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Examining Millennials' Global Citizenship Attitudes and Behavioral Intentions to Engage in Environmental Volunteering

Kyle M. Woosnam [1,*], Marianna Strzelecka [2,3], Gwendelyn S. Nisbett [4] and Samuel J. Keith [1]

1 Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA 30602, USA; skeith@uga.edu
2 Ekonomihögskolan, Linnéuniversitet, 391 82 Kalmar, Sweden; marianna.strzelecka@lnu.se
3 Institute of Environmental Sciences, Faculty of Biology, Jagiellonian University, 30-387 Krakow, Poland
4 Mayborn School of Journalism, University of North Texas, Denton, TX 76203, USA; Gwen.Nisbett@unt.edu
* Correspondence: woosnam@uga.edu

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Abstract: Volunteering for nature conservation has become an important resource in solving local environmental problems of global importance. The study at hand assessed how well millennials' global citizenship attitudes explain their behavioral intentions to engage in volunteer projects, as well as how prior experience of volunteering in environmental projects affects millennials' global citizenship attitudes. Those who reported past participation in this type of volunteer experience were generally more inclined to partake in future environmental volunteering than those without prior experience. Likewise, for those with prior experience, global citizen factors played a greater role in intentions to experience environmental volunteering. This study makes valuable contributions to the literature surrounding nature conservation, as it illustrates that millennials' global citizenship attitudes predict participation in environmental volunteering. This work concludes with insights concerning what programs (that provide millennials with opportunities to fulfill environmental duties associated with their global environmental citizenship) can do to provide a more valuable experience for young volunteers.

Keywords: environmental volunteering; global citizenship attitudes; behavioral intentions; prior volunteer experience

1. Introduction

Global environmental issues cannot be effectively addressed from the perspective of nationally-based politics [1], as governments alone cannot provide all needed interventions. Additional initiatives are crucial in coping with environmental change [2,3]. Environmental volunteering has been recognized as an important resource in solving local environmental problems of global importance [4], a positive response to the global reordering [5–8].

Environmental volunteering tends to be viewed as a form of global civic engagement or social movement [9–11] for which members demonstrate responsibility, awareness and engagement [12]. Some scholars advocate that environmental volunteering should become an essential resource for ecological restoration initiatives [8–10]. Environmental volunteers can provide physical labor for activities such as monitoring habitats and species, or publicizing environmental causes [10,11] without being financially rewarded for their commitment [10,13–16]. Restored ecosystems are for the volunteers a direct and worthwhile outcome of their efforts [17,18]. Gray and colleagues [19], further proposed that whenever environmental volunteers participate in the collection of scientific data, they are engaging in

activities similar to citizen scientists. The narrative constructs environmental volunteering as doing something worthy for nature and society [8–10,18,20,21].

Millennials are the first generation that has witnessed rapid degradation of crucial ecosystems at a global scale. The experiences around deteriorating quality of natural environment during formative years can shape how millennials think about nature, what they value, and what they believe needs to be done [22]. Arguably, the exposure to global environmental issues results in attitudes of global citizenship and acting for the environmental cause.

Despite the narrative concerning the need for greater contribution to and care for the natural environment, empirical research focused on millennials' attitudes of global citizenship is limited. More work is needed to understand how millennials' attitudes translate to developing behaviors that are more in tune with responsibility and care for the planet [23,24]. To contribute to the ongoing discussion of millennials and volunteer-based environmental projects, this study has been designed with the twofold purpose: (1) to understand how prior environmental volunteer experience affects the relationship between global citizenship and behavioral intention to volunteer; and (2) to determine differences between those with and without prior environmental volunteering experience.

2. Literature Review

2.1. Environmental Volunteering

Research on volunteering has been driven by the idea that matching peoples' expectations with the right environmental project is a critical step toward recruiting the right kind of volunteers and retaining them [25]. However, as only few studies have focused specifically on environmental volunteering and intentions to volunteer in nature conservation projects, there is a rather limited understanding about what attracts millennials to projects such as biodiversity monitoring or ecological restoration. Moreover, no clear link has been established between past volunteering experience in environmental management projects in general, global environmental citizen attitudes, and intent to engage in environmental volunteering in the future. Given the shortage of research examining the antecedents of environmental volunteering, the following section reviews participants' motivations to volunteer (in general) and volunteering in environmental management projects (in particular). Following this, international volunteering is examined in relation to global environmental citizenship, with global environmental citizenship attitudes as the motivating factor.

One of the early models of volunteering conceptualized people as being motivated to volunteer by concerns for the welfare of others (altruistic motives) and by self-interest (egoistic motives) [26]. Outside of the altruistic-egoistic discourse, other studies adapted the functional approach, which focused on the personal and social processes that initiate, direct, and sustain action. Finally, Finkelstein [27] distinguished between two forms of motivations among volunteers—intrinsic and extrinsic—implying that different individuals may participate in the same volunteer work for various reasons.

Clary and colleagues [28] examined the relationship between volunteers' motivations (through the VFI) and various aspects of volunteer behavior as well as demographic variables. What they found was that different types of volunteering activities were associated with different combinations of motivations, and their motivational distinctions were associated with different demographic groups. Later, Clary and colleagues [29] (employing his Volunteer Functions Inventory (VFI)) identified six primary reasons to volunteer: (1) protective motives; (2) values; (3) career advancement; (4) social ties; (5) understanding; and (6) ego enhancement. In environmental volunteering, Grese and colleagues [10] undertook an investigation to determine benefits volunteers derive from participating in ecological restoration, concluding that programs considering volunteer motivations tend to better retain participants. They, however, neglected to explicitly distinguish between extrinsic and intrinsic motivations or discuss the potential of such differences.

On the other hand, Stukas and colleagues [30] conducted an experiment in which they manipulated the perceived choice of a volunteer task to study differences. Importantly, they found that perception of

choice regarding the volunteer task was positively related to the intent to volunteer among individuals who engaged in obligatory volunteering. In contrast, for those who were actually volunteering because they believed it was the right thing to do, having the choice of volunteering task was unrelated to their intent to volunteer. This result indicates that when volunteers have high levels of intrinsic motivation, extrinsic motivational factors such as type of volunteer task may not affect how often they volunteer. Based on the above, it can be also suggested that environmental volunteers who are intrinsically motivated; thus, those who express greater responsibility and care in general, are less likely to be concerned with which environmental management tasks they get involved in.

In a study examining commitment among environmental volunteers, Ryan and colleagues [10] assessed extrinsic and intrinsic motivations of the participants. They identified five motivation themes, including helping the environment, learning, social, reflection, and the opportunity to work for a well-organized program. Interestingly, "helping the environment" and "learning" were highly ranked unique motivations to commit efforts to this kind of environmental initiative [10]. Additionally, the study also demonstrated that after engaging in environmental volunteering once, participants tended to become involved in more environmentally-conscientious behavior. Such work speaks to the potential behavioral outcomes of participating in environmental volunteering programs, namely, that those with a prior volunteering experience are more likely to volunteer again in future.

The integration of intrinsic/extrinsic motivations and functional approach to consider motivations among environmental volunteers continued through a research conducted by Caissie and Halpenny [31], who reported on volunteers participating in a Canadian-based biodiversity conservation program. Universal comments from the participants in the program regarding their experience included high levels of satisfaction with their volunteering experience and included key motivations for contributing, such as a desire for social interaction, appeal of working outdoors, interest in travelling to get to the volunteer site, and anticipation that the experience would be "fun" [31].

Measham and Barnett [16] interviewed both volunteers and project coordinators from environmental groups in Australia to explore six types of motivations, namely social interaction, helping a cause, skill improvement, learning, caring about the environment, and caring for a place. The authors found that the most salient motivations surrounded meeting others and meaningful engagement in environmental management projects. To retain volunteers, programs must strive to make them feel that they are making significant contribution to the environment, while promoting social interaction among participants and those they meet [16]. This social interaction motivation is a key theme running throughout the work of Grese and colleagues [32] as well as Caissie and Halpenny [31]. Of course, as Bruyere and Rappe [33] as well as Campbell and Smith [34] found, helping the environment and furthering global environmental efforts are central reasons why individuals claim they engage in conservation volunteering. More recently, Takase and colleagues [35] showed that improvement of well-being for a local community can have an influence on the variation in frequency of participation.

