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Creative and Happy Individuals Concerned about Climate Change: Evidence Based on the 10th Round of the European Social Survey in 22 Countries

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Abstract: Previous studies, to some extent, link creativity, well-being, and environmental concerns. Therefore, the purpose of this study was to examine the associations between self-reported creativity, psychological well-being, and climate change concerns. This study was based on data derived from the European Social Survey's 10th round and applied several items from sections H, B, and C. The findings revealed that creativity was positively linked to climate change concerns and psychological well-being, while psychological well-being was, to some extent, negatively related to climate change concerns. The SEM model demonstrated an acceptable fit, χ^2 = 1627.862; Df = 7; CFI = 0.959; TLI = 0.876; NFI = 0.958; RMSEA = 0.078 [0.075–0.082]. Additionally, the findings indicated that more creative and happy individuals were also more concerned about climate change; they were more prone to believe that climate change is caused by human activity, they felt a higher personal responsibility to reduce climate change, and they were significantly more worried about climate change. This implies that as creative and happy individuals have a heightened sense of responsibility for climate change, these individuals may indeed play a key role in promoting climate change awareness and actions, including communication on sustainability, sustainability-related projects, and other activities; thus, tailored campaigns could be developed within the frames of citizen science. The findings also suggest implications for policy development: policymakers could consider the perspectives of creative and happy individuals when crafting climate policies, potentially leading to more effective and widely accepted solutions.

Keywords: creativity; happiness; climate change; communication; European Social Survey; sustainable development goals; psychological well-being; environmental responsibility

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1. Introduction

Creativity is a powerful driver of innovation, communication, and change in the world [1,2]. Creative thinking can lead to breakthrough technologies, processes, and strategies that promote progress in societies and efficiently address issues such as poverty, climate change, resource depletion, or social inequality [2]. Throughout the history of human creativity, a "homo problematis solvendis" demonstrated countless successful efforts to make this world a better place to live in for all [3].

Extensive research documented that creativity could enable individuals and organizations to develop and implement more effective solutions [4]. Combined with pro-environmental values and their dissemination, it could positively add to the generation of diverse ideas that respond to challenges in the context of sustainability [5].

Several studies reveal associations between creativity and happiness [6–10] and establish happiness as a driver for creative initiative and innovation capital [7]. Although the links between psychological well-being, creativity, and sustainability have, to some

extent, been investigated from various perspectives [11,12], including sustainable development [13,14] and sustainable happiness [15–18], the question of whether creative and happy individuals are worried about climate change and feel responsible for it, is still under-researched.

Environmental anxiety is a relatively new form of anxiety [19–23]. It refers to considerable distress that is caused to a significant degree by the perception of ecological crisis or climate change concerns [24,25]. Though many studies investigated the risks of environmental anxiety or climate change concerns for emotional well-being, some studies showed that efforts to cope with it might lead to productive sustainability initiatives [24].

The purpose of this study is to examine the links between self-reported creativity, psychological well-being, and climate change concerns. The following research question was raised: do creative and happy individuals feel concerned and responsible about climate change? To support this study, we applied data derived from the European Social Survey conducted in 22 countries in 2020–2022.

1.1. Understanding the Interaction between the Individual and the Environment

This study indirectly targets European societies' potential to implement the Sustainable Development Goals (further–SDGs), as the implementation of many SDGs might depend on Europeans' characteristics and attitudes toward themselves, others, and nature. People's creativity and environmental responsibility are important for designing green workplaces [26], driving responsible entrepreneurship [27], shifting challenges to opportunities [28], ensuring urban health [29,30], or educating young minds [31–33]. People's well-being is important for degrowing extractivism [34] and promoting biophilia [35]. Europeans' attributes may implicitly indicate whether SDGs can be implemented in the near future in Europe or not.

Numerous authors have examined the interaction between individuals and their natural environment. Researchers have investigated various constructs, including environmental values [36,37], nature relatedness [38,39], connectedness to nature [40], environmental behaviors [41], environmental attitudes [42], eco-anxiety [19,20,23,25,43], and environmental responsibility [44–47].

Previous studies have explored diverse research questions and topics, such as the following: the relationship between nature perception and experiences in nature [48], rural–urban differences in environmental concerns, attitudes, and actions [49], educators' use of natural outdoor settings as learning environments [50], life experiences and the formation of pro-ecological commitment [51], connectedness to nature and its relationship with spirituality, well-being, and sustainable behavior [52], environmental peer persuasion [53], links between metacognitive beliefs, environmental demands, and subjective stress states [54], children's exploration of the meaning of death in human–animal–nature relationships [55], links between creativity and environmental sustainability [56], a design for sustainable and conservation mindsets [57], sustainable motivational behavior [58], institutionalized collective action and its relationship with beliefs about environmental problems [59], media use, environmental beliefs, self-efficacy, and pro-environmental behavior [60], social normative beliefs and environmental behavior [61], agent-based models to investigate climate skepticism and pro-environmental behavior [43], young travelers' intentions to behave pro-environmentally [62], sustainable behaviors among college students [63], education 4.0 as a component of the sustainable well-being of students [64], the sustainability of living [65], children's environmentally responsible behaviors and motive concerns [66], pro-environmental and civic behavior [67], the foundational processes that affect beliefs in climate change [68], socially responsible investment [69], the interpretation of land-based observations for climate change adaptation [70], public attitudes toward sustainable development goals [71], the effect of materialism on environmental beliefs, concerns, and environmentally responsible behavior [72], consumers' purchase intention of sustainable apparel products [73], and interconnections between human and environmental health [74].

Research conducted over the last decade has also focused on specifically emotional aspects of the interaction between the individual and the environment, e.g., emotions in pro-environmental decision making [75], the role of emotions in generating environmental arguments [76], the management of happiness in the age of industry [77], challenges and inspirations of nature-based adherents to spirituality who aspire to address the eco-crisis [78]. Some studies also explored the cognitive and emotional aspects of connectedness with nature and its links to well-being [75], while others focused on mediating factors like the role of meaning in life [79]. Moreover, several studies examined associations between connectedness to nature and religion [80], correlations with personality [81], or "friluftsliv" [82].

Additionally, there has been extensive research on experiences in nature, examining how significant life experiences impact pro-ecological commitment [51] or analyzing psychological rewards of familiar semirural landscapes [83] or daily nature observations [84]. Pleasurable experiences in nature have been found to promote connectedness to nature and, consequently, nature conservation [85].

Some authors emphasize exploring nature-relatedness as a significant contributor to subjective well-being [86], holistic wellness [87], or future consciousness [67]. Others postulate that humans have a fundamental psychological need for nature-relatedness [39]. Subsequently, many studies reveal the following antecedents and consequences of the interaction between individuals and their environment: connectedness to nature is linked to spirituality, personal well-being, and sustainable behavior, evidencing a mutually beneficial relationship [52,88]. It was also found that individual values play a significant role in environmental decision making, with biospheric and altruistic values promoting sustainability behaviors [63]. Moreover, it has been revealed that environmental consciousness among rural inhabitants is a regulating ethos governing social practices [89] and that environmental values are related to environmental preservation [42]. Additionally, research has also shown that reading pro-environmental materials, such as Pope Francis's encyclical, can increase a belief in and moralization of climate change [90]. These findings suggest that authorities can shape environmental attitudes among believers.

Research on nature-related educational issues has examined the effects of educational programs on children's connectedness with nature [91], environmental and social sustainability in carrier selection decisions [92], and the links between science motivation and environmental values [37]. Environmental education was not proven to automatically lead to connectedness [93].

Research on the links between sustainability and creativity encompass a variety of topics; these include the relationship between sustainability and creativity [94,95], unsustainable creativity [96], creativity in the design of green workplaces [26], axiomatic design for creativity, sustainability, and Industry 4.0 [97], views on creativity, environmental sustainability, and their integrated development [56], creativity, innovation, and sustainability [5], the role of greener innovations to achieve carbon neutrality [97], social well-being, creativity and sustainability [11,12], the development of students' creativity and competence [98], the development of sustainability–oriented creativity [95], and the sustainability of creativity [99]. A study by Vliert and Murray proposed the eco theory of creativity on the environmental precursors of creativity [100,101]. They argued that climatic coldness and heat trigger inventiveness and innovativeness; economic cash and capital serve as modifiers and nonzoonotic parasites serve as mediators who decrease disease burdens [101]. Researchers proposed that "creativity as a core process of human functioning is in part dependent on incoming heat radiation from space" and raised the question of whether "climatic causation may also drive genetic causation of creativity" [101]. These findings propose a unique perspective on the creativity-related consequences of climate change in poor and rich populations.

On the whole, and over the past decade, many researchers have contributed to building a solid theoretical foundation for understanding the interaction between individuals and their environment (e.g., [25,102]), including related concepts such as psychological

well-being and creativity. Various theoretical models were proposed, e.g., Eco-Existential Positive Psychology [88] or the eco theory of creativity [101], and various scales to measure the interaction between individuals and their environment were developed [103,104]. The findings on links between psychological well-being and climate change concerns, or the links between psychological well-being and creativity, were complementary or contradictory [105–109], yet the links between psychological well-being, creativity, and climate change concerns have yet to be explored across European countries in detail.

1.2. Present Study

Many previous studies established that creativity is a driver of sustainable development [4,5,110]. Research into the relationship between creativity, psychological well-being, and climate change concerns could provide valuable insights, adding to the established patterns of how creative and happy individuals perceive and respond to environmental issues [111]. Understanding whether creative and happy individuals are worried about climate change can inform strategies to encourage sustainable behaviors, as this group might be targeted for climate action initiatives [13,111] and to foster the implementation of SDGs.

