

CHAPTER 4: FINDINGS

4.1 Introduction

This chapter includes five major sections. The first section reports descriptive statistics and discusses the respondent's representativeness of the overall Earthwatch expedition volunteer population. The second section reports scale reliability and tests of multicollinearity of the survey items. The third section discusses each of the five multiple regression models. The fourth section contains analysis of each of the ten hypotheses, the statistical methods of testing, and a description of the findings. The fifth section highlights other significant findings.

4.2 Demographic and Socioeconomic Characteristics of the Sample

Various demographic and socioeconomic items were included in the pre-trip survey only (Table 4.1). Items included month of expedition, total number of Earthwatch expeditions taken, gender, race/ethnicity, marital status, education, and year of birth. Most items were answered without comment, but a few respondents took offense at being asked about their race/ethnicity.

TABLE 4.1: DESCRIPTIVE STATISTICS FOR VARIABLES USED IN ANALYSIS OF EARTHWATCH EXPEDITION PARTICIPANTS

(Percentages in parenthesis, N = 363)

Month of Expedition:		Education (highest level completed):	
June	111 (30.6)	Grade School	0 (0)
July	252 (69.4)	Some High School	48 (13.2)
Total Expeditions:		High School Diploma	23 (6.3)
One	243 (66.9)	Trade/Vocational School	2 (0.6)
Two	54 (14.9)	Community College Graduate	9 (2.5)
Three	21 (5.8)	Some College	38 (10.5)
Four-18	38 (10.4)	College Graduate	82 (22.6)
no response	7 (2.0)	Graduate School	137 (37.7)
Trip Destination:		Professional School	24 (6.6)
International:	209(57.0)	Gender:	
Domestic:	154(43.0)	Female	258 (71.1)
Trip Type:		Male	105 (28.9)
Socio-cultural:	147 (40.5)	Age:	
Environmental:	211 (58.1)	20 and under	83 (22.0)
no response:	5 (1.4)	21 through 25	19 (5.3)
Race/Ethnicity:		26 through 30	23 (6.4)
Anglo/White:	335 (92.3)	31 through 35	17 (4.8)
African-Amer.	2 (0.6)	36 through 40	18 (5.0)
Asian	12 (3.3)	41 through 45	15 (4.1)
Hispanic	4 (1.1)	46 through 50	56 (15.6)
"Other"	3 (0.8)	51 through 55	56 (15.6)
(2 Pacific Islander, 1 Native American)		56 through 60	25 (7.0)
no response	7(1.9)	61 through 65	20 (5.6)
Marital Status:		66 through 70	14 (3.9)
Single	173 (47.6)	71 through 75	13 (3.6)
Married	112 (30.9)	76 and above	3 (.8)
Separated	4 (1.1)	non-response	1 (.3)
Cohabiting	9 (2.5)		
Divorced	52 (14.3)		
Widowed	13 (3.6)		

No data are available on the demographic and socio-economic characteristics of the Earthwatch volunteer population. However, based on anecdotal data and data from their marketing department, we do know that over twice as many respondents traveled on their expeditions in July (70%) as in June (30%), which reflects the overall number of Earthwatch volunteers participating in expeditions during that month. For most, this was their first expedition (70%), although two respondents had been on twenty Earthwatch trips. The mean number of Earthwatch expeditions participated in was two (including the present one). One-hundred and one of the 126 expeditions (80%) were represented among the survey respondents. Each of the fourteen expedition category types was represented.

The vast majority of respondents were anglo/white (92%) and over 70% were female. More respondents were single (48%) or married (31%). On average, respondents were highly educated. The largest group (38%) were graduate school alumni. Respondents ranged in age from 16 to 79. Thirty-one percent were aged 46-55 and 23 percent were under 20. The mean age was 41, with a median age of 46.

4.3 Scale Reliability and Tests of Multicollinearity

I tested the ten hypotheses using multiple regression analysis. Significant beta values indicate that the independent variable was a significant predictor of the dependent variable, controlling for other variables in the equation. I conducted a scale reliability test in cases where items from the survey were grouped to create a scale (see Methods chapter). I tested each group for internal reliability to assure a Cronbach's alpha exceeding .6 (Table 4.2).