It can be noted that more recently, environmental volunteering discourse has shifted, to look at volunteering in relation to broader political economic processes and theoretical approaches, including global citizenship [8,36,37]. Gray and colleagues [38] further suggested that volunteers should be viewed as citizen scientists when they choose to participate in the collection of scientific data such as biodiversity monitoring projects. Within this notion of volunteers as global citizens, one finds examples of volunteers being increasingly engaged in citizen science projects [38] p. 97. The notion of global citizenship is a complex, widely used term that interconnects with volunteer travel in numerous ways. The following paragraphs review literature dedicated to the concept of global citizenship and seek to conceptualize global citizenship in the context of environmental volunteering.

2.2. Global Citizenship

Global citizenship attitudes derive from values and virtues regarding "civic global responsibility, service to community, respect for the environment, and a shared sense of belonging to a common human

community across national borders" [39]. They are about a sense of belonging to a global community that emphasizes political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global [40]. That is, the global citizens identify with and act on behalf of a global community [41,42]. In other words, Cabrera [43] contends that while global citizenship is commonly conceptualized in reference to and commitment to others within the global community, it is ultimately underpinned by the notion of acting for the common good [44].

When regarding the natural environment as a public good, conceptualization of global citizenship as attitudes of responsibility and service to a global community may enable a better understanding of how and why some individuals engage in environmental volunteering [8]. Specifically, environmental volunteering is seen as a way to express global citizenship attitudes in the context of environmental change [45]. Thus, perhaps one way to conceptualize the notion of global environmental citizenship is to turn to the idea of citizen science [19]. Citizen science refers to any project in which citizens engage in any phase of scientific research projects [46]. In this regard, environmental volunteers collect specific types of data at diverse locations on changing environmental conditions [4,19].

Goren and Yemini [47] reviewed research surrounding global citizenship and concluded that many studies focus on outcomes of global citizenship such as promoting tolerance, environmental awareness, and empowerment, rather than conceptualizing it within a theoretical model. One exception to this is the work of Reysen and colleagues [48], that demonstrated through a theoretical model, how normative environment, global awareness, and global citizenship identification all served as significant antecedents of pro-social values among participants. In recognizing the gap noted by Goren and Yemini [47], Tarrant and colleagues [49] proposed conceptual frameworks of global citizenship derived from value-belief-norm theory (VBN), though they never tested such models. Wynveen and colleagues [50] employed the established VBN model, revealing how personal values, environmental worldview, awareness of consequences, ascription of responsibility, and personal norms factored into individuals' intentions to engage in pro-environmental behavior.

The work surrounding global citizenship has received far less attention in the context of environmental volunteering [8], often focusing on volunteering in general [51–53]. Smith and Laurie [52] demonstrated (through secondary data) how international volunteering highlights individual autonomy, improvement and responsibility, while simultaneously "allying itself to notions of collective global citizenship, solidarity, development and activism" [52] (p 545). Smith and colleagues [53] claimed that global citizenship should be considered as a process (and as "products of constant negotiations or experiences") rather than an end point (i.e., outcome variables). Despite this, Lough and McBride [51] (through survey methods) found that engagement in international volunteering significantly explained individuals' levels of global citizenship. As such, global citizenship was considered the outcome variable.

Focusing exclusively on global citizenship in the context of international environmental volunteering, Lorimer [8] argues that international volunteering is a mode or form of global environmental citizenship. Such a perspective downplays the cognitive processes by which people intentionally seek to engage in international environmental volunteering as a potential result of global citizenship attitudes. Greater work, therefore, is needed to examine the role global citizenship potentially plays in individuals' intentions to participate in international environmental volunteering.

3. Materials and Methods

3.1. Participants and Data Collection Procedures

Participants (N = 646) for this study were millennials between the ages of 18–36 (M = 24.5). Of the participants, 65.9% (N = 426) were students at a large public university in southwestern United States, who were recruited in November and December of 2016. The remaining 34.1% (N = 220) were recruited during the same time period via a Qualtrics national panel survey that comprised of individuals from across the U.S. This convenience sample panel utilized qualifiers for age (i.e., 24–36 years) and gender

(i.e., 50/50 male/female) split. For each group, an online survey instrument (using Qualtrics) was self-administered to the young adults. Using a mixed data collection approach allowed for a greater opportunity to collect a pool of demographically-diverse participants within the millennial generation.

3.2. Measurement and Analysis

Three primary measures were utilized in this study to address study objectives: (1) engagement in environmental volunteering during the last 12 months; (2) global citizenship attitude; and (3) likelihood of participating in conservation volunteering in the near future. Participants were asked (using a single-item measure), to what extent they have engaged in activities aimed at conservation or protection of the environment or wildlife over the last 12 months, on a scale of 1–5 (1 = none at all; 5 = a great deal). For purposes of analysis, this item was recoded as a binary response (0 = no prior experience; 1 = some degree of experience). In other words, all those who indicated "1" from the original scale were recoded as "0" on the new scale; those who indicated "2–5" were recoded as "1" on the new scale. As such, 449 individuals indicated no prior experience and 197 indicated some prior experience.

The construct of global citizenship has been previously measured in some distinct manners. As [54] advances, "It is generally accepted that global citizenship encompasses three key dimensions [12,49,55]. Social responsibility (a concern for humanity and the environment); global awareness or competence (alertness and responsiveness to issues that are global in nature); and civic engagement (active, informed participation in local, national, and global affairs)." Realizing the limitations (i.e., interchangeable identification of measures, narrow focus, lack of face validity, etc.) of extant scales intended to measure global citizenship, Morais and Ogden [55] developed the 29-item Global Citizenship Scale. Across the 29 items within the GCS, Morais and Ogden [55] revealed three dimensions and six subscales: Social responsibility; global competence (with sub-scales self-awareness, intercultural communication, and global knowledge); and global civic engagement (with sub-scales involvement in civic organizations, political voice, and global civic activism). Building on the work of [55], Reysen and colleagues [48] then developed their own scale of global citizenship. Reysen and Katzarska-Miller [56] utilized 22 items to measure the construct, which resulted in nine unique dimensions (e.g., normative environment, global awareness, global citizenship identification, intergroup empathy, valuing diversity, social justice, environmental sustainability, intergroup helping, and responsibility to act).

Utilizing the same measures put forth by Reysen and colleagues [48] and Reysen and Katzarska-Miller [56], the 22-item scale was utilized to measure global citizenship across nine unique factors or dimensions (i.e., normative environment—four items; global awareness—four items; global citizenship identification –two items; intergroup empathy—two items; valuing diversity—two items; social justice—two items; environmental sustainability—two items; intergroup helping—two items; and responsibility to act—two items). The items were presented on a 7-pt Likert scale of agreement (1 = strongly disagree; 7 = strongly agree).

Behavioral intention to participate in future environmental volunteering was measured using eight items from prior research on consumer intentions [57] and tourism behavior [58]. Similar self-reporting inventories, as [59] assure, have been used successfully in recent research on nature conservation intentions. Items were presented on a 7-pt Likert scale of likeliness to engage (1 = very unlikely, 7 = very likely) in environmental volunteering in the near future.

Multiple analysis of variance (MANOVA) was utilized to determine if significant differences in global citizenship and future intentions to engage in environmental volunteering exist between those with and without prior environmental volunteering experience. To determine the extent to which global citizenship explains individuals' future intentions to engage in environmental volunteering, a confirmatory factor analysis (to establish a measurement model) and structural equation modeling (to test the path model) were undertaken in a two-step sequence for both groups (i.e., those with and those without prior experience). From the CFA, psychometric properties concerning reliability and construct validity were also assessed.