On the whole, this study implicitly addresses the potential for the implementation of SDGs in Europe. The verification of the positive link between creativity and psychological well-being could be related to SDG No. 3: "Ensure healthy lives and promote well-being for all at all ages" [112,113]. Namely, worldwide practices, training, programs, and projects that are aimed at developing and strengthening creativity skills could become one of the most effective means to achieve the above-mentioned goal [114–116]. This is especially relevant since creativity and innovation are regarded as the universal measure for solving sustainable development challenges [5,7,27,94,117,118].

Similarly, confirmation of the positive link between creativity and concerns about climate change could be related to SDG No. 13: "Take urgent action to combat climate change and its impacts" [113]. That is, worldwide practices, training, programs, and projects of open science and citizen science that are aimed at involving creative and responsible individuals in climate change-related actions, as well as national, regional, and international bodies planning and taking decisions on this matter, could become an effective measure for achieving the above-mentioned goal [112].

Next, these findings could help in designing climate change communication strategies [119–122]; if creative and happy individuals are indeed more concerned about climate change, then tailored messaging and campaigns could be developed, leveraging emotional and creative inclinations as well as encouraging participation in significant sustainability projects, programs and the other activities including sustainability communication within the frame of citizen science [123,124].

Moreover, research on the links between creativity, psychological well-being, and climate change concerns might have implications for policy development; if creative and happy individuals are more concerned about climate change, policymakers could consider their perspectives when crafting climate policies, potentially leading to more effective and widely accepted solutions [125–127].

Furthermore, this research could add to the exploration of how climate change concerns affect mental health, and this information might lead to better mental health support for those who are distressed by climate issues [128,129]. In addition, discovering a link between creativity, happiness, and climate change concerns could foster the formation of communities or networks of individuals who share these attributes and interests, as such communities could effectively collaborate on sustainability projects or advocacy efforts.

Additionally, interdisciplinary approaches that combine environmental science with the arts, design, and positive psychology could be promoted to address climate change and creative solutions, and happiness-based interventions might be integrated into climate action plans, as suggested by previous studies [38,130–133]. Finally, creative and happy individuals concerned about climate change may become advocates for climate

action as they might use their creative and communicative talents to raise awareness, influence public opinion, or advocate for policy changes along with adaptive coping with environmental worries.

Thus, the purpose of this study was to examine the associations between creativity, psychological well-being, and climate change concerns, as this investigation has the potential to inform the communication of climate change and policy efforts and inspire innovative approaches to address environmental challenges.

Based on previous studies, we raised the following hypotheses.

H1. *Creativity is positively linked to climate change concerns (including perceived responsibility).*

H2. *Creativity is positively linked to psychological well-being.*

H3. *Psychological well-being is positively linked to climate change concerns.*

H4. *Creative and happy individuals are concerned about climate change.*

2. Materials and Methods

2.1. The Sample

This study utilized data from the 10th round of the European Social Survey, a comprehensive cross-sectional survey conducted across 22 European countries from 2020 to 2022. The primary objective of the ESS study is to examine and depict changes and persistence in social structures, conditions, and attitudes throughout Europe. Additionally, it aims to offer insights into the social, political, and ethical dimensions of the European landscape. Data were retrieved from the ESS10 database on 10 September 2023, accessible at https://doi.org/10.21338/ess10e03_1 (accessed on 10 September 2023). The participants' ages ranged from 15 to 90, with a mean age of nearly 51 years for the entire sample (mean = 50.85, standard deviation = 18.413). All participating countries employed various forms of probability sampling, including simple, stratified, or multistage methods, to collect data. Interviews were conducted in local languages, and data collection was carried out through face-to-face interviews, computer-assisted methods, or paper-and-pencil surveys, with an average completion time of approximately one hour. The gender characteristics of the sample across countries are displayed in Table 1.

Table 1. The numbers and percentage of participants, by gender, across 22 European countries, Pearson Chi-Square = 200.795, $p < 0.001$.

	Male N	%	Female N	%	Total N
Belgium	672	50.1%	669	50.1%	1341
Bulgaria	1284	47.2%	1434	47.2%	2718
Switzerland	782	51.3%	741	51.3%	1523
Czechia	1079	43.6%	1397	43.6%	2476
Estonia	693	44.9%	849	44.9%	1542
Finland	780	49.5%	797	49.5%	1577
France	974	49.3%	1003	49.3%	1977
United Kingdom	506	44.0%	643	44.0%	1149
Greece	1335	47.7%	1464	47.7%	2799
Croatia	715	44.9%	877	44.9%	1592
Hungary	699	37.8%	1150	37.8%	1849
Ireland	840	47.5%	930	47.5%	1770
Iceland	435	48.2%	468	48.2%	903
Italy	1254	47.5%	1386	47.5%	2640
Lithuania	638	38.5%	1021	38.5%	1659
Montenegro	648	50.7%	630	50.7%	1278
North Macedonia	649	45.4%	780	45.4%	1429
Netherlands	750	51.0%	720	51.0%	1470
Norway	720	51.0%	691	51.0%	1411
Portugal	772	42.0%	1066	42.0%	1838
Slovenia	591	47.2%	661	47.2%	1252
Slovakia	647	45.6%	771	45.6%	1418
Total	17,463	46.4%	20,148	46.4%	37,611

2.2. Measures

To examine creativity, psychological well-being, and climate change concerns, the following specific modules from the 10th round of the European Social Survey were utilized:

Creativity was assessed using 1 item of section H (Schwartz Human values scale). The respondents were given the subsequent instruction: "Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you". The item to evaluate creativity (H1) was the following: "Thinking up new ideas and being creative is important to him. He likes to do things in his own original way". The respondents had to choose a reply on a 6-point Likert scale from 1 (very much like me) to 6 (not like me at all). For the statistical analyses, the reversed values were used.

Psychological well-being was assessed using the following two questions: to assess the cognitive aspect of psychological well-being, one item of section B was applied (B27): "All things considered, how satisfied are you with your life as a whole nowadays?". The respondents were asked to choose one of the answers on a 10-point Likert scale from 0 to 10, where 0 meant "extremely dissatisfied" and 10 meant "extremely satisfied". To assess the emotional aspect of psychological well-being, one item of section C was applied (C1): "Taking all things together, how happy would you say you are?". The respondents were asked to choose one of the answers on a 10-point Likert scale from 0 to 10, where 0 meant "extremely unhappy" and 10 meant "extremely happy". Cronbach's alpha for these 2 items in the study sample was 0.817.

Climate change concerns were assessed using three questions in section C. The first question (C30) was: "Do you think that climate change is caused by natural processes, human activity, or both?". The response pattern was as follows: "Entirely by natural processes" (1), "Mainly by natural processes" (2), "About equally by natural processes and human activity" (3), "Mainly by human activity" (4), "Entirely by human activity" (5). The second question (C31) was: "To what extent do you feel a personal responsibility to try to reduce climate change?". The respondents were asked to choose one of the answers on a 10-point Likert scale from 0 to 10, where 0 meant "not at all" and 10 meant "a great deal". The third question (C32) applied was: "How worried are you about climate change?". The respondents had to choose a response on a 5-point Likert scale from 1 (not at all worried) to 5 (extremely worried).

2.3. Statistical Analysis

This study used SPSS v.26.0, AMOS v.26.0 [134,135]. In SEM, the model fit was evaluated based on the CFI (Comparative Fit Index), the Tucker–Lewis's coefficient (TLI), the normed fit index (NFI), RMSEA (Root Mean Square Error of Approximation), and the $\chi 2$ [136]. The *p*-values less than 0.05 were considered to be statistically significant, and values higher than 0.90 for CFI, NFI, and TLI, and values lower than 0.08 for RMSEA were considered indicative of a good fit [137,138].

3. Results

Means and standard deviations of creativity, psychological well-being (happiness and satisfaction with life), and environmental concerns by country are displayed in Table 2.

Table 2. Means and standard deviations of creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns by country.

Country	Creative	Satisfied with Life as a Whole	Happy	Climate Change Causes	Feel Personally Responsible to Reduce Climate Change	Worried about Climate Change
Belgium	4.5660 ±1.14651	7.66 ±1.685	7.73 ±1.527	3.65 ±2.145	6.39 ±2.336	3.32 ±0.940