TABLE 4.2: SCALE RELIABILITY TESTS FOR GROUPED VARIABLES

Group of Variables	Cronbach's Alpha
New Network Ties from Earthwatch	.6971
Perceived Self-Efficacy Gains from Earthwatch	.7638
Pre-Trip Social Movement Participation	.9048
Post-Trip Planned Social Movement Participation	.9193
Pre-Trip Network ties	.4878 ¹
Post-Trip Network ties	.5383 ¹
Pre-Trip Support for Activism	.8005
Post-Trip Support for Activism	.8228
Pre-Trip Self-Efficacy	.6386
Post-Trip Self-Efficacy	.7429
Pre-Trip Consciousness-Raising: Seeing the Personal as Political	.5904 ²
Post-Trip Consciousness-Raising: Seeing the Personal as Political	.6706
Pre-Trip Consciousness-Raising: Reasons for Poverty Scale (individual)	.0502 ³
Post-Trip Consciousness-Raising: Reasons for Poverty Scale (structural)	.2068 ³

Whenever variables are summed to create a scale in multiple regression analysis, multicollinearity is a concern. Multicollinearity is “a condition of high or near perfect correlation among independent variables” (Bohrnstedt and Knoke, 1994:527) . I tested the variable scales in my study for multicollinearity by two different statistical measures - tolerance and VIF (Variance Inflation Factor).

¹ While these items were supported theoretically, they produced a low Cronbach's alpha. It is possible that this occurred because some categories or types of network support excluded some of the respondents, depending on the respondent's characteristics, i.e. "Does your spouse support you?" "Do your fellow students support you?" were two questions that would not apply to a single non-student respondent, but would apply to a married student respondent.

² This scale remained in the multiple regression analysis, given that it was within .0096 of the allowable Cronbach's alpha.

³ These items produced an extremely low Cronbach's alpha, therefore they were not used in the multiple regression equations involving the consciousness-raising variable.

Tolerance is “the proportion of variability in an independent variable not explained by the other independent variables” (Marija J. Norusis/SPSS Inc., 1990: 280). Simply put, higher tolerance means less multicollinearity.

In general, tolerance of .6 or higher is acceptable. Each of the variable scales in this study measured between .7 and .85, indicating little chance of multicollinearity. VIF (Variance Inflation Factor) is another diagnostic test that indicates whether the proportion indicated through multiple regression has been falsely exaggerated due to multicollinearity. A range of 2.0 or less is considered acceptable. In other words, a VIF of over 2.0 indicates higher multicollinearity. Each of the scaled variables in this study measured between 1.7 and 2.0. Given the results of these statistical measures, multicollinearity is not a problem. For a complete list of the items used for each scale, refer to Chapter 3.

4.4 Multiple Regression Models

I developed four multiple regression models to examine various interactive effects among the independent variables and the resulting impacts on the predictability of the five dependent variables (Figures 4.1-4.4). They were developed in the following manner:

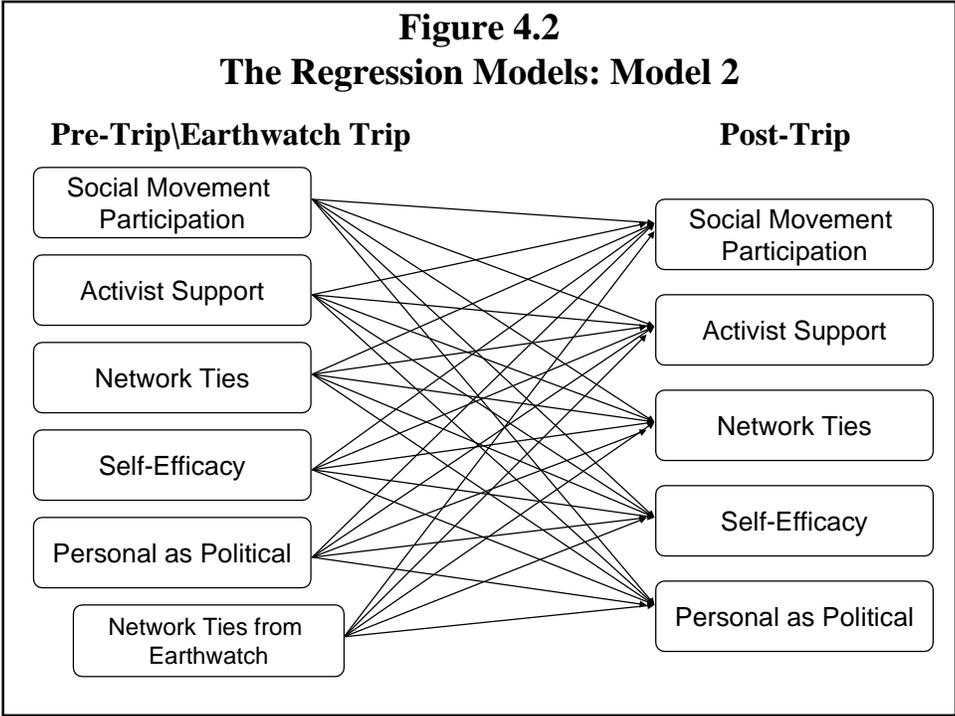
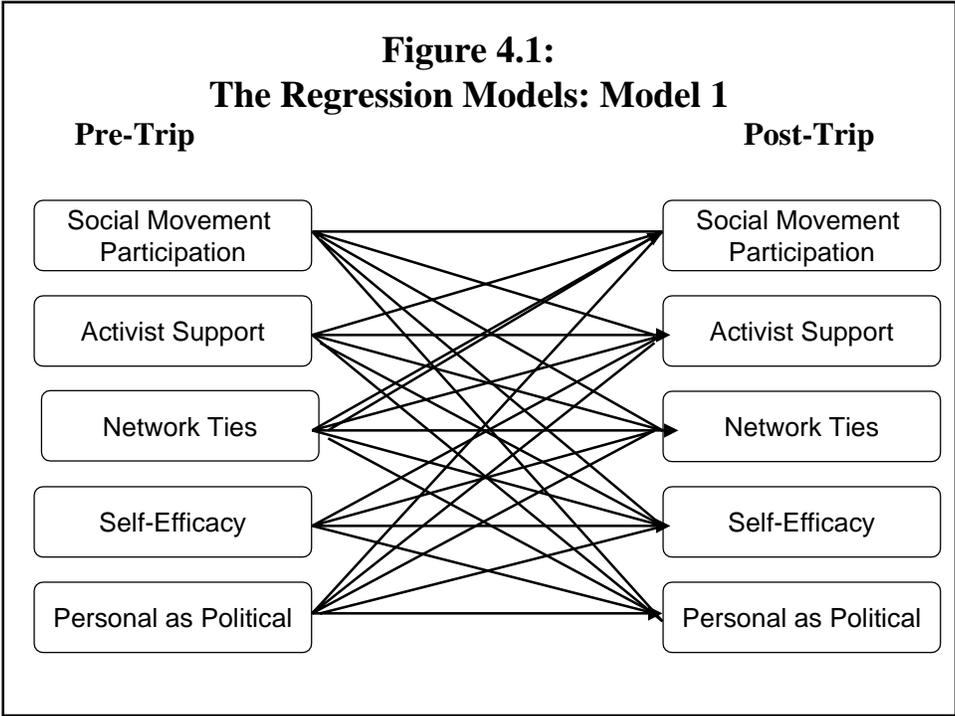