4. Results

4.1. Sample Descriptions

Information pertaining to six demographic variables helps to provide a better context for each sample (i.e., those with and those without prior environmental volunteering experience) under consideration. The gender composition of the two samples was fairly similar, with slightly more females in the no prior environmental volunteering experience group (69.9%) than in the prior experience group (63.1%). Age was nearly identical with 49% of those in the no prior environmental volunteering experience group (M = 24.47 years) between the ages of 18–21 compared to 48% in the same age range for those with prior experience (M = 24.69 years). In terms of race and ethnicity, 72.2% of those with prior environmental volunteer experience were white, while 68.2% with no prior experience were white. Other groups included African Americans (9.3% prior experience; 12.6% no prior experience) and Hispanic/Latinx (regardless of race) (24.5% prior experience; 21.8% no prior experience). While fewer without prior environmental volunteering experience had travelled outside the U.S. (66.8% versus 71.9% with prior experience), a higher percentage within the same sample had lived outside the U.S. prior (13.8% versus 12.2% with prior experience).

4.2. Comparisons on Global Citizenship Scale and Intentions to Engage in Future Environmental Volunteering Opportunities

Two MANOVAs with Wilks's Λ (using IBM SPSS v. 25) were performed to determine if those with and without prior environmental volunteering experience responded differently to items within the Global Citizenship Scale (GCS) as well as their intentions to participate in future environmental volunteering opportunities. Uniformly, those with prior environmental volunteer experience reported a higher level of agreement with the 22 items (as indicated by mean scores) in the GCS than did those without prior experience. From the MANOVA, significant differences were found on 19 of the items (Wilks's $\Lambda = 0.91$, $F(22,598) = 2.74$, $p < 0.001$). ANOVAs for the items: 'I am interested in learning about the many cultures that have existed in this world' ($F(1,598) = 2.30$, $p = 0.13$); 'Natural resources should be used primarily to provide for basic needs rather than material wealth' ($F(1,598) = 2.10$, $p = 0.15$); and 'If I had the opportunity, I would help others who are in need regardless of their nationality' ($F(1,598) = 1.48$, $p = 0.22$) were not significantly different between those with and those without prior environmental volunteering experience. Table 1 provides output for the MANOVA model and its ANOVA results for each GCS item.

Table 1. Differences [a] in global citizenship scale items [b] between prior environmental volunteering experience groups [c].

Global Citizenship Scale Item	No Prior Environmental Volunteering Experience Mean	Prior Environmental Volunteering Experience Mean	*F*	*p*
Most people who are important to me think that being a global citizen is desirable	4.74	5.11	9.14	0.00
If I called myself a global citizen, most people who are important to me would approve	4.88	5.37	16.13	0.00
My friends think that being a global citizen is desirable	4.64	5.24	26.34	0.00
My family thinks that being a global citizen is desirable	4.57	5.17	22.55	0.00
I am aware that my actions in my local environment may affect people in other countries	5.18	5.71	20.03	0.00
I believe that I am connected to people in other countries, and my actions can affect them	5.05	5.61	20.54	0.00
I try to stay informed of current issues that impact international relations	5.11	5.61	17.08	0.00
I understand how various cultures of the world interact socially	5.00	5.39	12.79	0.00
I would describe myself as a global citizen	4.62	5.24	24.22	0.00
I strongly identify with global citizens	4.47	5.24	35.63	0.00
I am able to empathize with people from other countries	5.34	5.75	14.27	0.00
It is easy for me to put myself in someone else's shoes regardless of what country they are from	5.09	5.34	4.20	0.04
I would like to join groups that emphasize getting to know people from different countries	5.39	5.71	6.81	0.01
I am interested in learning about the many cultures that have existed in this world	5.97	6.14	2.30	0.13
Those countries that are well off should help people in countries who are less fortunate	4.97	5.43	13.25	0.00
Basic services such as health care, clean water, food, and legal assistance should be available to everyone regardless of what country they live in	5.46	5.95	17.94	0.00
People have a responsibility to conserve natural resources to foster a sustainable environment	5.69	6.01	9.25	0.00
Natural resources should be used primarily to provide for basic needs rather than material wealth	5.64	5.80	2.10	0.15
If I had the opportunity, I would help others who are in need regardless of their nationality	5.90	6.03	1.48	0.22
If I could, I would dedicate my life to helping others no matter what country that are from	4.99	5.39	8.97	0.00
Being actively involved in global issues is my responsibility	4.81	5.40	23.58	0.00
It is my responsibility to understand and respect cultural differences across the globe to the best of my abilities	5.44	5.81	9.34	0.00

[a] MANOVA model Wilks's $\Lambda = 0.91$, $F(22,598) = 2.74$, $p < 0.001$, $\eta^2 = 0.09$. [b] Items were rated on a 7-point scale, where 1 = strongly disagree and 7 = strongly agree. [c] Participants were asked whether they had participated in environmental volunteering during the last 12 months.

The second MANOVA (Table 2) was undertaken to examine whether the two prior environmental volunteer experience groups differed on their future intentions to engage in environmental volunteer opportunities. As with the first MANOVA, those with prior environmental volunteering experience indicated a higher degree of likelihood of engaging in future volunteering focusing on nature conservation (as indicated by mean scores across the eight items). From the second MANOVA results, it is apparent that significant differences were found on every item (Wilks's $\Lambda = 0.91$, $F(8,625) = 7.96$, $p < 0.001$). Table 2 provides output for the MANOVA model and its ANOVA results for each item concerning intention to engage in future environmental volunteering opportunities.

Table 2. Differences [a] in intentions to participate in future environmental volunteering items [b] between prior experience groups.

Intentions to Participate in Future Environmental Volunteering Item	No Prior Environmental Volunteering Experience Mean	Prior Environmental Volunteering Experience Mean	*F*	*p*
I intend to participate in environmental volunteering	4.04	5.02	49.32	0.00
I expect to participate in environmental volunteering	3.90	4.90	52.84	0.00
I will try to participate in environmental volunteering	4.41	5.32	41.35	0.00
I would use my vacation to go on an environmental volunteering program	3.84	4.83	41.14	0.00
I would pay to go on an environmental volunteering program	3.21	4.19	43.91	0.00
If someone sponsored an environmental trip, I would go	4.89	5.76	38.95	0.00
I would like to learn more about environmental volunteering	4.82	5.59	32.92	0.00
I will research environmental volunteering through social media	4.13	5.05	39.51	0.00

[a] MANOVA model Wilks's $\Lambda = 0.91$, $F(8,625) = 7.96$, $p < 0.001$, $\eta^2 = 0.09$. [b] Items were rated on a 7-point scale, where 1 = very unlikely and 7 = very likely.

4.3. CFA Results for Those with No Prior Environmental Volunteering Experience

Before assessing the relationships between GCS factors and intentions to engage in future environmental volunteering (through a structural regression model), measurement models (using CFA) for each prior environmental volunteering experience group was established (see Table 3). CFA was undertaken utilizing EQS v 6.3. To start, all 10 factors across the GCS and behavioral intentions was added to the model along with error terms using LaGrange Multiplier (LM) tests. Next, the model was trimmed using Wald tests in such a way as to not compromise the standard established by [60] (i.e., $\Delta\chi^2/df$ no less than 3.84) (see [61]. One hundred and eight error terms were identified, for which 103 were successfully removed. The item, 'I would like to learn more about environmental volunteering' (belonging to the behavioral intentions factor) was removed as it loaded onto the social justice factor within the GCS (and would have compromised the 3.84 $\Delta\chi^2/df$ threshold had it remained in the final measurement model). Additionally, four error covariances (none of which covaried across factors) remained in the final model because removing them would have compromised the 3.84 $\Delta\chi^2/df$ threshold. This practice is acceptable, according to [62], given items from which the error covariance originated uniquely loaded onto the same factor.

The final 10-factor measurement model for the no prior environmental volunteering experience group resulted in nine unique GCS factors (e.g., normative environment; global awareness; global citizenship identification; intergroup empathy; valuing diversity; social justice; environmental sustainability; intergroup helping; and responsibility to act) [56] and a unidimensional behavioral intention factor [63]. The measurement model was significant with a Satorra-Bentler scaled χ^2 (335, $N = 449$) = 718.29, $p < 0.001$; CFI = 0.95, RMSEA = 0.05. Each of the model fit indices is considered acceptable per [62] recommendations. All 29 items within the model had a standardized factor loading greater than 0.50 [63]. Maximal weighted alphas or MWA (representing factor reliabilities) ranged from 0.73 to 0.97.