Table 2. *Cont.*

Country	Creative	Satisfied with Life as a Whole	Happy	Climate Change Causes	Feel Personally Responsible to Reduce Climate Change	Worried about Climate Change
Bulgaria	4.3341 ±1.34083	6.02 ±2.440	6.27 ±2.379	4.23 ±6.683	4.87 ±2.885	3.11 ±0.930
Switzerland	4.7951 ±1.09894	8.30 ±1.519	8.09 ±1.488	3.73 ±3.055	7.28 ±1.991	3.32 ±0.895
Czechia	4.3566 ±1.40678	7.10 ±1.973	6.91 ±1.997	4.50 ±7.685	4.35 ±2.887	3.15 ±1.118
Estonia	4.0162 ±1.29106	7.45 ±1.845	7.50 ±1.742	3.48 ±3.044	5.53 ±2.871	2.99 ±0.905
Finland	4.3646 ±1.27733	8.12 ±1.505	8.16 ±1.431	3.65 ±1.981	6.84 ±2.372	3.19 ±0.838
France	4.4305 ±1.34539	7.02 ±2.218	7.44 ±1.705	3.69 ±2.159	7.49 ±2.060	3.28 ±0.917
United Kingdom	4.4578 ±1.35482	7.08 ±2.198	7.29 ±1.988	3.74 ±3.500	7.11 ±2.327	3.33 ±1.006
Greece	4.5313 ±1.33906	6.36 ±1.746	6.58 ±1.536	4.27 ±5.376	5.54 ±2.115	3.20 ±0.935
Croatia	4.3273 ±1.44074	7.29 ±2.237	7.51 ±2.104	3.57 ±2.024	5.53 ±3.045	3.40 ±1.024
Hungary	4.4224 ±1.22940	6.73 ±2.104	7.02 ±1.968	3.56 ±2.543	5.80 ±2.338	3.38 ±0.783
Ireland	4.4469 ±1.29867	7.38 ±1.907	7.59 ±1.706	4.22 ±6.843	6.57 ±2.438	3.09 ±0.991
Iceland	4.3212 ±1.36103	8.02 ±1.703	8.09 ±1.539	3.64 ±1.895	6.75 ±2.393	3.05 ±0.947
Italy	4.5640 ±1.17592	6.96 ±1.904	7.05 ±1.669	4.08 ±5.008	5.91 ±2.411	3.24 ±0.896
Lithuania	4.1507 ±1.53534	6.67 ±2.417	7.12 ±2.188	4.50 ±7.801	6.09 ±2.656	3.19 ±0.974
Montenegro	4.5524 ±1.28237	6.94 ±2.240	7.57 ±2.017	3.91 ±6.139	4.07 ±2.669	3.09 ±0.942
North Macedonia	4.4262 ±1.35128	6.40 ±2.543	6.65 ±2.351	3.82 ±5.724	4.28 ±2.988	3.31 ±1.009
Netherlands	4.5952 ±1.10945	7.91 ±1.410	7.90 ±1.290	3.60 ±.773	6.66 ±2.042	3.31 ±0.913
Norway	4.3600 ±1.22535	7.83 ±1.707	7.82 ±1.642	3.53 ±1.560	6.86 ±2.033	3.21 ±0.855
Portugal	4.3716 ±1.20857	6.75 ±2.099	6.97 ±1.983	3.62 ±2.299	6.77 ±2.536	3.54 ±0.851
Slovenia	4.8379 ±1.16094	7.65 ±1.935	7.69 ±1.748	3.44 ±.750	6.42 ±2.627	3.49 ±0.871
Slovakia	4.2687 ±1.36408	6.26 ±2.284	6.54 ±2.050	5.35 ±9.694	5.02 ±2.538	2.85 ±0.940
Total	4.4296 ±1.30711	7.08 ±2.112	7.24 ±1.934	3.94 ±4.967	5.94 ±2.683	3.23 ±0.946

The analysis of means revealed that people in Switzerland and France perceive the highest responsibility to reduce climate change. Moreover, Switzerland was among the countries demonstrating the highest rates of self-reported creativity, satisfaction with life, and happiness. If Switzerland's ecological footprint was not higher than in all other regions of the world except for North America and the Arab Gulf, it could be presumed that the attitudes of Swiss people toward their creativity, psychological well-being, and climate change could be considered outstanding in comparison to other European countries. However, the gap between the national footprint and people's attitudes needs further exploration.

The correlations between creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns are presented in Table 3.

Table 3. Pearson correlation of creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns.

	Creative	1	2	3	4
How satisfied with life as a whole	0.111 **	-			
How happy are you	0.122 **	0.689 **	-		
Climate change is caused by natural processes, human activity, or both	0.021 **	0.021 **	0.017 **	-	
To what extent feel a personal responsibility to reduce climate change	0.104 **	0.149 **	0.159 **	0.245 **	-
How worried about climate change	0.100 **	0.017 **	0.027 **	0.331 **	0.430 **

**. Correlation is significant at the 0.01 level (2-tailed); Listwise N = 35452.

To test the hypotheses and to examine different aspects of the associations between creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns, a structural equation modeling (SEM) analysis was applied. Standardized results of the model are presented in Figure 1. The findings revealed that the fit of the model was acceptable: χ^2 = 1627.862; Df = 7; CFI = 0.959; TLI = 0.876; NFI = 0.958; RMSEA = 0.078 [0.075–0.082].

The scalar estimates of the model of associations between creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns are displayed in Table 4.

Table 4. Scalar estimates of the model of associations between conspiracy beliefs and creativity, attitudes towards people, and psychological well-being.

Regression			B	S.E.	C.R.	*p*	β
Creativity	→	Psychological well-being	0.191	0.008	23.087	<0.001	0.149
Psychological well-being	→	Climate change concerns	−0.022	0.006	−3.572	<0.001	−0.021
Creativity	→	Climate change concerns	0.055	0.007	7.564	<0.001	0.041
Psychological well-being	→	B27	1.000			<0.001	0.796
Psychological well-being	→	C1	1.004	0.033	30.639	<0.001	0.873
Climate change concerns	→	C30	2.598	0.008	321.513		0.935
Climate change concerns	→	C31	2.187	0.008	269.625	<0.001	0.872
Climate change concerns	→	C32	1.000				0.944

The SEM analysis revealed that creativity was positively linked to climate change concerns (including perceived responsibility), which means that H1 was confirmed. Next, creativity was weakly but positively linked to psychological well-being, which means that H2 was confirmed. However, psychological well-being was weakly but negatively linked to climate change concerns, which means that H3 was not confirmed.

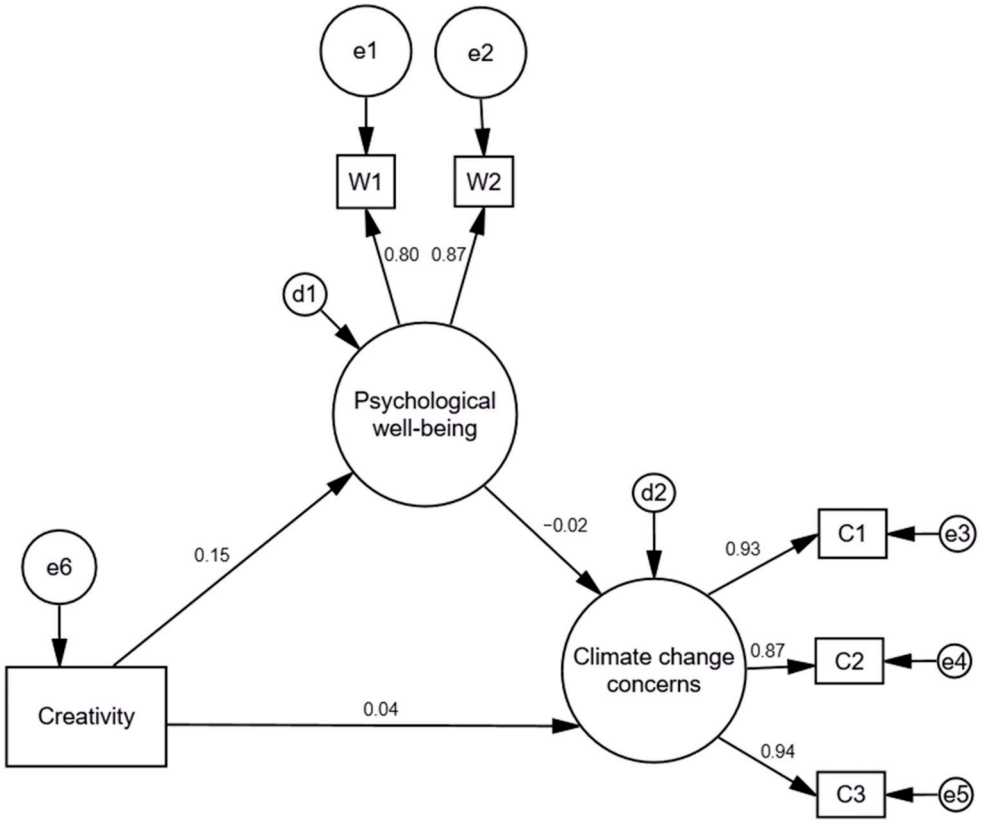


Figure 1. Standardized results on the model of associations between creativity, psychological well-being (happiness and satisfaction with life), and climate change concerns. W1 = 'B27'; W2 = 'C1'; C1 = 'C30'; C2 = 'C31'; C3 = 'C32'.

Next, some additional analyses were performed to evaluate the variables and their links in more depth and to test whether creative and happy individuals are concerned about climate change, as presumed in H4. First, a K-means cluster analysis was performed to group cases (iterate and classify) based on self-reported creativity, satisfaction with life, and happiness. The cases were grouped into two clusters, indicating lower satisfaction with life, happiness, and creativity (Nr. 1: final cluster centers were 5, 5, and 4.09, accordingly) and higher satisfaction with life, happiness, and creativity (Nr. 2: final cluster centers were 8, 8, and 4.57, accordingly). The number of cases in the first cluster was 11,095, and the number of cases in the second cluster was 26,091. Subsequently, an independent samples' T-test analysis was performed to identify differences in perceived reasons for climate change, personal responsibility to reduce climate change, and worry about climate change in clusters based on lower self-reported creativity, happiness, and satisfaction with life (cluster 1), and higher self-reported creativity, happiness, and satisfaction with life (cluster 2). The results are displayed in Table 5.

Table 5. Comparison of means of perceived reasons for climate change, personal responsibility to reduce climate change, and worry about climate change in clusters based on lower self-reported creativity, happiness, and satisfaction with life (cluster 1, n = 11,095), and higher self-reported creativity, happiness, and satisfaction with life (cluster 2, n = 26,091).

Logistic Parameter	Cluster 1		Coeff. of Variation	Cluster 2		Coeff. of Variation	t(35,450)	*p*	Mean Difference	Standard Error Difference	Cohen's d
	M	SD		M	SD						
Climate change is caused by natural processes, human activity, or both	3.430	0.887	0.259	3.498	0.818	0.234	−6.948	<0.001	−0.068	0.010	−0.081
Feel a personal responsibility to reduce climate change	5.356	2.725	0.509	6.249	2.582	0.413	−29.073	<0.001	−0.894	0.031	−0.341
Worried about climate change	3.203	0.964	0.301	3.266	0.928	0.284	−5.746	<0.001	−0.063	0.011	−0.067

The analysis presented in Table 5 reveals that individuals with higher self-reported creativity, life satisfaction, and happiness (cluster 2) demonstrate significantly higher rates of climate change concerns: they are more prone to believe that climate change is caused by human activity, they feel a higher personal responsibility to reduce climate change, and they are significantly more worried about climate change.