Figure 4.3
The Regression Models: Model 3

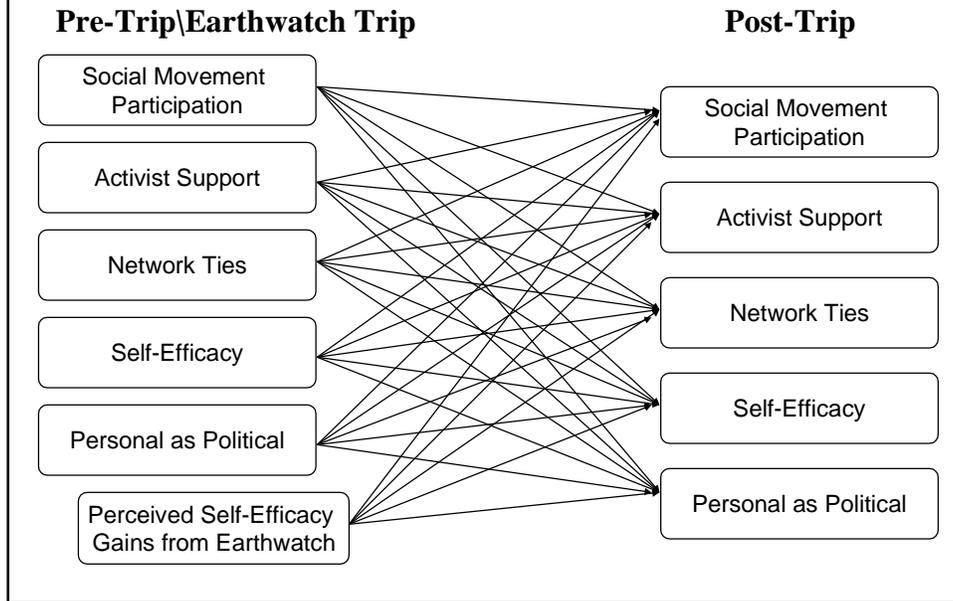
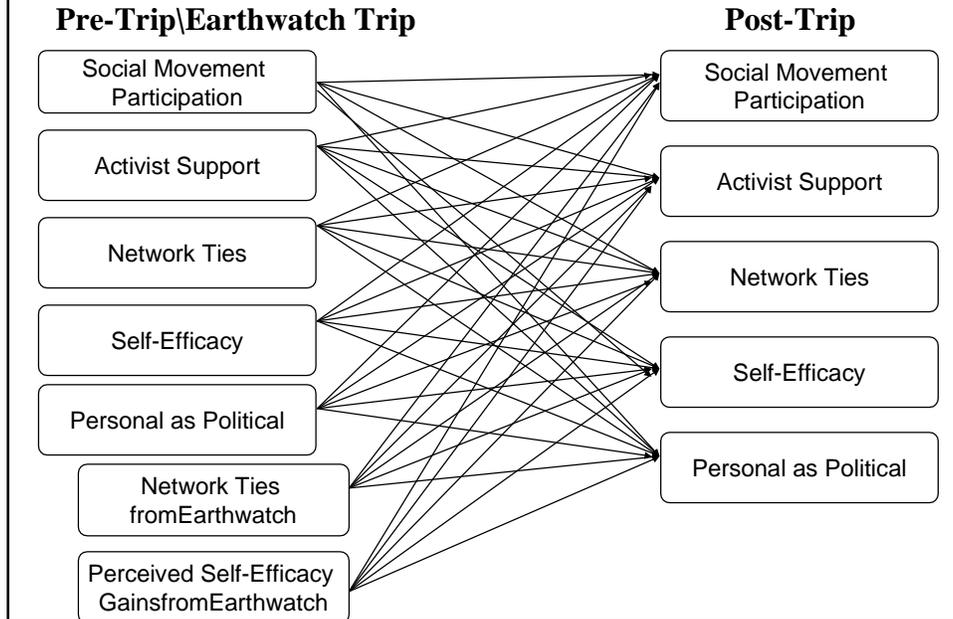


Figure 4.4:
The Regression Models: Model 4



1. The first model regressed the five pre-trip independent control variables (social movement participation, support for activism, network ties, self-efficacy, and seeing the personal as political and the Earthwatch control variables (first-time versus veteran, international versus domestic, and environmental versus socio-cultural), with each of the five post-trip dependent variables – planned social movement participation, support for activism, network ties, self-efficacy, and seeing the personal as political (Figure 4.1).
2. The second model built upon the first, adding the "new network ties from Earthwatch" variable (Figure 4.2) to the regression equation.
3. The third model also build upon the first, adding the "Perceived Self-efficacy gains from Earthwatch" variable to the regression equation instead of the "new network ties from Earthwatch" variable (Figure 4.3).
4. The fourth model built upon the first, including both Earthwatch independent variables in the regression equation (Figure 4.4).