Convergent validity was established through each significant ($p < 0.001$) *t*-value associated with each loading on to corresponding factors. Discriminant validity, by and large, was demonstrated through average variance extracted (AVE) estimates exceeding the squared correlations between each factor [63] (see Table 4). Three exceptions (among the 45 comparisons) to this are the squared correlations between global citizenship identification, social justice, and responsibility to act with global awareness (as italicized in Table 4), which slightly surpassed the AVE for global awareness. With sound demonstration of convergent and discriminant validity estimates, it can be said that construct validity was established among the 10 factors within the measurement model for the no prior environmental volunteering group.

4.4. CFA Results for Those with Prior Environmental Volunteering Experience

The same CFA was employed for the group with prior environmental volunteering experience in developing a sound measurement model (see Table 3; right portion). Following LM tests to build the model (one factor at a time), 78 error terms were identified. Seventy-five of the error terms were removed without compromising the 3.84 $\Delta\chi^2/df$ threshold. However, three cross-loaders (i.e., 'If I could, I would dedicate my life to helping others no matter what country that they are from; If I had the opportunity, I would help others who are in need regardless of their nationality;' and 'I would pay to go on an environmental volunteering program') had to be removed as their inclusion in the final measurement model would compromise the threshold. It should be mentioned that by removing the first two items (of the three listed), the intergroup helping factor was not included within the final measurement model.

As such, the measurement model for the prior environmental volunteering experience group consisted of nine factors: eight across the GCS and one comprising the behavioral intentions of future environmental volunteering engagement. The measurement model was significant with a Satorra-Bentler scaled χ^2 (294, $N = 197$) = 493.37, $p < 0.001$; CFI = 0.93, RMSEA = 0.06. All 27 items within the model had a standardized factor loading, which exceeded the suggested critical value of 0.50 [64]. MWAs ranged from 0.70 to 0.96.

Table 3. CFA for global citizenship and intentions to participate in future environmental volunteering items among no prior [a] and prior [b] experience groups.

Factor and Corresponding Item	No Prior Environmental Volunteering Experience Standardized Factor Loading (*t* Value [c])	MWA [d]	Prior Environmental Volunteering Experience Standardized Factor Loading (*t* Value [e])	MWA [f]
Global Citizenship Scale [g]				
Normative Environment (GC_{NE}) ($M_{No\ Prior}$ = 4.71; M_{Prior} = 5.22)		***0.90***		***0.86***
My friends think that being a global citizen is desirable	0.90 (23.99)		0.68 (7.95)	
Most people who are important to me think that being a global citizen is desirable	0.80 (19.86)		0.79 (11.46)	
My family thinks that being a global citizen is desirable	0.76 (18.00)		0.62 (8.59)	
If I called myself a global citizen, most people who are important to me would approve	0.75 (17.23)		0.82 (12.31)	
Global Awareness (GC_{GA}) ($M_{No\ Prior}$ = 5.09; M_{Prior} = 5.58)		***0.86***		***0.82***
I believe that I am connected to people in other countries, and my actions can affect them	0.70 (15.11)		0.81 (13.99)	
I understand how various cultures of the world interact socially	0.69 (15.47)		0.64 (9.75)	
I try to stay informed of current issues that impact international relations	0.66 (13.26)		0.69 (11.97)	
I am aware that my actions in my local environment may affect people in other countries	0.64 (12.29)		0.75 (11.18)	
Global Citizenship Identification (GC_{GCID}) ($M_{No\ Prior}$ = 4.55; M_{Prior} = 5.24)		***0.93***		***0.81***
I would describe myself as a global citizen	0.93 (26.94)		0.83 (13.83)	
I strongly identify with global citizens	0.93 (27.26)		0.81 (9.89)	
Intergroup Empathy (GC_{IE}) ($M_{No\ Prior}$ = 5.22; M_{Prior} = 5.55)		***0.79***		***0.71***
It is easy for me to put myself in someone else's shoes regardless of what country they are from	0.82 (21.52)		0.77 (13.31)	
I am able to empathize with people from other countries	0.80 (17.69)		0.68 (10.09)	
Valuing Diversity (GC_{VD}) ($M_{No\ Prior}$ = 5.68; M_{Prior} = 5.93)		***0.78***		***0.81***
I would like to join groups that emphasize getting to know people from different countries	0.82 (22.91)		0.81 (14.32)	
I am interested in learning about the many cultures that have existed in this world	0.78 (17.68)		0.78 (12.31)	
Social Justice (GC_{SJ}) ($M_{No\ Prior}$ = 5.22; M_{Prior} = 5.69)		***0.83***		***0.78***
Those countries that are well off should help people in countries who are less fortunate	0.85 (19.86)		0.84 (13.96)	
Basic services such as health care, clean water, food, and legal assistance should be available to everyone regardless of what country they live in	0.83 (13.40)		0.79 (10.83)	
Environmental Sustainability (GC_{ES}) ($M_{No\ Prior}$ = 5.67; M_{Prior} = 5.91)		***0.79***		***0.70***
Natural resources should be used primarily to provide for basic needs rather than material wealth	0.82 (17.36)		0.68 (9.20)	
People have a responsibility to conserve natural resources to foster a sustainable environment	0.78 (15.56)		0.74 (9.82)	
Intergroup Helping (GC_{IH}) ($M_{No\ Prior}$ = 5.45; M_{Prior} = ——)		***0.73***		——
If I could, I would dedicate my life to helping others no matter what country that are from	0.80 (19.28)		————	
If I had the opportunity, I would help others who are in need regardless of their nationality	0.71 (13.67)		————	
Responsibility to Act (GC_{RESP}) ($M_{No\ Prior}$ = 5.13; M_{Prior} = 5.61)		***0.84***		***0.75***
Being actively involved in global issues is my responsibility	0.85 (23.05)		0.80 (12.48)	
It is my responsibility to understand and respect cultural differences across the globe to the best of my abilities	0.84 (18.08)		0.75 (11.15)	
Intentions to Participate in Future Environmental Volunteering [h] ($M_{No\ Prior}$ = 4.06; M_{Prior} = 5.21)		***0.97***		***0.96***
I will try to participate in environmental volunteering	0.92 (27.40)		0.90 (14.04)	
I intend to participate in environmental volunteering	0.91 (28.80)		0.93 (16.97)	
I expect to participate in environmental volunteering	0.91 (27.73)		0.92 (17.17)	
If someone sponsored an environmental trip, I would go	0.79 (19.12)		0.75 (11.14)	
I would use my vacation to go on an environmental volunteering program	0.77 (21.42)		0.77 (14.10)	
I will research environmental volunteering through social media	0.71 (17.15)		0.67 (10.32)	
I would pay to go on an environmental volunteering program	0.68 (17.67)		————	
I would like to learn more about environmental volunteering	————		0.75 (10.01)	

[a] Satorra-Bentler χ^2 (335, N = 449) = 718.29, $p < 0.001$, CFI = 0.95, RMSEA = 0.05. [b] Satorra-Bentler χ^2 (294, N = 197) = 493.37, $p < 0.001$, CFI = 0.93, RMSEA = 0.06. [c] All t tests were significant at $p < 0.001$. [d] Maximal weighted alphas provided in EQS v6.3. [e] All t tests were significant at $p < 0.001$. [f] Maximal weighted alphas provided in EQS v6.3. [g] Items were rated on a 7-point scale, where 1 = strongly disagree and 7 = strongly agree. [h] Items were rated on a 7-point scale, where 1 = *very unlikely* and 7 = very likely.

Table 4. Discriminant validity analysis from global citizenship and intention to participate in future environmental volunteering for the no prior experience group.

