Supplementary Materials

for

On climate anxiety and the threat it may pose to daily life functioning and adaptation: A study among European and African French-speaking participants

Alexandre Heeren^{1,2,3}, Camille Mouguiama-Douada¹, & Alba Conteras¹

¹Psychological Science Research Institute, UCLouvain, Louvain-la-Neuve, Belgium

² Institute of Neuroscience, UCLouvain, Brussels, Belgium

³ National Fund for Scientific Research (FRS-FNRS), Brussels, Belgium

Correspondence should be addressed to Alexandre Heeren, Psychological Sciences Research Institute & Institute of Neuroscience, Université catholique de Louvain, 10 Place du Cardinal Mercier, 1348 Louvain-la-Neuve, Belgium. Email: <u>alexandre.heeren@uclouvain</u>

Table S1.

Years of Education, M (SD)

	Overall sample	African Countries	European Countries	<i>t</i> or χ^2	р	Cohen's <i>d</i> or
	(n = 2080)	(n = 46)	(n = 2034)			φ
Climate anxiety						
CAS, M (SD)	2.06 (.70)	1.99 (.68)	2. 06 (.70)	.72ª	.47	.10
Cognitive-emotional impairments, M (SD)	2.00 (.69)	1.88 (.62)	2.00 (.69)	1.13 ^a	.26	.18
Functional impairments, M (SD)	2.16 (.86)	2.15 (.93)	2.16 (.86)	.08ª	.94	.01
Experience of climate change, M (SD)	2.20 (.99)	2.50 (1.03)	2.20 (.99)	2.06 ^a	.04	.30
Pro-environmental behaviors, M (SD)	4.07 (.56)	3.92 (.62)	4.08 (.56)	1.75 ^a	.09	.27
Gender				.31 ^b	.58	.01
Female	51.87%	47.80% ^c	52.00% ^c			
Male	48.12%	52.20% ^c	48.00% ^c			
Age, M (SD)	43.04 (13.52)	39.41 (11.56)	43.23 (13.55)	1.46 ^a	.15	.30

.22

Climate Anxiety and other features as a Function of Geographical Locations

Note. CAS = Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020); M = mean score; SD = Standard Deviation. Significant differences appear in bold (at p < .005)^{; a} Value for t(2078); ^b Value for $\chi^2(1, N = 2080)$; ^c Value denotes percentage within geographical locations.

16.19 (2.71)

16.79 (2.65)

1.88^a

.08

16.77 (2.71)

Table S2.

	Below the midpoint $(n = 1855)$	Above the midpoint $(n = 225)$	t or χ^2	р	Cohen's <i>d</i> or φ
Age	43.73 (13.59)	37.36 (11.41)	6.75 ^a	<.0001	.51
Gender (%)			24.85 ^b	<.001	.11
Female	85.9% ^c	14.1% ^c			
Male	92.7% ^c	7.3% ^c			
Years of Education, M (SD)	16.78 (2.72)	16.68 (2.63)	.57 ^a	.57	.04
Climate anxiety					
CAS, M (SD)	1.92 (.58)	3.24 (.39)	33.38 ^a	<.0001	2.67
Cognitive-emotional impairments, M (SD)	1.84 (.55)	3.27 (.32)	38.41 ^a	<.0001	3.18
Functional impairments, M (SD)	2.03 (.79)	3.19 (.72)	21.13 ^a	<.001	1.54
Continent (%)			.22 ^b	.64	.01
European	89.1% ^d	10.9% ^d			
African	91.3% ^d	8.7% ^d			
Experience of climate change, M (SD)	2.13 (.95)	2.87 (1.02)	10.96 ^a	<.0001	.75
Pro-environmental behaviors, M (SD)	4.04 (.56)	4.38 (.48)	8. 77 ^a	<.001	.65

Participants' characteristics as a function of their levels of cognitive-emotional impairments

Note. CAS = Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020); M = mean score; SD = Standard Deviation. Significant differences (at p < .005) appear in bold ^a Value for t(2078); ^b Value for $\chi^2(1, N = 2080)$; ^c Value reflecting % within each gender category.^{; d} Value reflecting % within each location

Table S3.