4. Discussion

This study implicitly intended to explore European societies' potential to implement the Sustainable Development Goals, as Europeans' attributes may indirectly indicate whether SDGs can be implemented in the near future in Europe or not, especially SDG No. 3, which aims to ensure healthy lives and the promotion of well-being for all ages [112,113], and SDG No. 13, which encourages urgent action to combat climate change and its impacts [113]. Europeans' creativity and climate change concerns could be important for informing practices that foster the implementation of SDGs, including promoting urban health [29,30], designing green workplaces [26], encouraging responsible entrepreneurship [27] or sustainability education [31–33], as creativity could be considered a universal measure for solving sustainable development challenges [5,7,27,94,117,118].

The purpose of this study was to examine the relationships between creativity, psychological well-being, and climate change concerns based on the data of the European Social Survey, 10th round. It was hypothesized, aligning with previous research, that creative individuals are prone to be happy [138–142] and may possess heightened awareness and concern for environmental issues, including climate change [56].

The findings derived from data from 22 European countries confirm a positive link between creativity and climate change concerns, which suggests that individuals who are more creative tend to be more aware of and concerned about climate change issues or vice versa. This finding aligns with previous research that has shown that creative individuals often have a heightened sense of awareness and empathy and are more likely to engage with social and environmental concerns [117]. Their ability to think outside the box may make them more receptive to understanding complex problems like climate change. This study confirms that creativity can be a valuable asset in addressing climate change challenges, as creative individuals are more likely to recognize and communicate the urgency and significance of various concerns [143,144]; therefore, encouraging and harnessing creativity could be an important strategy in addressing climate change [97,98,145]. Therefore, the results of this study are consistent with earlier studies, which suggest that creativity fosters a deeper and wider understanding as well as communication of complex issues and that creative thinking can lead to innovative solutions to environmental challenges and the effective communication of the latter [116,145].

Furthermore, the results of this study confirm that creativity is positively associated with psychological well-being, as suggested in earlier research [8,9,12,123]. The weak but positive link between creativity and psychological well-being affirms that creativity plays a role in enhancing one's overall sense of psychological well-being. While the strength of this relationship is modest, it implies that engaging in creative activities can contribute to psychological well-being [8,123]. It aligns with previous research on the positive effects of creativity on mental health, as earlier research highlights the therapeutic and stress-reducing benefits of creative pursuits such as art, music, and writing and also suggests that engaging in creative activities can have a positive impact on psychological well-being by providing a sense of accomplishment and fulfillment [38,129,132,146]. The findings of this study highlight the potential benefits of promoting creativity as a means to enhance overall life satisfaction.

Contrary to expectations, the SEM findings of this study did not confirm positive links between psychological well-being and climate change concerns [147]. The weak negative link between psychological well-being and climate change concerns suggests that individuals with greater levels of well-being may be less alarmed about climate change. This result is somewhat surprising and contradicts previous research, which has often found that psycho-

logical well-being is positively associated with environmental concerns [52,74,126,148,149]. Previous research has often suggested that individuals with better psychological well-being may be more inclined to engage in pro-environmental behaviors, but this unexpected result could be affected by various factors, including methodological issues, the complexity of the relationship, or the potential impact of other unexplored factors. Therefore, further research is needed to better understand the nuanced dynamics between psychological well-being, concerns about climate change, and the underlying factors contributing to this association.

In addition, these findings partially confirm that creative and happy individuals are concerned about climate change. The cluster analysis indicates that individuals categorized into the cluster characterized by higher creativity, life satisfaction, and happiness demonstrate significantly greater concerns about climate change. It aligns with the idea that creative individuals who are also satisfied with their lives may be more motivated to address pressing global issues [74,149]. The findings also suggest that as creative and happy individuals may have a heightened sense of responsibility for climate change, these individuals could play a key role in promoting climate change awareness and actions [12,52,149].

Finally, this study proposes some additional insights into regional variations. Switzerland's unique position as a country with high creativity, life satisfaction, and climate change responsibility underscores the need for further research into the specific cultural, social, or educational factors that might explain this phenomenon. It raises questions about the paradox of a high national footprint and the role of cultural and societal factors in shaping attitudes toward sustainability. If Switzerland's ecological footprint is not higher than in all other regions of the world except for North America and the Arab Gulf, these findings suggest that Swiss people have the potential to shift this country to the role model for sustainability initiatives and communication in the future [150,151]. These findings indicate the need for further exploration of this paradox across various regions, especially to consider to what extent environmental responsibility leads to a lower ecological footprint. The associations between environmental responsibility and ecological footprint are not yet sufficiently explored, so it could become a solid topic for future research.

The above-mentioned findings could help in designing effective climate change communication strategies (e.g., [152–156]). If creative and happy individuals are indeed more concerned about climate change, then tailored messaging and campaigns could be developed, leveraging emotional and creative inclinations as well as encouraging participation in significant sustainability projects, programs, and other activities, including sustainability communication within the frame of citizen science [157]. The findings of this study might also have implications for policy development; if creative and happy individuals are more concerned about climate change, policymakers could consider their perspectives when crafting climate policies, potentially leading to more effective and widely accepted solutions.

Limitations and Future Directions

First, this study applied a set of different questions from the European Social Survey questionnaire and used single measures for several variables (e.g., creativity, life satisfaction, happiness, environmental responsibility), which might not capture the multidimensional nature of the examined constructs. In future research, we would strongly recommend using complex and validated instruments to assess creativity, psychological well-being, and climate change concerns (e.g., [66,104,158–162]).

Moreover, the reliance on self-reported measures introduces the possibility of social desirability bias. Future research could include objective measures and behavioral observations, i.e., employ a mixed-methods approach to complement self-reporting with objective measures [162–165].

Next, the research findings of this study are based on correlations, which do not imply causation. The study's cross-sectional design does not allow for causal inferences, so it is essential to acknowledge that while these established relationships exist, other factors not considered in this study may impact the outcomes. As the findings provide a snapshot

of relationships at a single point in time, longitudinal or experimental designs tracking changes in creativity, well-being, and climate change concerns over time could provide a more nuanced and clearer understanding of causal relationships.

On the whole, the findings of this study indirectly support the notion that educational programs and interventions that boost creative thinking and problem-solving skills may also be effective at addressing climate change concerns [125]. The findings also underscore the importance of incorporating creative activities into mental health interventions [12,166,167], providing insights on designing more effective climate communication strategies that resonate with different emotional states [118,120,121], and indicating the importance of studying the policies, cultural factors and practices that contribute to the sustainability role model.

5. Conclusions

The findings of this study align with previous research on the links between creativity, psychological well-being, and environmental concerns and revealed several significant associations. First, the findings demonstrated that self-reported creativity is positively related to climate change concerns. Next, the findings revealed that creativity is positively linked to psychological well-being. Third, the results showed that psychological well-being is weak but negatively associated with climate change concerns. Finally, the findings indicate that more creative and happier individuals are also more concerned about climate change: they were more prone to believe that climate change is caused by human activity, they feel a higher level of personal responsibility to reduce climate change, and are significantly more worried about climate change. Notably, Switzerland stood out among the countries with some of the highest levels of self-reported creativity, life satisfaction, happiness, and climate change concerns. This suggests that the relationships between environmental responsibility and a country's ecological footprint have not been thoroughly investigated, making it a promising area for future research.

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References

1. Kaufman, J.C.; Sternberg, R.J. (Eds.) *The Cambridge Handbook of Creativity*; Cambridge University Press: Cambridge, UK, 2019; ISBN 9781107188488.
2. Shalley, C.E.; Hitt, M.A.; Zhou, J. *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*; Oxford Academic: Oxford, UK, 2015.
3. Cropley, D.H. *Homo Problematis Solvendis—Problem-Solving Man: A History of Human Creativity*; Springer: Berlin/Heidelberg, Germany, 2019; ISBN 9789811331008.
4. Saleh, R.; Brem, A. Creativity for Sustainability: An Integrative Literature Review. *J. Clean. Prod.* **2023**, *388*, 135848. [CrossRef]
5. Brem, A.; Puente-Díaz, R. Creativity, Innovation, Sustainability: A Conceptual Model for Future Research Efforts. *Sustainability* **2020**, *12*, 3139. [CrossRef]
6. Tamannaeifar, M.; Hossain, P.M. Psychological Effects of Spiritual Intelligence and Creativity on Happiness. *Int. J. Med. Investig.* **2019**, *8*, 91–107.
7. Usai, A.; Orlando, B.; Mazzoleni, A. Happiness as a Driver of Entrepreneurial Initiative and Innovation Capital. *J. Intellect. Cap.* **2020**, *21*, 1229–1255. [CrossRef]