Factors	1	2	3	4	5	6	7	8	9	10
1. GC_{NE}	**0.65** [a]	0.34 [c]	0.52	0.17	0.23	0.22	0.27	0.23	0.38	0.12
2. GC_{GA}	0.58 [b,d]	**0.52**	0.64	0.49	0.45	0.55	0.34	0.36	0.58	0.17
3. GC_{GCID}	0.72	0.80	**0.86**	0.38	0.23	0.36	0.21	0.25	0.53	0.16
4. GC_{IE}	0.41	0.70	0.62	**0.65**	0.41	0.48	0.29	0.37	0.44	0.15
5. GC_{VD}	0.48	0.67	0.48	0.64	**0.64**	0.53	0.64	0.55	0.59	0.18
6. GC_{SJ}	0.47	0.74	0.60	0.69	0.73	**0.71**	0.36	0.49	0.62	0.34
7. GC_{ES}	0.52	0.58	0.46	0.54	0.80	0.60	**0.64**	0.57	0.55	0.17
8. GC_{IH}	0.48	0.60	0.50	0.61	0.74	0.70	0.76	**0.57**	0.52	0.36
9. GC_{RESP}	0.62	0.76	0.73	0.66	0.77	0.79	0.74	0.72	**0.72**	0.32
10. $Intentions_{CV}$	0.34	0.41	0.40	0.39	0.42	0.58	0.41	0.60	0.57	**0.67**

[a] The bold diagonal elements are the measures of average variance explained (AVE) for each factor. [b] Below the diagonal elements are the correlations between factors. [c] Above the diagonal elements are the squared correlations between factors. [d] All correlations were significant at $p < 0.001$.

The *t* values associated with each factor loading were all significant ($p < 0.001$), which revealed convergent validity for the nine factors in the model. Similar to the no prior environmental volunteering experience group, all AVEs (which exceeded 0.50) surpassed the squared correlations between factors except in two instances (as italicized in Table 5). The squared correlations between the global citizenship identification factor and the normative environment and responsibility to act factors exceeded the AVE for the normative environment factor. These two squared factor correlations were only two of the possible 36 comparisons to exceed the AVE within either the row or column under consideration as shown in Table 5. With that said, construct validity was also demonstrated for the nine factors in the measurement model for the prior environmental volunteering experience group.

Table 5. Discriminant validity analysis from global citizenship and intention to participate in future environmental volunteering for prior experience group.

Factors	1	2	3	4	5	6	7	8	9
1. GC_{NE}	**0.53** [a]	0.41 [c]	*0.56*	0.44	0.38	0.34	0.45	*0.56*	0.29
2. GC_{GA}	0.64 [b,d]	**0.53**	0.52	0.52	0.50	0.52	0.49	0.52	0.23
3. GC_{GCID}	0.75	0.72	**0.67**	0.45	0.40	0.52	0.38	0.52	0.30
4. GC_{IE}	0.66	0.72	0.67	**0.53**	0.32	0.50	0.25	0.49	0.14
5. GC_{VD}	0.62	0.71	0.63	0.57	**0.67**	0.53	0.50	0.49	0.20
6. GC_{SJ}	0.58	0.72	0.72	0.71	0.73	**0.63**	0.40	0.60	0.40
7. GC_{ES}	0.67	0.70	0.62	0.50	0.71	0.63	**0.51**	0.49	0.18
8. GC_{RESP}	0.75	0.72	0.72	0.70	0.70	0.78	0.70	**0.60**	0.31
9. $Intentions_{CV}$	0.54	0.48	0.55	0.38	0.45	0.63	0.42	0.56	**0.67**

[a] The bold diagonal elements are the measures of average variance explained (AVE) for each factor. [b] Below the diagonal elements are the correlations between factors. [c] Above the diagonal elements are the squared correlations between factors. [d] All correlations were significant at $p < 0.001$.

4.5. SEM Results for Those with No Prior Environmental Volunteering Experience

So as to understand how prior environmental volunteer experience affects the relationship between global citizenship and behavioral intention to volunteer, structural equation modelling (SEM) was undertaken (also using EQS v 6.3) for both those with and without prior environmental volunteering experience (following the measurement models established from CFA). For the group with no prior experience, the Satorra-Bentler χ^2 (335, $N = 449$) = 718.27, $p < 0.001$; CFI = 0.95, RMSEA = 0.05. In assessing the particular paths between GCS factors and the behavioral intentions factor (see Table 6), six GCS factors were significant predictors in the model: global awareness ($\beta = 0.44$, $p < 0.001$); valuing diversity ($\beta = 0.62$, $p < 0.001$); social justice ($\beta = 0.96$, $p < 0.001$); environmental sustainability ($\beta = 0.65$, $p < 0.001$); intergroup helping ($\beta = 0.92$, $p < 0.001$); and responsibility to act ($\beta = 0.86$, $p < 0.001$). The squared multiple correlation (R^2_{SMC}) was 0.35, indicating that the six GCS factors uniquely explained 35% of the variance in intentions to participate in future environmental volunteering among those who had no prior experience. The paths from normative environment ($\beta = 0.86$, $p < 0.001$), global citizenship identification ($\beta = 0.86$, $p < 0.001$), and intergroup empathy ($\beta = 0.86$, $p < 0.001$) were not significant contributors in the model.

Table 6. Structural paths examining relationship between global citizenship factors and intention to participate in future environmental volunteering for each group.

Regression Path	β	*p*	R^2_{SMC}
No Prior Environmental Volunteering Group [a]			
$GC_{NE} \rightarrow Intentions_{CV}$	0.16	0.15	0.35 [b]
$GC_{GA} \rightarrow Intentions_{CV}$	0.44	<0.001	
$GC_{GCID} \rightarrow Intentions_{CV}$	0.29	0.28	
$GC_{IE} \rightarrow Intentions_{CV}$	0.18	0.17	
$GC_{VD} \rightarrow Intentions_{CV}$	0.62	<0.001	
$GC_{SJ} \rightarrow Intentions_{CV}$	0.96	<0.001	
$GC_{ES} \rightarrow Intentions_{CV}$	0.65	<0.001	
$GC_{IH} \rightarrow Intentions_{CV}$	0.92	<0.001	
$GC_{RESP} \rightarrow Intentions_{CV}$	0.86	<0.001	
Prior Environmental Volunteering Group [c]			
$GC_{NE} \rightarrow Intentions_{CV}$	0.83	<0.001	0.54 [d]
$GC_{GA} \rightarrow Intentions_{CV}$	1.14	<0.001	
$GC_{GCID} \rightarrow Intentions_{CV}$	1.29	<0.001	
$GC_{IE} \rightarrow Intentions_{CV}$	0.68	<0.001	
$GC_{VD} \rightarrow Intentions_{CV}$	0.70	<0.001	
$GC_{SJ} \rightarrow Intentions_{CV}$	0.46	<0.001	
$GC_{ES} \rightarrow Intentions_{CV}$	0.77	<0.001	
$GC_{RESP} \rightarrow Intentions_{CV}$	0.96	<0.001	

[a] Satorra-Bentler χ^2 (335, N = 449) = 718.27, $p < 0.001$, CFI = 0.95, RMSEA = 0.05. [b] R^2_{SMC} = 0.35; six of the nine paths explaining 35% of variance in intentions to participate in future environmental volunteering among those who had no prior environmental volunteering experience. [c] Satorra-Bentler χ^2 (295, N = 197) = 544.50, $p < 0.001$, CFI = 0.91, RMSEA = 0.07. [d] R^2_{SMC} = 0.54; all eight paths explaining 54% of variance in intentions to participate in future environmental volunteering among those who had prior environmental volunteering experience.