All four models were used to determine whether the ten hypotheses were supported. The tables indicate the relationship among the variables in a number of ways. Each table includes four models for each dependent variable. For example, Table 4.3 includes four regression models by the dependent variable post-trip planned social movement participation. Each table also has the same indicators. First, I listed both the unstandardized and standardized regression coefficients for each relationship. Standardized regression coefficients indicate "the amount of change, in standard deviation units, of the dependent variable for an independent variable change of one standard deviation" (Bohrnstedt and Knoke 1994:519). Second, I have noted levels of significance. Levels of significance, or p-values, test "whether the observed difference between sample proportions could occur by chance in the populations from which the samples were selected (Bohrnstedt and Knoke 1994:531). Third, for each regression equation, I have indicated the R-square. R-square is a measure of goodness of fit in a linear relationship "that expresses the amount of variation in the dependent variable explained or accounted for by the independent variables in a regression equation" (Bohrnstedt and Knoke 1994:520). More specifically, I reported the *adjusted* R-square, a more accurate statistic produced through SPSS that corrects what is usually an overly optimistic R-square. Finally, I have indicated the *N*, or sample size, for each regression equation.

I tested each of the ten hypotheses with three statistics from the multiple regression equations – the standardized regression coefficient, level of significance, and adjusted R-square. Due to the high number of variables in each regression equation, I developed a two-tiered system of criteria to determine whether each hypothesis was supported. The more rigorous level of acceptance, level one support, occurred if two of the Earthwatch variables'

standardized regression coefficients were .1 or greater, with significance of at least the .05 level.

Level two support for each hypothesis occurred if one of the Earthwatch variables' standardized regression coefficients were .1 or greater, with significance of at least the .05 level. Again, this weaker standard was included as a counter to the high number of variables in each regression equation relative to the sample size. The standardized coefficients come from Models #2 and #4 for new network ties from Earthwatch, and Models #3 and #4 for perceived self-efficacy gains from Earthwatch (see Tables 4.3 through 4.7 for clarity). For both levels of support, the significant coefficients must also indicate an adjusted R-squared of .1 or greater. The adjusted R-square will provide information about how much of the variation is explained in the equations from which each of the standardized coefficients originate. The tables and hypotheses follow.

TABLE 4.3: EFFECTS OF PRE-TRIP VARIABLES, EARTHWATCH VARIABLES, AND SOCIAL CHARACTERISTICS ON POST-TRIP SOCIAL MOVEMENT PARTICIPATION (Unstandardized Coefficients in Parentheses)^a

Independent Variables	Post-Trip Planned Social Movement Participation Model #1	Post-Trip Planned Social Movement Participation Model #2	Post-Trip Planned Social Movement Participation Model #3	Post-Trip Planned Social Movement Participation Model #4
<i>Pre-Trip Variables</i>				
Social Movement Participation	.733*** (.829)	.757*** (.852)	.729*** (.839)	.737*** (.844)
Activism Support	.065 (.136)	.079 (.166)	.069 (.147)	.075 (.158)
Network Ties	-.239*** (-1.41)	-.254*** (-1.48)	.212** (-1.29)	-.230** (-1.38)
Self-Efficacy	-.022 (-.105)	-.059 (-.279)	-.026 (-.120)	-.058 (-.271)
Personal as Political	.135* (.846)	.142** (.899)	.126* (.797)	.147** (.939)
<i>Earthwatch Variables</i>				
First Trip	.061 (1.20)	.094 (1.87)	.067 (1.36)	.093 (1.86)
International Trip	.007 (.128)	.005 (.095)	.005 (.084)	.001 (.024)
Environmental Trip	-.064 (-1.19)	-.083 (-1.55)	-.076 (-1.43)	-.083 (-1.56)
Network Ties Established		.122* (.421)		.153* (.531)
Self-Efficacy Gains			.047 (.244)	-.059 (-.306)
Adjusted R-Square	.399	.444	.400	.439
N	267	256	257	249

*p<.05 **p<.01 ***p<.001

^a Controlled in all equations, but not shown here, are gender, age, education, and marital status. None of the control variable coefficients were significant.