8. Ahumada-Tello, E. Subjective Well-Being Based on Creativity and the Perception of Happiness. *Retos* **2019**, *9*, 327–344. [CrossRef]
9. Jalali, Z.; Heidari, A. The Relationship between Happiness, Subjective Well-Being, Creativity and Job Performance of Primary School Teachers in Ramhormoz City. *Int. Educ. Stud.* **2016**, *9*, 45. [CrossRef]
10. Tan, C.S.; Tan, S.A.; Mohd Hashim, I.H.; Lee, M.N.; Ong, A.W.H.; Yaacob, S.N.B. Problem-Solving Ability and Stress Mediate the Relationship between Creativity and Happiness. *Creat. Res. J.* **2019**, *31*, 15–25. [CrossRef]
11. Ravina-Ripoll, R.; Tobar-Pesantenz, L.B.; Galiano-Coronil, A.; Marchena-Domínguez, J. *Happiness Management and Social Marketing: A Wave of Sustainability and Creativity*; Peter Lang: Lausanne, Switzerland, 2021.
12. Ripoll, R.R.; Pesantez, L.B.T.; Domínguez, J.M. (Eds.) *Happiness Management: A Lighthouse for Social Wellbeing, Creativity and Sustainability*; Peter Lang: Lausanne, Switzerland, 2019.
13. Di Fabio, A. The Psychology of Sustainability and Sustainable Development for Well-Being in Organizations. *Res. Top. Front. Psychol. Sect. Org. Psychol.* **2017**, *8*, 1534. [CrossRef]
14. Fabio, A.D.; Rosen, M.A. Opening the Black Box of Psychological Processes in the Science of Sustainable Development: A New Frontier. *Eur. J. Sustain. Dev. Res.* **2018**, *2*, 2–6. [CrossRef] [PubMed]
15. Marsella, A.J.; Mustakova-Possardt, E.; Lyubansky, M.; Basseches, M.; Editors, J.O. *International and Cultural Psychology Series Editor: Toward a Socially Responsible Psychology for a Global Era*; Kluwer Academic/Plenum: New York, NY, USA, 2002.
16. O'Brien, C. Sustainable Happiness: How Happiness Studies Can Contribute to a More Sustainable Future. *Can. Psychol.* **2008**, *49*, 289–295. [CrossRef]
17. Kerret, D.; Orkibi, H.; Ronen, T. Green Perspective for a Hopeful Future: Explaining Green Schools' Contribution to Environmental Subjective Well-Being. *Rev. Gen. Psychol.* **2014**, *18*, 82–88. [CrossRef]
18. Aknin, L.B.; Dunn, E.W.; Norton, M.I. Happiness Runs in a Circular Motion: Evidence for a Positive Feedback Loop between Prosocial Spending and Happiness. *J. Happiness Stud.* **2011**, *13*, 347–355. [CrossRef]
19. Boluda-Verdú, I.; Senent-Valero, M.; Casas-Escolano, M.; Matijasevich, A.; Pastor-Valero, M. Fear for the Future: Eco-Anxiety and Health Implications, a Systematic Review. *J. Environ. Psychol.* **2022**, *84*, 101904. [CrossRef]
20. Jain, N.; Jain, P. Eco-Anxiety and Environmental Concern as Predictors of Eco-Activism. *IOP Conf. Ser. Earth Environ. Sci.* **2022**, *1084*, 012007. [CrossRef]
21. Lutz, P.K.; Passmore, H.A.; Howell, A.J.; Zelenski, J.M.; Yang, Y.; Richardson, M. The Continuum of Eco-Anxiety Responses: A Preliminary Investigation of Its Nomological Network. *Collabra. Psychol.* **2023**, *9*, 67838. [CrossRef]
22. Ágoston, C.; Urbán, R.; Nagy, B.; Csaba, B.; Kőváry, Z.; Kovács, K.; Varga, A.; Dúll, A.; Mónus, F.; Shaw, C.A.; et al. The Psychological Consequences of the Ecological Crisis: Three New Questionnaires to Assess Eco-Anxiety, Eco-Guilt, and Ecological Grief. *Clim. Risk. Manag.* **2022**, *37*, 100441. [CrossRef]
23. Ágoston, C.; Csaba, B.; Nagy, B.; Kőváry, Z.; Dúll, A.; Rácz, J.; Demetrovics, Z. Identifying Types of Eco-Anxiety, Eco-Guilt, Eco-Grief, and Eco-Coping in a Climate-Sensitive Population: A Qualitative Study. *Int. J. Environ. Res. Public Health* **2022**, *19*, 2461. [CrossRef] [PubMed]
24. Pihkala, P. Eco-Anxiety and Environmental Education. *Sustainability* **2020**, *12*, 149. [CrossRef]
25. Lutz, P.K.; Zelenski, J.M.; Newman, D.B. Eco-Anxiety in Daily Life: Relationships with Well-Being and pro-Environmental Behavior. *Curr. Res. Ecol. Soc. Psychol.* **2023**, *4*, 100110. [CrossRef]
26. Caple, D. Creativity in Design of Green Workplaces. In *Advances in Intelligent Systems and Computing*; Springer: Berlin/Heidelberg, Germany, 2019; Volume 824.
27. Popescu, C.R.G. Approaches to Sustainable and Responsible Entrepreneurship: Creativity, Innovation, and Intellectual Capital as Drivers for Organization Performance. In *Building an Entrepreneurial and Sustainable Society*; IGI Global: Hershey, PN, USA, 2020.
28. Prescott, S.L.; Hancock, T.; Bland, J.; van den Bosch, M.; Jansson, J.K.; Johnson, C.C.; Kondo, M.; Katz, D.; Kort, R.; Kozyrskyj, A.; et al. Eighth Annual Conference of in VIVO Planetary Health: From Challenges to Opportunities. *Int. J. Environ. Res. Public Health* **2019**, *16*, 4302. [CrossRef] [PubMed]
29. Liu, J.; Gatzweiler, F.W.; Kumar, M. An Evolutionary Complex Systems Perspective on Urban Health. *Socioecon. Plann. Sci.* **2021**, *75*, 100815. [CrossRef]
30. Miciukiewicz, K. Can a Park Save the City?: Hopes and Pitfalls of the London National Park City. *Przegląd Kult.* **2020**, *2020*, 424–434. [CrossRef]
31. Jones, V.; Podpadec, T. Young People, Climate Change and Fast Fashion Futures. *Environ. Educ. Res.* **2023**, *15*, 1–17. [CrossRef]
32. Akhan, N.E.; Çiçek, S.; Kocaağa, G. Critical and Creative Perspectives of Gifted Students on Global Problems: Global Climate Change. *Think Ski. Creat.* **2022**, *46*, 101131. [CrossRef]
33. Dabaja, Z.F. Exploring an Unfamiliar Territory: A Study on Outdoor Education in Lebanon. *J. Adventure Educ. Outdoor Learn.* **2023**, *23*, 379–393. [CrossRef]
34. Chassagne, N.; Everingham, P. Buen Vivir: Degrowing Extractivism and Growing Wellbeing through Tourism. *J. Sustain. Tour.* **2019**, *27*, 1909–1925. [CrossRef]
35. Woodworth, A.V. Biophilia and Human Health. In *Programming for Health and Wellbeing in Architecture*; Routledge: London, UK, 2021.
36. Regmi, S.; Johnson, B.; Dahal, B.M. Analysing the Environmental Values and Attitudes of Rural Nepalese Children by Validating the 2-MEV Model. *Sustainability* **2020**, *12*, 164. [CrossRef]