4.6. SEM Results for Those with Prior Environmental Volunteering Experience

Data from the group with prior environmental volunteering experience was also subjected to SEM following the measurement model establishment. The Satorra-Bentler χ^2 (295, N = 197) = 544.50, $p < 0.001$; CFI = 0.91, RMSEA = 0.07. As could be expected, the SEM fit indices follow from the CFA fit indices. In this case, the CFI was marginally acceptable, with a value exceeding the 0.90 threshold as suggested by [63]. Despite intergroup helping not being included in the SEM model as it was removed in the measurement model, the remaining eight GCS factors were significant predictors in the model: normative environment (β = 0.83, $p < 0.001$); global awareness (β = 1.14, $p < 0.001$); global citizenship identification (β = 1.29, $p < 0.001$); intergroup empathy (β = 0.68, $p < 0.001$); valuing diversity (β = 0.70, $p < 0.001$); social justice (β = 0.46, $p < 0.001$); environmental sustainability (β = 0.77, $p < 0.001$); and responsibility to act (β = 0.96, $p < 0.001$). The squared multiple correlation (R^2_{SMC}) was 0.54, indicating that the eight GCS factors uniquely explained 54% of the variance in intentions to participate in future environmental volunteering among those who had prior experience.

5. Discussion

The project at hand sought to assess attitudes of global citizenship among those with and without prior environmental volunteer experience and how well those attitudes can explain behavioral intentions to engage in environmental volunteer projects in those two groups. Millennials in the sample who reported past participation in environmental volunteering were generally more inclined to partake in future environmental projects than those without prior experiences of environmental volunteering. This argument is supported by [10] who demonstrated earlier that participation in environmental volunteering projects was linked to more environmentally-conscientious behavior afterwards. Here the important task for future research is to explore how the quality of past volunteer experiences shapes attitudes and future behavior.

Nevertheless, differences in terms of intentions to engage in environmental volunteering between millennials with prior experience and those without prior experience inspired further questions about

the contribution global citizenship attitude makes to explaining intentions to rejoin environmental volunteer projects. Interestingly, for respondents with prior experience, global citizen attitudes factors played a greater role in intentions to explore environmental volunteer projects as all eight GC factors (normative environment, global awareness, global citizenship identification, intergroup helping, valuing diversity, social justice, environmental sustainability, and responsibility to act) explained more than half of the variance in intentions. That being said, even for those without prior experience, six factors (global awareness, valuing diversity, social justice, environmental sustainability, intergroup helping, and responsibility to act) were significant predictors of behavioral intentions to engage in environmental volunteering, contributing to approximately one-third of the variance in intentions. Overall, this demonstrates that global citizenship attitudes tend to explain intentions to participate in environmental volunteering, regardless of whether individuals had prior experience in environmental volunteering. It is also worth noting that factors such as normative environment, global citizenship identification, and intergroup empathy are intuitively linked to some form of engagement with the group and the effect of the reference group on individual behavior, which could be connected to findings from Ryan and colleagues [10].

Results from the study at hand complement Ryan and colleagues' assessment of extrinsic and intrinsic motivations among environmental volunteers in which 'helping the environment' and 'learning' were the top ranked [10]. Precisely, the two top motivations identified by the scholars corresponded to dimensions of global citizenship attitudes identified in this study. Likewise, conclusions regarding retention of volunteers seem to justify the focus of this study on global citizenship attitudes as antecedents of environmental volunteering. Moreover, given that millennials from the sample find global citizenship attitudes an important aspect of their decisions to participate in environmental volunteering, it is important to consider highlighting dimensions of global citizenship to fulfill ambitions of their volunteers.

While the results from the study at hand indicate that global citizenship attitudes can explain why millennials want to travel for environmental volunteering, it is necessary to acknowledge critical views regarding the narratives used in framing volunteer traveler as a global citizen. As such, it is worth to recall [36] concern about general tendency to see the volunteer as part of a new, progressive focus for citizenship. Similarly, [8] raises criticism of environmental volunteering being idealized as a collection of social and environmental duties. He reflects that at the international level, environmental volunteering tends to be framed as a positive model of the cosmopolitan citizen. The volunteers are falsely believed to "perform a universal attachment to 'globality' and a re-territorialised sense of belonging that respects cultural difference" [65] in [8].

Indeed, several recent studies seem to support this contra-narrative illustrating that millennials' focus on their lifestyles and fighting for environmental well-being is simply a way to express their lifestyle and how they would like to be perceived [66,67]. Therefore, especially for millennials, a quest for positive emotional states and hedonic experiences can reinforce the informed ethical travel choices within this group [68,69]. And while millennials are more likely to consider travelling with a higher focus on individuality and flexibility, [70,71] point out "increasing levels of concern over the impacts of travel" within this group [65]. Thus, it could be proposed that while global citizenship attitudes indeed explain millennials' participation in environmental volunteer travel, this type of 'global citizenship' nurtures the 'travel for lifestyle' attitude among millennials. This behavioral inconsistency or so to speak, 'novel behaviour,' is fascinating and demands further exploration.

Implications, Limitations and Future Research

The study makes an important contribution to the area of environmental volunteering as it illustrates that global citizenship attitudes matter to millennials and can explain their participation in environmental volunteering. Important finding from the perspective of environmental management is that for millennials, environmental programs that provide opportunities to fulfill their global citizenship duties seem to be more attractive. This managerial implication of the results is consistent with past

research arguing that programs considering volunteer motivations tend to be more attractive and more likely to retain volunteers [32]. When volunteers feel that they fulfil their global citizen's duties, project managers do not need to invest additional resources in recruiting new individuals. Moreover, when volunteer retention is high, there will likely be greater opportunity to achieve the objectives of an environmental project [72]. In sum, in the neoliberal reality of environmental management [24,73], the higher the volunteer retention, the more successful the project is.

This study also has several important theoretical implications. First of all, it joins political discussion concerning environmental volunteering as global citizenship by illustrating how global citizenship attitudes relate to millennials' intentions to engage in environmental volunteer projects. That is not to undermine the skepticism by [8] or [36] about the real beneficiaries of international environmental volunteer travel. Quite the opposite, contemporary environmental volunteering is far from the ideal of global citizenship; however, the study illustrated that despite problems, millennials like to think of themselves as global citizens when they travel to volunteer for nature environmental projects. And while millennials may prefer to engage in projects that enable them to view themselves as global citizens, their behavior may also be driven by hedonic values [69].

Last, but not least, this study conceptualized and examined the notion of global citizenship attitudes as a multidimensional construct, rather than a unidimensional concept. Global awareness, valuing diversity, social justice, environmental sustainability, intergroup helping and responsibility to act were identified as dimensions of global citizenship attitudes to be examined in terms of their ability to explain environmental volunteering among millennials.

Though it was intentional to capture the perspectives of millennials regarding prior experience and future intentions of engaging in environmental volunteering along with global citizenship, our sample largely comprised of students from one particular university. In efforts to minimize the potential for such bias, participants from a national panel sample were included. Given this, findings should be interpreted with some degree of caution. Future research needs to consider data collection using a probability form of sampling (i.e., not convenience as was used in this study) from a more robust sample that includes students from multiple institutions. Utilizing a full sample of respondents throughout the entire U.S. (i.e., panel sample) would provide greater support for the present study's findings.

Despite global citizenship explaining a considerable degree of variance (i.e., 35% and 54%) in future intentions to engage in environmental volunteering, the fact remains that only one construct was included within each path model. Additional constructs should be added to future models that may help to explain a greater degree of variance in intentions to engage in future environmental volunteering. One means by which this can be done is through the employment of the value-belief-norm (VBN) model, originally developed by [74,75] and most recently tested in the contexts of sustainability behaviors [76] and tourists' pro-sustainable behaviors [77]. Such antecedents that may serve to explain a greater degree of variance in antecedents within the VBN model are: personal values, the New Ecological Paradigm (NEP), awareness of consequences, ascription of responsibility, and personal norms.

Due to the nature of cross-sectional survey-based research, it is extremely difficult to gauge both behavioral intentions and actual behavior. As such, one limitation is focused on individuals' levels of intention. Further research should embrace more longitudinal data collection approaches, whereby data can be collected for both behavioral intentions and actual intentions of engaging in environmental volunteering. As has been argued within the literature [78], one would expect to see a significant positive relationship between the two constructs. At that point, greater confidence is needed in demonstrating how intentionality translates to behaviour.

