825	0.17
<i>M</i> (BEING AWAY)		-	-	-	<i>b</i>	0.413	0.282	0.553	
Indirect effect					<i>ab</i>	-0.042	-0.138	0.051	0.37

Table B.18. Mediation results of perceived plants and trees biodiversity on positive affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (POSITIVE 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>	-0.020	-0.610	0.583	<i>c'</i>	0.327	-0.167	0.802	0.20
<i>M</i> (FASCINATION)		-	-	-	<i>b</i>	0.194	0.143	0.250	
Indirect effect					<i>ab</i>	-0.004	-0.115	0.110	0.95

Table B.19. Mediation results of perceived plant/tree biodiversity on positive affect via compatibility

Antecedent		Consequent								
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (POSITIVE 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>	0.337	-0.220	0.905	<i>c'</i>		0.247	-0.251	0.706	0.34
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect						<i>ab</i>	0.068	-0.045	0.189	0.23

Table B.20. Mediation results of perceived plant/tree biodiversity on positive affect via coherence

Antecedent		Consequent								
		<i>M</i> (COHERENCE)				<i>Y</i> (POSITIVE 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	0.387	<i>c'</i>		0.332	-0.172	0.860	0.21
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.058	-0.171	0.049	
Indirect effect						<i>ab</i>	-0.006	-0.036	0.017	0.67

Walk duration

Table B.21. Mediation results of walk duration on positive affect via overall PRS

Antecedent		Consequent							
		M (PRS)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (DURATION)	<i>a</i>	0.981	-0.051	1.979	<i>c'</i>	-0.092	-0.510	0.348	0.66
M (PRS)		-	-	-	<i>b</i>	0.125	0.099	0.153	
Indirect effect					<i>ab</i>	0.123	0.002	0.250	0.05

Table B.22. Mediation results of walk duration on positive affect via being away

Antecedent		Consequent							
		M (BEING AWAY)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (DURATION)	<i>a</i>	0.102	-0.105	0.303	<i>c'</i>	-0.004	-0.422	0.417	1.00
M (BEING AWAY)		-	-	-	<i>b</i>	0.413	0.282	0.553	
Indirect effect					<i>ab</i>	0.043	-0.045	0.130	0.30

Table B.23. Mediation results of walk duration on positive affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (DURATION)	<i>a</i>	0.232	-0.302	0.747	<i>c'</i>	-0.037	-0.522	0.411	0.89
M (FASCINATION)		-	-	-	<i>b</i>	0.194	0.143	0.250	
Indirect effect					<i>ab</i>	0.043	-0.059	0.151	0.41

Table B.24. Mediation results of walk duration on positive affect via compatibility

Antecedent		Consequent								
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>		Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (DURATION)	<i>a</i>	0.135	-0.370	0.622	<i>c'</i>	-0.013	-0.480	0.425	0.98	
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect						<i>ab</i>	0.029	-0.068	0.133	0.56

Table B.25. Mediation results of walk duration on positive affect via coherence

Antecedent		Consequent								
		<i>M</i> (coherence)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>		Coeff.	CI lower	CI upper	<i>p</i>
<i>X</i> (DURATION)	<i>a</i>	0.052	-0.202	0.314	<i>c'</i>	0.007	-0.444	0.457	0.97	
<i>M</i> (COHERENCE)		-	-	-	-	<i>b</i>	-0.058	-0.171	0.049	
Indirect effect						<i>ab</i>	-0.003	-0.028	0.019	0.79

Perceived walk intensity

Table B.26. Mediation results of perceived walk intensity on positive affect via overall PRS

Antecedent		Consequent							
		M (PRS)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (INTENSITY)	<i>a</i>	0.845	0.468	1.238	<i>c'</i>	0.398	0.235	0.555	< 0.001
M (PRS)		-	-	-	<i>b</i>	0.125	0.099	0.153	
Indirect effect					<i>ab</i>	0.105	0.056	0.160	< 0.001

Table B.27. Mediation results of perceived walk intensity on positive affect via being away

Antecedent		Consequent							
		M (BEING AWAY)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (INTENSITY)	<i>a</i>	0.050	-0.025	0.129	<i>c'</i>	0.472	0.301	0.629	<0.001
M (BEING AWAY)		-	-	-	<i>b</i>	0.413	0.282	0.553	
Indirect effect					<i>ab</i>	0.020	-0.011	0.054	0.20

Table B.28. Mediation results of perceived walk intensity on positive affect via fascination

Antecedent		Consequent							
		M (FASCINATION)				Y (POSITIVE AFFECT)			
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>
X (INTENSITY)	<i>a</i>	0.379	0.183	0.582	<i>c'</i>	0.435	0.266	0.599	<0.001
M (FASCINATION)		-	-	-	<i>b</i>	0.194	0.143	0.250	
Indirect effect					<i>ab</i>	0.074	0.032	0.120	<0.001

Table B.29. Mediation results of perceived walk intensity on positive affect via compatibility

Antecedent		Consequent								
		<i>M</i> (COMPATIBILITY)				<i>Y</i> (POSITIVE AFFECT)				
		Coeff.	CI lower	CI upper	<i>p</i>	Coeff.	CI lower	CI upper	<i>p</i>	
<i>X</i> (INTENSITY)	<i>a</i>	0.143	-0.042	0.334	<i>c'</i>	0.476	0.309	0.639	<0.001	
<i>M</i> (COMPATIBILITY)		-	-	-	-	<i>b</i>	0.208	0.154	0.267	
Indirect effect						<i>ab</i>	0.030	-0.009	0.073	0.13

Table B.30. Mediation results of perceived walk intensity on positive affect via coherence

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