37. Schönfelder, M.L.; Bogner, F.X. Between Science Education and Environmental Education: How Science Sustainability between Science Education and Environmental Education: How Science Motivation Relates to Environmental Values. *Sustainability* **2020**, *12*, 1968. [CrossRef]
38. Atari, M.; Afhami, R.; Mohammadi-Zarghan, S. Exploring Aesthetic Fluency: The Roles of Personality, Nature Relatedness, and Art Activities. *Psychol. Aesthet. Creat. Arts* **2018**, *14*, 125–131. [CrossRef]
39. Baxter, D.E.; Pelletier, L.G. Is Nature Relatedness a Basic Human Psychological Need? A Critical Examination of the Extant Literature. *Can. Psychol.* **2019**, *60*, 21–34. [CrossRef]
40. Rosa, C.D.; Profice, C.C.; Collado, S. Nature Experiences and Adults' Self-Reported pro-Environmental Behaviors: The Role of Connectedness to Nature and Childhood Nature Experiences. *Front. Psychol.* **2018**, *9*, 1055. [CrossRef] [PubMed]
41. Goldberg, J.A.; Marshall, N.A.; Birtles, A.; Case, P.; Curnock, M.I.; Gurney, G.G. On the Relationship between Attitudes and Environmental Behaviors of Key Great Barrier Reef User Groups. *Ecol. Soc.* **2018**, *23*, 19. [CrossRef]
42. Ajdukovic, I.; Gilibert, D.; Fointiat, V. Structural Confirmation of the 24-Item Environmental Attitude Inventory/Confirmación Estructural Del Inventario de Actitudes Ambientales de 24 Ítems. *Psyecology* **2019**, *10*, 184–216. [CrossRef]
43. Kapeller, M.L.; Jäger, G. Threat and Anxiety in the Climate Debate—An Agent-Based Model to Investigate Climate Scepticism and Pro-Environmental Behaviour. *Sustainability* **2020**, *12*, 1823. [CrossRef]
44. Yang, D.; Song, D.; Li, C. Environmental Responsibility Decisions of a Supply Chain under Different Channel Leaderships. *Environ. Technol. Innov.* **2022**, *26*, 102212. [CrossRef]
45. Xu, P.; Xu, X.; Bai, G. Corporate Environmental Responsibility, CEO's Tenure and Innovation Legitimacy: Evidence from Chinese Listed Companies. *Technol. Soc.* **2022**, *70*, 102056. [CrossRef]
46. Shah, S.M.M.; Ahmed, U.; Ismail, A.I.; Mozammel, S. Going Intellectually Green: Exploring the Nexus between Green Intellectual Capital, Environmental Responsibility, and Environmental Concern towards Environmental Performance. *Sustainability* **2021**, *13*, 6257. [CrossRef]
47. Ivashkiv, I.; Kupalova, H.; Goncharenko, N.; Andrusiv, U.; Streimikis, J.; Lyashenko, O.; Yakubiv, V.; Lyzun, M.; Lishchynsky, I.; Saukh, I. Environmental Responsibility as a Prerequisite for Sustainable Development of Agricultural Enterprises. *Manag. Sci. Lett.* **2020**, *10*, 2973–2984. [CrossRef]
48. Cheng, E.H.P.; Patterson, I.; Packer, J.; Pegg, S. Identifying the Satisfactions Derived from Leisure Gardening by Older Adults. *Ann. Leis. Res.* **2010**, *13*, 395–419. [CrossRef]
49. Berenguer, J.; Corraliza, J.A.; Martín, R. Rural-Urban Differences in Environmental Concern, Attitudes, and Actions. *Rural-Urban Differ. Eur. J. Psychol. Assess.* **2005**, *21*, 128–138. [CrossRef]
50. Ernst, J. Early Childhood Educators' Use of Natural Outdoor Settings as Learning Environments: An Exploratory Study of Beliefs, Practices, and Barriers. *Environ. Educ. Res.* **2014**, *20*, 735–752. [CrossRef]
51. Diniz, R.; Morais, D.; Pinheiro, J. Life Experiences and the Formation of Pro-Ecological Commitment: Exploring the Role of Spirituality/Experiencias de Vida y La Formación Del Compromiso pro-Ecológico: Explorando El Papel de La Espiritualidad. *Psyecology* **2018**, *9*, 237–258. [CrossRef]
52. Navarro, O.; Tapia-Fonllem, C.; Fraijo-Sing, B.; Roussiau, N.; Ortiz-Valdez, A.; Guillard, M.; Wittenberg, I.; Fleury-Bahi, G. Connectedness to Nature and Its Relationship with Spirituality, Wellbeing and Sustainable Behaviour. *Psyecology* **2020**, *11*, 37–48. [CrossRef]
53. Maki, A.; Raimi, K.T. Environmental Peer Persuasion: How Moral Exporting and Belief Superiority Relate to Efforts to Influence Others. *J. Environ. Psychol.* **2017**, *49*, 18–29. [CrossRef]
54. Trouillet, R.; Doron, J.; Combes, R. Metacognitive Beliefs, Environmental Demands and Subjective Stress States: A Moderation Analysis in a French Sample. *Pers. Individ. Dif.* **2016**, *101*, 9–15. [CrossRef]
55. Russell, J. "Everything Has to Die One Day": Children's Explorations of the Meanings of Death in Human-Animal-Nature Relationships. *Environ. Educ. Res.* **2017**, *23*, 75–90. [CrossRef]
56. Cheng, V.M.Y. Views on Creativity, Environmental Sustainability and Their Integrated Development. *Creat. Educ.* **2018**, *9*, 719–743. [CrossRef]
57. Baron, G.N.; Ghelich Khani, N. Defining Design for Sustainability and Conservation Mindsets. *Cuad. Cent. Estud. Diseño Comun.* **2021**, *321*, 131–151. [CrossRef]
58. Chen, S.Y. True Sustainable Development of Green Technology: The Influencers and Risked Moderation of Sustainable Motivational Behavior. *Sustain. Dev.* **2019**, *27*, 69–83. [CrossRef]
59. Doyle, J. Institutionalized Collective Action and the Relationship between Beliefs about Environmental Problems and Environmental Actions: A Cross-National Analysis. *Soc. Sci. Res.* **2018**, *75*, 32–43. [CrossRef]
60. Huang, H. Media Use, Environmental Beliefs, Self-Efficacy, and pro-Environmental Behavior. *J. Bus. Res.* **2016**, *69*, 2206–2212. [CrossRef]
61. Wang, E.S.T.; Lin, H.C. Sustainable Development: The Effects of Social Normative Beliefs On Environmental Behaviour. *Sustain. Dev.* **2017**, *25*, 595–609. [CrossRef]
62. Kiatkawsin, K.; Han, H. Young Travelers' Intention to Behave pro-Environmentally: Merging the Value-Belief-Norm Theory and the Expectancy Theory. *Tour. Manag.* **2017**, *59*, 76–88. [CrossRef]
63. Whitley, C.T.; Takahashi, B.; Zwickle, A.; Besley, J.C.; Lertpratchya, A.P. Sustainability Behaviors among College Students: An Application of the VBN Theory. *Environ. Educ. Res.* **2018**, *24*, 245–262. [CrossRef]

64. Brahmi, M.; Aldieri, L.; Dhayal, K.S.; Agrawal, S. Education 4.0: Can It Be a Component of the Sustainable Well-Being of Students? Available online: https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-6684-4981-3.ch014 (accessed on 6 November 2023).
65. Hou, W.K.; Lai, F.T.T.; Hougen, C.; Hall, B.J.; Hobfoll, S.E. Measuring Everyday Processes and Mechanisms of Stress Resilience: Development and Initial Validation of the Sustainability of Living Inventory (SOLI). *Psychol. Assess.* **2019**, *31*, 715–729. [CrossRef] [PubMed]
66. Bahar, F.; Sahin, E. An Associational Research on Turkish Children's Environmentally Responsible Behaviors, Nature Relatedness, and Motive Concerns. *Sci. Educ. Int.* **2017**, *28*, 111–118. [CrossRef]
67. Lalot, F.; Ahvenharju, S.; Minkkinen, M.; Wensing, E. Aware of the Future?: Development and Validation of the Futures Consciousness Scale. *Eur. J. Psychol. Assess.* **2019**, *36*, 874–888. [CrossRef]
68. Brownlee, M.T.J.; Powell, R.B.; Hallo, J.C. A Review of the Foundational Processes That Influence Beliefs in Climate Change: Opportunities for Environmental Education Research. *Environ. Educ. Res.* **2013**, *19*, 1–20. [CrossRef]
69. Jansson, M.; Biel, A. Investment Institutions' Beliefs about and Attitudes toward Socially Responsible Investment (SRI): A Comparison between SRI and Non-SRI Management. *Sustain. Dev.* **2014**, *22*, 33–41. [CrossRef]
70. Sawatzky, A.; Cunsolo, A.; Shiwak, I.; Flowers, C.; Jones-Bitton, A.; Gillis, D.; Middleton, J.; Wood, M.; Harper, S.L. "It Depends. . .": Inuit-Led Identification and Interpretation of Land-Based Observations for Climate Change Adaptation in Nunatsiavut, Labrador. *Reg. Environ. Chang.* **2021**, *21*, 54. [CrossRef]
71. Guan, T.; Meng, K.; Liu, W.; Xue, L. Public Attitudes toward Sustainable Development Goals: Evidence from Five Chinese Cities. *Sustainability* **2019**, *11*, 5793. [CrossRef]
72. Kilbourne, W.; Pickett, G. How Materialism Affects Environmental Beliefs, Concern, and Environmentally Responsible Behavior. *J. Bus. Res.* **2008**, *61*, 885–893. [CrossRef]
73. Jung, H.J.; Choi, Y.J. Influencing Factors of Chinese Consumers ' Purchase Intention to Sustainable Apparel Products: Exploring Consumer " Attitude—Behavioral Intention " Gap. *Sustainability* **2020**, *12*, 1770. [CrossRef]
74. Isaac, G.; Finn, S.; Joe, J.R.; Hoover, E.; Gone, J.P.; Leftliand-Begay, C.; Hill, S. Native American Perspectives on Health and Traditional Ecological Knowledge. *Environ. Health Perspect.* **2018**, *126*, 125002. [CrossRef] [PubMed]
75. del Carmen Aguilar-Luzón, M.; Benítez, I. Advances in Environmental Psychology Regarding the Promotion of Wellbeing and Quality of Life/Avances de La Psicología Ambiental Ante La Promoción Del Bienestar y La Calidad de Vida. *Psyecology* **2018**, *9*, 113–117. [CrossRef]
76. Amérigo, M.; García, J.A.; López-Santiago, S. The Effects of Emotions on the Generation of Environmental Arguments/Efectos de Las Emociones En La Generación de Argumentos Sobre El Medio Ambiente Natural. *Psyecology* **2018**, *9*, 204–236. [CrossRef]
77. Ravina-Ripoll, R.; Domínguez, J.M.; Montañés-Del Río, M.Á. Happiness Management in the Age of Industry 4.0. *Retos* **2019**, *9*, 189–202. [CrossRef]
78. Walker, H.L. *Challenges and Inspirations of Nature-Based Spirituality Adherents Who Aspire to Address the Ecocrisis*; Convention Presentation, Topic 27; American Psychological Association: Washington, DC, USA, 2014.
79. Howell, A.J.; Passmore, H.A.; Buro, K. Meaning in Nature: Meaning in Life as a Mediator of the Relationship Between Nature Connectedness and Well-Being. *J. Happiness Stud.* **2013**, *14*, 1681–1696. [CrossRef]
80. Allison, E. Nature: For Religion Conservation. *J. Study Relig. Nat. Cult.* **2017**, *2*, 197–226. [CrossRef]
81. Lee, K.; Ashton, M.C.; Choi, J.; Zachariassen, K. Connectedness to Nature and to Humanity: Their Association and Personality Correlates. *Front. Psychol.* **2015**, *6*, 1003. [CrossRef] [PubMed]
82. Beery, T.H. Nordic in Nature: Friluftsliv and Environmental Connectedness. *Environ. Educ. Res.* **2013**, *19*, 94–117. [CrossRef]
83. Richardson, M.; Hallam, J. Exploring the Psychological Rewards of a Familiar Semirural Landscape: Connecting to Local Nature through a Mindful Approach. *Humanist. Psychol.* **2013**, *41*, 35–53. [CrossRef]
84. Richardson, M.; Sheffield, D. Three Good Things in Nature: Noticing Nearby Nature Brings Sustained Increases in Connection with Nature. *Psyecology* **2017**, *8*, 1–32. [CrossRef]
85. Brügger, A.; Kaiser, F.G.; Roczen, N. One for All?: Connectedness to Nature, Inclusion of Nature, Environmental Identity, and Implicit Association with Nature. *Eur. Psychol.* **2011**, *16*, 324–333. [CrossRef]
86. Nisbet, E.K.; Zelenski, J.M.; Murphy, S.A. Happiness Is in Our Nature: Exploring Nature Relatedness as a Contributor to Subjective Well-Being. *J. Happiness Stud.* **2011**, *12*, 303–322. [CrossRef]
87. Reese, R.F.; Lewis, T.F.; Myers, J.E.; Wahesh, E.; Iversen, R. Relationship between Nature Relatedness and Holistic Wellness: An Exploratory Study. *J. Humanist. Couns.* **2014**, *53*, 63–79. [CrossRef]
88. Passmore, H.A.; Howell, A.J. Eco-Existential Positive Psychology: Experiences in Nature, Existential Anxieties, and Well-Being. *Humanist. Psychol.* **2014**, *42*, 370–388. [CrossRef]
89. El-Hajj, R.; Khater, C.; Tatoni, T.; Adam, A.A.; Errol, V. Integrating Conservation and Sustainable Development Through Adaptive Co-Management in UNESCO Biosphere Reserves. *Conserv. Soc.* **2017**, *15*, 217–231.
90. Shin, F.; Preston, J.L. Green as the Gospel: The Power of Stewardship Messages to Improve Climate Change Attitudes. *Psychol. Relig. Spirit.* **2019**, *13*, 437–447. [CrossRef]
91. Bruni, C.M.; Winter, P.L.; Schultz, P.W.; Omoto, A.M.; Tabanico, J.J. Getting to Know Nature: Evaluating the Effects of the Get to Know Program on Children's Connectedness with Nature. *Environ. Educ. Res.* **2017**, *23*, 43–62. [CrossRef]