Participants' characteristics as a function of their levels of functional impairments

	Below the midpoint	Above the midpoint	<i>t</i> or χ^2	p	Cohen's d
	(<i>n</i> = 1649)	(<i>n</i> = 431)			or Ø
Age	43.83 (13.70)	40.06 (12.35)	5.18 ^a	<.001	.29
Gender (%)			5.46 ^b	.02	.05
Female	81.3 % ^c	18.7 % ^c			
Male	77.1 % ^c	22.9% ^c			
Years of Education	16.80 (2.74)	16.79 (2.56)	.24 ^a	.81	< .01
Climate anxiety					
CAS, M (SD)	1.82 (.54)	2.97 (.45)	40.69 ^a	<.0001	2.31
Cognitive-emotional impairments, M (SD)	1.82 (.59)	2.67 (.60)	26.4 1 ^a	<.0001	1.43
Functional impairments, M (SD)	1.82 (.57)	3.44 (.49)	53.76 ^a	<.0001	3.05
Location (%)			.03 ^b	.86	< .01
European countries	79.3% ^d	20.7% ^d			
African countries	78.3% ^d	21.7% ^d			
Experience of climate change, M (SD)	2.11 (.97)	2.57 (.98)	8.82 ^a	< .0001	.47
Pro-environmental behaviors, M (SD)	4.01 (.57)	4.31 (.49)	10.27 ^a	<.0001	.56

Note. CAS = Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020); M = mean score; SD = Standard Deviation. Significant differences (at p < .005) appear in bold.

^a Value for $t(2078)^{5b}$ Value for $\chi^2(1, N = 2080)^{5c}$ Value reflecting % within each gender category.^{3 d} Value reflecting % within each location

Table S4.

Associations between climate anxiety and pro-environmental behaviors and experience of climate change as a function of participants' levels of cognitive-emotional impairments

	Below the midpoint	Above the midpoint	Ζ	р
	(n = 1855)	(n = 1855) $(n = 225)$		(2-tailed)
Pro-environmental behaviors & CAS	.40**	.13	4.12	< .001
Pro-environmental behaviors & Cognitive-emotional impairments	.38**	.10	4.22	<.001
Pro-environmental behaviors & Functional impairments	.34**	.11	3.43	<.001
Experience of Climate Change & Climate anxiety	.29**	.18	1.64	.10
Experience of Climate Change & Cognitive-emotional impairments	.27**	.17*	1.48	.14
Experience of Climate Change & Functional impairments	.25**	.13	1.76	.08
Experience of Climate Change & Pro- environmental behaviors	.24**	.12	1.75	.08

Note. CAS = Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020). Significant differences (at p < .005) appear in bold.

* and ** denote correlations significant at p < .05 and p < .001, respectively (with Bonferroni-corrected adjustment for multiple comparison).

Table S5.

Associations between climate anxiety and pro-environmental behaviors and experience of climate change as a function of participants' levels of functional impairments

	Below the midpoint	Above the midpoint	7	р
	(n = 1649) $(n = 431)$		Ζ	(2-tailed)
Pro-environmental behaviors & Climate anxiety	.40**	.16*	4.83	< .001
Pro-environmental behaviors & Cognitive-emotional impairments	.37**	.17*"	3.99	< .001
Pro-environmental behaviors & Functional impairments	.36**	.04	6.21	< .001
Experience of Climate Change & Climate anxiety	.32**	.28*	.81	.41
Experience of Climate Change & Cognitive-emotional impairments	.30**	.24*	1.19	.23
Experience of Climate Change & Functional impairments	.27**	.22*	.98	.33
Experience of Climate Change & Pro- environmental behaviors	.26**	.12*	2.70	.01

Note. CAS = Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020). Significant differences (at p < .005) appear in bold.

* and ** denote correlations significant at $p \le .05$ and $p \le .001$, respectively (with Bonferroni-corrected adjustment for multiple comparison).