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References

1. Dower, N. *An Introduction to Global Citizenship*; Edinburgh University Press: Edinburgh, UK, 2003.
2. Bell, S.; Marzano, M.; Cent, J.; Kobierska, H.; Podjed, D.; Vandzinskaite, D.; Reinert, H.; Armaitiene, A.; Grodzińska-Jurczak, M.; Muršič, R. What counts? Volunteers and their organisations in the recording and monitoring of biodiversity. *Biodivers. Conserv.* **2008**, *17*, 3443–3454. [CrossRef]
3. Branchini, S.; Pensa, F.; Neri, P.; Tonucci, B.M.; Mattielli, L.; Collavo, A.; Sillingardi, M.E.; Piccinetti, C.; Zaccanti, F.; Goffredo, S. Using a citizen science program to monitor coral reef biodiversity through space and time. *Biodivers. Conserv.* **2015**, *24*, 319–336. [CrossRef]
4. Dickinson, J.L.; Zuckerberg, B.; Bonter, D.N. Citizen science as an ecological research tool: Challenges and benefits. *Annu. Rev. Ecol. Evol. Syst.* **2010**, *41*, 149–172. [CrossRef]
5. Beck, U. *World Risk Society*; Polity Press: Malden, MA, USA, 1999.
6. Beck, U. *The Cosmopolitan Vision*; Polity Press: Malden, MA, USA, 2006.
7. Giddens, A. *The Consequences of Modernity*; Stanford University Press: Stanford, UK, 1990.
8. Lorimer, J. International conservation 'volunteering' and the geographies of global environmental citizenship. *Political Geogr.* **2010**, *29*, 311–322. [CrossRef]
9. McGehee, N.G. Alternative Tourism and social Movements. *Ann. Tour. Res.* **2002**, *29*, 124–143. [CrossRef]
10. Ryan, R.L.; Kaplan, R.; Grese, R.E. Predicting volunteer commitment in environmental stewardship programmes. *J. Environ. Plan. Manag.* **2001**, *44*, 629–648. [CrossRef]
11. Randle, M.; Dolnicar, S. Understanding the Australian environmental volunteering market: A basis for behavioural change and a sustainable future. *Australas. Mark. J.* **2009**, *17*, 192–203. [CrossRef]
12. Schattle, H. Global citizenship in theory and practice. In *The Handbook of Practice and Research in Study Abroad: Higher Education and the Quest for Global Citizenship*; Routledge: New York, NY, USA, 2009; pp. 3–18.
13. Kremen, C.; Ullman, K.S.; Thorp, R.W. Evaluating the quality of citizen-scientist data on pollinator communities. *Conserv. Biol.* **2011**, *25*, 607–617. [CrossRef] [PubMed]
14. Hochachka, W.M.; Fink, D.; Hutchinson, R.A.; Sheldon, D.; Wong, W.-K.; Kelling, S. Data-intensive science applied to broad-scale citizen science. *Trends Ecol. Evol.* **2012**, *27*, 130–137. [CrossRef]
15. Suárez-Orozco, C.; Hernández, M.G.; Casanova, S. "It's sort of my calling": The civic engagement and social responsibility of Latino immigrant-origin young adults. *Res. Hum. Dev.* **2015**, *12*, 84–99. [CrossRef]
16. Measham, T.G.; Barnett, G.B. Environmental Volunteering: Motivations, modes and outcomes. *Aust. Geogr.* **2008**, *39*, 537–552. [CrossRef]
17. Byron, I.; Curtis, A. Maintaining volunteer commitment to local watershed initiatives. *Environ. Manag.* **2002**, *30*, 59–67. [CrossRef]
18. Bramston, P.; Pretty, G.; Zammit, C. Assessing environmental stewardship motivations. *Environ. Behav.* **2011**, *43*, 776–788. [CrossRef]
19. Gray, N.J.; Meeker, A.; Ravensbergen, S.; Kipp, A.; Faulkner, J. Producing science and global citizenship? Volunteer tourism and conservation in Belize. *Tour. Recreat. Res.* **2017**, *42*, 199–211. [CrossRef]
20. Cnaan, R.A.; Goldberg-Glen, R.S. Measuring motivation to volunteer in human services. *J. Appl. Behav. Sci.* **1991**, *27*, 269–284. [CrossRef]
21. Ohrel, R.; Register, K. *Volunteer Estuary Monitoring: A Methods Manual*, 2nd ed.; The Ocean Conservancy and the USEPA: Washington, DC, USA, 2006.
22. Pendergast, D. Getting to know the Y generation. In *Tourism and Generation Y*; CAB International: Cambridge, MA, USA, 2010; pp. 1–15.
23. Benckendorff, P.; Moscardo, G.; Pendergast, D. (Eds.) *Tourism and Generation Y*; CABI Press: Cambridge, MA, USA, 2010.
24. Sobel, D. Climate change meets ecophobia. *Connect Mag.* **2007**, *21*, 14–21.
25. Clary, E.G.; Snyder, M.; Ridge, R.D. Volunteers' motivations: Strategies for the recruitment, placement, and retention of volunteers. *Nonprofit Leadersh. Manag.* **1992**, *2*, 330–350. [CrossRef]
26. Frisch, M.B.; Gerrard, M. Natural helping systems: A survey of Red Cross volunteers. *Am. J. Community Psychol.* **1981**, *9*, 567–579. [CrossRef]
27. Finkelstein, M. *Intrinsic vs. Extrinsic Motivational Orientations and the Volunteer Process*; Psychology Faculty Publications, 2009; Available online: https://scholarcommons.usf.edu/psy_facpub/770 (accessed on 7 June 2014).