92. Davis-Sramek, B.; Robinson, J.L.; Darby, J.L.; Thomas, R.W. Exploring the Differential Roles of Environmental and Social Sustainability in Carrier Selection Decisions. *Int. J. Prod. Econ.* **2020**, *227*, 107660. [CrossRef]
93. Lankenau, G.R. Fostering Connectedness to Nature in Higher Education. *Environ. Educ. Res.* **2018**, *24*, 230–244. [CrossRef]
94. d'Orville, H. The Relationship between Sustainability and Creativity. *Cadmus* **2019**, *4*, 65–73.
95. Shu, Y.; Ho, S.J.; Huang, T.C. The Development of a Sustainability-Oriented Creativity, Innovation, and Entrepreneurship Education Framework: A Perspective Study. *Front. Psychol.* **2020**, *11*, 1878. [CrossRef] [PubMed]
96. Lemmetty, S.; Glaveanu, V.P.; Collin, K.; Forsman, P. (Un)Sustainable Creativity? Different Manager-Employee Perspectives in the Finnish Technology Sector. *Sustainability* **2020**, *12*, 3605. [CrossRef]
97. Brown, C.A.; Rauch, E. Axiomatic Design for Creativity, Sustainability, and Industry 4.0. *MATEC Web Conf.* **2019**, *301*, 00016. [CrossRef]
98. Brahmi, M.; Esposito, L.; Parziale, A.; Dhayal, K.S.; Agrawal, S.; Giri, A.K.; Loan, N.T. The Role of Greener Innovations in Promoting Financial Inclusion to Achieve Carbon Neutrality: An Integrative Review. *Economies* **2023**, *11*, 194. [CrossRef]
99. Mróz, A.; Ocetkiewicz, I. Creativity for Sustainability: How Do Polish Teachers Develop Students' Creativity Competence? Analysis of Research Results. *Sustainability* **2021**, *13*, 571. [CrossRef]
100. Kanzola, A.M.; Petrakis, P.E. The Sustainability of Creativity. *Sustainability* **2021**, *13*, 2776. [CrossRef]
101. Luoto, S.; Jonason, P.K. Intelligence as a Psychological Mechanism for Ecotheory of Creativity. *Creat. Res. J.* **2019**, *31*, 448–451. [CrossRef]
102. Van de Vliert, E.; Murray, D.R. Climate and Creativity: Cold and Heat Trigger Invention and Innovation in Richer Populations. *Creat. Res. J.* **2018**, *30*, 17–28. [CrossRef]
103. Di Fabio, A.; Tsuda, A. The Psychology of Harmony and Harmonization: Advancing the Perspectives for the Psychology of Sustainability and Sustainable Development. *Sustainability* **2018**, *10*, 4726. [CrossRef]
104. Lamm, E.; Tosti-Kharas, J.; Williams, E.G. Organizational Citizenship Behavior Toward the Environment Scale. *Group Organ. Manag.* **2013**, *38*, 10–11. [CrossRef]
105. Nisbet, E.K.; Zelenski, J.M.; Murphy, S.A. The Nature Relatedness Scale. *Environ. Behav.* **2009**, *41*, 715–740. [CrossRef]
106. Manley, J. The Jewel in the Corona: Crisis, the Creativity of Social Dreaming, and Climate Change. *J. Soc. Work Pract.* **2020**, *34*, 429–443. [CrossRef]
107. Stephenson, L. Collective Creativity and Wellbeing Dispositions: Children's Perceptions of Learning through Drama. *Think Ski. Creat.* **2023**, *47*, 101188. [CrossRef]
108. Miller-Rushing, A.J.; Gallinat, A.S.; Primack, R.B. Creative Citizen Science Illuminates Complex Ecological Responses to Climate Change. *Proc. Natl. Acad. Sci. USA* **2019**, *116*, 720–722. [CrossRef] [PubMed]
109. Chuvieco, E.; Burgui-Burgui, M.; Orellano, A.; Otón, G.; Ruíz-Benito, P. Links between Climate Change Knowledge, Perception and Action: Impacts on Personal Carbon Footprint. *Sustainability* **2021**, *13*, 8088. [CrossRef]
110. Han, P.; Tong, Z.; Sun, Y.; Chen, X. Impact of Climate Change Beliefs on Youths' Engagement in Energy-Conservation Behavior: The Mediating Mechanism of Environmental Concerns. *Int. J. Environ. Res. Public Health* **2022**, *19*, 7222. [CrossRef]
111. Souto, J.E. Organizational Creativity and Sustainability-Oriented Innovation as Drivers of Sustainable Development: Overcoming Firms' Economic, Environmental and Social Sustainability Challenges. *J. Manuf. Technol. Manag.* **2022**, *33*, 805–826. [CrossRef]
112. Di Fabio, A.; Bucci, O.; Gori, A. High Entrepreneurship, Leadership, and Professionalism Questionnaire. *Front. Psychol.* **2016**, *7*, 1480.
113. United Nations General Assembly (UNGA). *Education for Sustainable Development in the Framework of the 2030 Agenda for Sustainable Development*; UNESCO: Paris, France, 2020; Volume 19.
114. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development, Resolution 70/1, Resolution Adopted by the General Assembly on 25 September 2015*; United Nations: New York, NY, USA, 2015. Available online: https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement (accessed on 2 September 2023).
115. Baeyens, A.; Goffin, T. Resolution Adopted by the General Assembly on 25 September 2015 [without Reference to a Main Committee (A/70/L.1)] 70/1. Transforming Our World: The 2030 Agenda for Sustainable Development. Available online: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf (accessed on 2 September 2023).
116. Sengupta, M. The Sustainable Development Goals: An Assessment of Ambition. Available online: https://www.e-ir.info/pdf/60984 (accessed on 2 September 2023).
117. United Nations. General Assembly UN-Resolution 70/204. In *UN-General Assembly—Seventieth Session*; UN: New York, NY, USA, 2015.
118. Awan, U.; Sroufe, R.; Kraslawski, A. Creativity Enables Sustainable Development: Supplier Engagement as a Boundary Condition for the Positive Effect on Green Innovation. *J. Clean. Prod.* **2019**, *226*, 172–185. [CrossRef]
119. Mulyaningsih, I.; Ananda, R.; Fauziddin, M.; Pattiasina, P.J.; Anwar, M. Developing Student Characters to Have Independent, Responsible, Creative, Innovative and Adaptive Competencies towards the Dynamics of the Internal and External World. *Int. J. Health Sci.* **2022**, *6*, 9332–9345. [CrossRef]
120. Wu, M.; Long, R.; Yang, S.; Wang, X.; Chen, H. Evolution of the Knowledge Mapping of Climate Change Communication Research: Basic Status, Research Hotspots, and Prospects. *Int. J. Environ. Res. Public Health* **2022**, *19*, 11305. [CrossRef] [PubMed]

121. Kaushal, S.; Dhammi, S.; Guha, A. Climate Crisis and Language—A Constructivist Ecolinguistic Approach. *Mater. Today Proc.* **2022**, *49*, 3581–3584. [CrossRef]
122. Briandana, R.; Saleh, M.S.M. Implementing Environmental Communication Strategy Towards Climate Change Through Social Media in Indonesia. *Online J. Commun. Media Technol.* **2022**, *12*, 12467. [CrossRef]
123. Vasquez, R. CSR, CSA, or CPA? Examining Corporate Climate Change Communication Strategies, Motives, and Effects on Consumer Outcomes. *Sustainability* **2022**, *14*, 3604. [CrossRef]
124. Poon, J.P.H.; Shang, Q. Are Creative Workers Happier in Chinese Cities? The Influence of Work, Lifestyle, and Amenities on Urban Well-Being. *Urban Geogr.* **2014**, *35*, 567–585. [CrossRef]
125. Tan, C.Y.; Chuah, C.Q.; Lee, S.T.; Tan, C.S. Being Creative Makes You Happier: The Positive Effect of Creativity on Subjective Well-Being. *Int. J. Environ. Res. Public Health* **2021**, *18*, 7244. [CrossRef]
126. Schroeder, K. Cultural Values and Sustainable Tourism Governance in Bhutan. *Sustainability* **2015**, *7*, 15837. [CrossRef]
127. Alam, A. Investigating Sustainable Education and Positive Psychology Interventions in Schools Towards Achievement of Sustainable Happiness and Wellbeing for 21 St Century Pedagogy and Curriculum. *ECS Trans.* **2022**, *107*, 19481–19494. [CrossRef]
128. Munar, J.L.S.; De Juana-Espinosa, S.; Martínez-buelvas, L.; Abarca, Y.V.; Tirado, J.O. Organizational Happiness Dimensions as a Contribution to Sustainable Development Goals: A Prospective Study in Higher Education Institutions in Chile, Colombia and Spain. *Sustainability* **2020**, *12*, 10502. [CrossRef]
129. Reyes, M.E.S.; Carmen, B.P.B.; Luminarias, M.E.P.; Mangulabnan, S.A.N.B.; Ogunbode, C.A. An Investigation into the Relationship between Climate Change Anxiety and Mental Health among Gen Z Filipinos. *Curr. Psychol.* **2023**, *42*, 7448–7456. [CrossRef]
130. Lawrance, E.L.; Jennings, N.; Kioupi, V.; Thompson, R.; Diffey, J.; Vercammen, A. Psychological Responses, Mental Health, and Sense of Agency for the Dual Challenges of Climate Change and the COVID-19 Pandemic in Young People in the UK: An Online Survey Study. *Lancet Planet Health* **2022**, *6*, e726–e738. [CrossRef]
131. Sanz-Hernández, A.; Covaleda, I. Sustainability and Creativity through Mail Art: A Case Study with Young Artists in Universities. *J. Clean. Prod.* **2021**, *318*, 128525. [CrossRef]
132. Benedek, M.; Jauk, E.; Kerschenbauer, K.; Anderwald, R.; Grond, L. Creating Art: An Experience Sampling Study in the Domain of Moving Image Art. *Psychol. Aesthet. Creat. Arts* **2017**, *11*, 325–334. [CrossRef]
133. Mastandrea, S.; Bartoli, G.; Carrus, G. The Automatic Aesthetic Evaluation of Different Art and Architectural Styles. *Psychol. Aesthet. Creat. Arts* **2011**, *5*, 126–134. [CrossRef]
134. Lee, H.; Heo, S. Arts and Cultural Activities and Happiness: Evidence from Korea. *Appl. Res. Qual. Life* **2021**, *16*, 1637–1651. [CrossRef]
135. Byrne, B.M. *Structural Equation Modeling With AMOS*; Talyor Francis Group: Abingdon, UK, 2013; ISBN 9781138797031.
136. Venkataswamy Reddy, M. *Statistical Methods in Psychiatry Research and SPSS*; Routledge: London, UK, 2019.
137. Bagozzi, R.P.; Yi, Y. Specification, Evaluation, and Interpretation of Structural Equation Models. *J. Acad. Mark. Sci.* **2012**, *40*, 8–34. [CrossRef]
138. Tabachnick, B.G.; Fidell, L.S. *Using Multivariate Statistics*; Pearson Education Limited: London, UK, 2014.
139. Kline, R.B. *Principles and Practices of Structural Equation Modelling*, 4th ed.; Guilford Press: New York, NY, USA, 2016; ISBN 9781609182304.
140. Silvia, P.J.; Beaty, R.E.; Nusbaum, E.C.; Eddington, K.M.; Levin-Aspenson, H.; Kwapil, T.R. Everyday Creativity in Daily Life: An Experience-Sampling Study of "Little c" Creativity. *Psychol. Aesthet. Creat. Arts* **2014**, *8*, 183–188. [CrossRef]
141. Hirt, E.R.; Devers, E.E.; McCrea, S.M. I Want to Be Creative: Exploring the Role of Hedonic Contingency Theory in the Positive Mood-Cognitive Flexibility Link. *J. Pers. Soc. Psychol.* **2008**, *94*, 214–230. [CrossRef]
142. Hirt, E.R.; McDonald, H.E.; Melton, R.J.; Harackiewicz, J.M. Processing Goals, Task Interest, and the Mood-Performance Relationship: A Mediational Analysis. *J. Pers. Soc. Psychol.* **1996**, *71*, 245–261. [CrossRef]
143. Phillips, L.H.; Bull, R.; Adams, E.; Fraser, L. Positive Mood and Executive Function. Evidence From Stroop and Fluency Tasks. *Emotion* **2002**, *2*, 12–22. [CrossRef]
144. De Dreu, C.K.W.; Baas, M.; Nijstad, B.A. Hedonic Tone and Activation Level in the Mood-Creativity Link: Toward a Dual Pathway to Creativity Model. *J. Pers. Soc. Psychol.* **2008**, *94*, 739–756. [CrossRef]
145. Corazza, G.E.; Lubart, T. Intelligence and Creativity: Mapping Constructs on the Space-Time Continuum. *J. Intell.* **2021**, *9*, 1. [CrossRef] [PubMed]
146. Benedek, M.; Jauk, E.; Sommer, M.; Arendasy, M.; Neubauer, A.C. Intelligence, Creativity, and Cognitive Control: The Common and Differential Involvement of Executive Functions in Intelligence and Creativity. *Intelligence* **2014**, *46*, 73–83. [CrossRef] [PubMed]
147. Nerlich, B.; Koteyko, N. Compounds, Creativity and Complexity in Climate Change Communication: The Case of "Carbon Indulgences". *Glob. Environ. Chang.* **2009**, *19*, 345–353. [CrossRef]
148. Baldwin, D.R.; Towler, K.; Oliver, M.D.; Datta, S. An Examination of College Student Wellness: A Research and Liberal Arts Perspective. *Health Psychol. Open* **2017**, *4*, 2055102917719563. [CrossRef]
149. Fritze, J.G.; Blashki, G.A.; Burke, S.; Wiseman, J. Hope, Despair and Transformation: Climate Change and the Promotion of Mental Health and Wellbeing. *Int. J. Ment. Health Syst.* **2008**, *2*, 13. [CrossRef] [PubMed]
150. Corral-Verdugo, V.; Mireles-Acosta, J.; Tapia-Fonllem, C.; Fraijo-Sing, B. Happiness as Correlate of Sustainable Behavior: A Study of pro-Ecological, Frugal, Equitable and Altruistic Actions That Promote Subjective Wellbeing. *Hum. Ecol. Rev.* **2011**, *18*, 95–104.

151. Jaspal, R.; Nerlich, B.; Cinnirella, M. Human Responses to Climate Change: Social Representation, Identity and Socio-Psychological Action. *Environ. Commun.* **2014**, *8*, 110–130. [CrossRef]
152. Knebel, S.; Seele, P. Framing Sustainability in Public Procurement by Typologizing Sustainability Indicators—The Case of Switzerland. *J. Public Procure.* **2021**, *21*, 119–137. [CrossRef]
153. Teschner, R.; Ruppen, J.; Bornemann, B.; Emmenegger, R.; Sánchez, L.A. Mapping Sustainable Diets: A Comparison of Sustainability References in Dietary Guidelines of Swiss Food Governance Actors. *Sustainability* **2021**, *13*, 12076. [CrossRef]
154. Lucas, C.H. Climate Friction: How Climate Change Communication Produces Resistance to Concern. *Geogr. Res.* **2022**, *60*, 371–382. [CrossRef]
155. Gislason, M.K.; Galway, L.; Buse, C.; Parkes, M.; Rees, E. Place-Based Climate Change Communication and Engagement in Canada's Provincial North: Lessons Learned from Climate Champions. *Environ. Commun.* **2021**, *15*, 530–545. [CrossRef]
156. Born, D. Bearing Witness? Polar Bears as Icons for Climate Change Communication in National Geographic. *Environ. Commun.* **2019**, *13*, 649–663. [CrossRef]
157. Schäfer, M.S.; Hase, V. Computational Methods for the Analysis of Climate Change Communication: Towards an Integrative and Reflexive Approach. *Wiley Interdiscip Rev. Clim. Chang.* **2023**, *14*, e806. [CrossRef]
158. Wibeck, V.; Neset, T.S. Focus Groups and Serious Gaming in Climate Change Communication Research—A Methodological Review. *Wiley Interdiscip Rev. Clim. Chang.* **2020**, *11*, e664. [CrossRef]
159. Jacobson, S.K.; Seavey, J.R.; Mueller, R.C. Integrated Science and Art Education for Creative Climate Change Communication. *Ecol. Soc.* **2016**, *21*, 30. [CrossRef]
160. Shepherd, D.A.; Kuskova, V.; Patzelt, H. Sustainable Development Survey Scale. *APA PsycTests* **2009**, *30*, 8–11. [CrossRef]
161. Hills, P.; Argyle, M. *Short Oxford Happiness Questionnaire—Short Scale*; Oxford Academic: Oxford, UK, 2002; p. 8869. [CrossRef]
162. Diener, E.; Emmons, R.A.; Larsem, R.J.; Griffin, S. The Satisfaction With Life Scale. *J. Pers. Assess.* **1985**, *49*, 71–75. [CrossRef] [PubMed]
163. Babnik, K.; Benko, E.; von Humboldt, S. Ryff's Psychological Well-Being Scale. In *Encyclopedia of Gerontology and Population Aging*; Springer: Berlin/Heidelberg, Germany, 2019; pp. 1–6. [CrossRef]
164. Silvia, P.J.; Wigert, B.; Reiter-Palmon, R.; Kaufman, J.C. Assessing Creativity with Self-Report Scales: A Review and Empirical Evaluation. *Psychol. Aesthet. Creat. Arts* **2012**, *6*, 19–34. [CrossRef]
165. Kaufman, J.C. Counting the Muses: Development of the Kaufman Domains of Creativity Scale (K-DOCS). *Psychol. Aesthet. Creat. Arts* **2012**, *6*, 298–308. [CrossRef]
166. Karwowski, M. Creative Mindsets: Measurement, Correlates, Consequences. *Psychol. Aesthet. Creat. Arts* **2014**, *8*, 62–70. [CrossRef]
167. Conner, T.S.; Silvia, P.J. Creative Days: A Daily Diary Study of Emotion, Personality, and Everyday Creativity. *Psychol. Aesthet. Creat. Arts* **2015**, *9*, 463–470. [CrossRef]

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