28. Clary, E.G.; Snyder, M.; Stukas, A.A. Volunteers' motivations: Findings from a national survey. *Nonprofit Volunt. Sect. Q.* **1996**, *25*, 485–505. [CrossRef]
29. Clary, E.G.; Snyder, M.; Ridge, R.D.; Copeland, J.; Stukas, A.A.; Haugen, J.; Meine, P. Understanding and assessing the motivations of volunteers: A functional approach. *J. Personal. Soc. Psychol.* **1998**, *74*, 1516–1530. [CrossRef]
30. Stukas, A.A.; Snyder, M.; Gil, C.E. The Effects of "Mandatory Volunteerism" on Intentions to Volunteer. *Psychol. Sci.* **1999**, 40. [CrossRef]
31. Caissie, L.T.; Halpenny, E.A. Volunteering for nature: Motivations for participating in a biodiversity conservation volunteer program. *World Leis. J.* **2003**, *45*, 38–50. [CrossRef]
32. Grese, R.E.; Kaplan, R.; Ryan, R.L.; Buxton, J. Psychological benefits of volunteering in stewardship programs. In *Restoring Nature: Perspectives from the Social Sciences and Humanities*; Gobster, P.P., Hull, R.B., Eds.; Island Press: Washington, DC, USA, 2000; pp. 265–280.
33. Bruyere, B.; Rappe, S. Identifying the motivations of environmental volunteers. *J. Environ. Plan. Manag.* **2007**, *50*, 503–516. [CrossRef]
34. Campbell, L.M.; Smith, C. What Makes Them Pay? Values of Volunteer Tourists Working for Sea Turtle Conservation. *Environ. Manag.* **2006**, *38*, 84–98. [CrossRef] [PubMed]
35. Takase, Y.; Hadi, A.A.; Furuya, K. The Relationship Between Volunteer Motivations and Variation in Frequency of Participation in Conservation Activities. *Environ. Manag.* **2018**. [CrossRef] [PubMed]
36. Butcher, J. Citizenship, global citizenship and volunteer tourism: A critical analysis. *Tour. Recreat. Res.* **2017**, *42*, 129–138. [CrossRef]
37. Lyons, K.; Hanley, J.; Wearing, S.; Neil, J. Gap year volunteer tourism: Myths of global citizenship? *Ann. Tour. Res.* **2012**, *39*, 361–378. [CrossRef]
38. Brosnan, T.; Filep, S.; Rock, J. Exploring synergies: Hopeful tourism and citizen science. *Ann. Tour. Res.* **2015**, *53*, 96–98. [CrossRef]
39. Roman, L.G. Education and the contested meanings of 'global citizenship'. *J. Educ. Chang.* **2003**, *4*, 269–293. [CrossRef]
40. UNESCO. Global Citizenship Education: Preparing Learners for the Challenges of the 21st Century. 2014. Available online: http://unesdoc.unesco.org/images/0022/002277/227729E.pdf (accessed on 31 January 2018).
41. Bianchi, R.; Stephenson, M. *Tourism and Citizenship: Rights, freedoms and Responsibilities in the Global Order*; Routledge: London, UK, 2014; Volume 11.
42. Wilde, L. *Global Solidarity*; Edinburgh University Press: Edinburgh, UK, 2013.
43. Cabrera, L. Global citizenship as the completion of cosmopolitanism. *J. Int. Political Theory* **2008**, *4*, 84–104. [CrossRef]
44. Convery, A.; Kerr, K. Acting locally to have global impact: Citizenship education in theory and practice in England. *Citizsh. Soc. Econ. Educ.* **2007**, *7*, 189–200. [CrossRef]
45. Andow, D.A.; Borgida, E.; Hurley, T.M.; Williams, A.L. Recruitment and Retention of Volunteers in a Citizen Science Network to Detect Invasive Species on Private Lands. *Environ. Manag.* **2016**, *58*, 606–618. [CrossRef]
46. Dickinson, J.L.; Shirk, J.; Bonter, D.; Bonney, R.; Crain, R.L.; Martin, J.; Purcell, K. The current state of citizen science as a tool for ecological research and public engagement. *Front. Ecol. Environ.* **2012**, *10*, 291–297. [CrossRef]
47. Goren, H.; Yemini, M. Global citizenship education in context: Teacher perceptions at an international school and a local Israeli school. *Comp. A J. Comp. Int. Educ.* **2016**, *46*, 832–853. [CrossRef]
48. Reysen, S.; Larey, L.W.; Katzarska-Miller, I. College course curriculum and global citizenship. *Int. J. Dev. Educ. Glob. Learn.* **2012**, *4*, 27–40. [CrossRef]
49. Tarrant, M.A. A conceptual framework for exploring the role of studies abroad in nurturing global citizenship. *J. Stud. Int. Educ.* **2010**, *14*, 433–451. [CrossRef]
50. Wynveen, C.J.; Kyle, G.T.; Tarrant, M.A. Study abroad experiences and global citizenship: Fostering proenvironmental behavior. *J. Stud. Int. Educ.* **2012**, *16*, 334–352. [CrossRef]
51. Lough, B.J.; McBride, A.M. Navigating the boundaries of active global citizenship. *Trans. Inst. Br. Geogr.* **2014**, *39*, 457–469. [CrossRef]
52. Smith B, M.; Laurie, N. International volunteering and development: Global citizenship and neoliberal professionalisation today. *Trans. Inst. Br. Geogr.* **2011**, *36*, 545–559. [CrossRef]

53. Baillie Smith, M.; Laurie, N.; Hopkins, P.; Olson, E. International volunteering, faith and subjectivity: Negotiating cosmopolitanism, citizenship and development. *Geoforum* **2013**, *45*, 126–135. [CrossRef]
54. Stoner, K.R.; Tarrant, M.A.; Perry, L.; Stoner, L.; Wearing, S.; Lyons, K. Global citizenship as a learning outcome of educational travel. *J. Teach. Travel Tour.* **2014**, *14*, 149–163. [CrossRef]
55. Morais, D.B.; Ogden, A.C. Initial development and validation of the global citizenship scale. *J. Stud. Int. Educ.* **2011**, *15*, 445–466. [CrossRef]
56. Reysen, S.; Katzarska-Miller, I. A model of global citizenship: Antecedents and outcomes. *Int. J. Psychol.* **2013**, *48*, 858–870. [CrossRef]
57. Zaichkowsky, J.L. Measuring the involvement construct. *J. Consum. Res.* **1985**, *12*, 341–352. [CrossRef]
58. Sparks, C.; Guthrie, A.; Shepherd, R. The Dimensional Structure of the Perceived Behavioral Control Construct. *J. Appl. Soc. Psychol.* **1997**, *27*, 418–438. [CrossRef]
59. Kormos, C.H.; Gifford, R. The validity of self-report measures of proenvironmental behavior: A meta-analytic review. *J. Environ. Psychol.* **2014**, *40*, 359–371. [CrossRef]
60. Tabachnick, B.G.; Fidell, L.S. *Using Multivariate Statistics*; Pearson: Boston, MA, USA, 2013.
61. Maruyama, N.U.; Woosnam, K.M.; Boley, B.B. Residents' attitudes toward ethnic neighborhood tourism (ENT): Perspectives of ethnicity and empowerment. *Tour. Geogr.* **2017**, *19*, 265–286. [CrossRef]
62. Kline, R.B. *Principles and Practice of Structural Equation Modeling*, 4th ed.; The Gullford Press: New York, NY, USA; London, UK, 2015.
63. Strzelecka, M.; Nisbett, G.; Woosnam, K.M. The hedonic nature of conservation volunteer travel. *Tour. Manag.* **2017**, *63*, 417–425. [CrossRef]
64. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Tatham, R.L. *Multivariate Data Analysis*, 6th ed.; Pearson University Press: Upper Saddle River, NJ, USA, 2006.
65. Molz, J. Getting a "flexible eye": Round-the-world travel and scales of cosmopolitan citizenship. *Citizsh. Stud.* **2005**, *9*, 517–531. [CrossRef]
66. Wismayer, H. When tourism turns into narcissism. *Vice* **2014**. Retrived June 9, 2015.
67. Gössling, S.; Stavrinidi, I. Social Networking, Mobilities, and the Rise of Liquid Identities. *Mobilities* **2016**, *11*, 723–743. [CrossRef]
68. Malone, S.; McCabe, S.; Smith, A.P. The role of hedonism in ethical tourism. *Ann. Tour. Res.* **2014**, *44*, 241–254. [CrossRef]
69. Nisbett, G.; Strzelecka, M. Appealing to Goodwill or YOLO- promoting conservation volunteering to Millennials. *VOLUNTAS: J. Int. Soc. Third-Sector Res.* **2017**, *28*, 288–306. [CrossRef]
70. Mehmetoglu, M.; Fennell, D.; Weaver, D. Nature-based tourism: A contrast to everyday life. *J. Ecotourism* **2007**, *6*, 111–126. [CrossRef]
71. Moscardo, G.; Benckendorff, P. Mythbusting: Generation Y and travel. In *Tourism and Generation Y*; CAB International: Cambridge, MA, USA, 2010; pp. 16–26.
72. Schmeller, D.S.; Henry, P.Y.; Julliard, R.; Gruber, B.; Clobert, J.; Dziock, F.; Lengyel, S.; Nowicki, P.; Deri, E.; Budrys, E.; et al. Advantages of Volunteer-Based Biodiversity Monitoring in Europe. *Conserv. Biol.* **2009**, *23*, 307–316. [CrossRef]
73. Dean, J. Volunteering, the market, and neoliberalism. *People Place Policy* **2015**, *9*, 139–148. [CrossRef]
74. Stern, P.; Dietz, T.; Abel, T.; Guagnano, G.; Kalof, L. A value-belief-norm theory of support for social movements: The case of environmentalism. *Res. Hum. Ecol.* **1999**, *6*, 81–97.
75. Stern, P.C. Toward a coherent theory of environmentally significant behavior. *J. Soc. Issues* **2000**, *56*, 81–97. [CrossRef]
76. 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]
77. Landon, A.C.; Woosnam, K.M.; Boley, B.B. Modeling the psychological antecedents to tourists' pro-sustainable behaviors: An application of the value-belief-norm model. *J. Sustain. Tour.* **2018**, *26*, 957–972. [CrossRef]
78. Fletcher, R.; Dressler, W.H.; Anderson, Z.R.; Büscher, B. Natural capital must be defended: Green growth as neoliberal biopolitics. *J. Peasant Stud.* **2018**. [CrossRef]