4.5 The Hypotheses

Hypothesis 1:

New network ties from an Earthwatch expedition will have a positive effect on planned social movement participation.

In order to test this hypothesis, I regressed the independent variable New network ties from Earthwatch on the dependent variable planned post-trip planned social movement participation (see Model #2 and Model #4 in Table 4.3). In Model #2, new network ties from Earthwatch was a positive and significant predictor of post-trip planned social movement participation ($p < .05$). The standardized coefficient for new network ties from Earthwatch was .122. In Model #4, new network ties from Earthwatch had a standardized regression coefficient of .153, an adjusted R-square of .439, and was a positive and significant predictor of post-trip planned social movement participation ($p < .05$). Given that both times the independent variable new network ties from Earthwatch was included in the regression models it was both significant and had a standardized regression coefficient of at least .1, Hypothesis 1 was supported at level one. In other words, new network ties from Earthwatch had a positive and significant effect on post-trip planned social movement participation. None of the control variables – gender, age, education, and marital status – were significant for this hypothesis.

Hypothesis 2:

Perceived self-efficacy gains from Earthwatch will have a positive effect on planned social movement participation.

In order to test this hypothesis, I regressed the independent variable Perceived self-efficacy gains from Earthwatch on the dependent variable post-trip planned social movement participation (see Model #3 and Model #4 in Table 4.2). In Models #3 and #4, Perceived self-efficacy gains from Earthwatch did not predict post-trip planned social movement participation. Given that in each of the models in which the independent variable perceived self-efficacy gains from Earthwatch was included it was not significant, Hypothesis 2 was not supported. In other words, Perceived self-efficacy gains from Earthwatch did not have a significant effect on post-trip planned social movement participation. None of the control variables – gender, age, education, and marital status – was significant for this hypothesis.

TABLE 4.4: EFFECTS OF PRE-TRIP VARIABLES, EARTHWATCH VARIABLES, AND SOCIAL CHARACTERISTICS ON POST-TRIP ACTIVISM SUPPORT (Unstandardized Coefficients in Parentheses)^a

Independent Variables	Post-Trip Activism Support Model #1	Post-Trip Activism Support Model #2	Post-Trip Activism Support Model #3	Post-Trip Activism Support Model #4
<i>Pre-Trip Variables</i>				
Social Movement Participation Activism Support	-.025 (-.014) .658*** (.692)	-.026 (-.014) .653*** (.688)	-.007 (-.039) .654*** (.690)	.000 (.000) .650*** (.687)
Network Ties	.027 (.084)	.024 (.076)	.017 (.053)	.011 (.035)
Self-Efficacy	.079 (.181)	.074 (.171)	.070 (.161)	.066 (.153)
Personal as Political	.069 (.210)	.071 (.219)	.067 (.206)	.070 (.218)
<i>Earthwatch Variables</i>				
First Trip	.065 (.627)	.071 (.701)	.056 (.551)	.064 (.639)
International Trip	.020 (.184)	.015 (.140)	.019 (.170)	.020 (.178)
Environmental Trip	.009 (.080)	.008 (.075)	.013 (.161)	.010 (.089)
Network Ties Established		.015 (.026)		-.013 (-.023)
Self-Efficacy Gains			.036 (.094)	.042 (.110)
Adjusted R-Square	.485	.476	.479	.473
N	247	237	240	232

*p<.05 **p<.01 ***p<.001

^a Controlled in all equations, but not shown here, are gender, age, education, and marital status. None of the control variable coefficients were significant.

Hypothesis 3:

New network ties from Earthwatch during an Earthwatch expedition will have a positive effect on support for activism.

In order to test this hypothesis, I regressed the independent variable new network ties from Earthwatch on the dependent variable post-trip support for activism (see Model #2 and Model #4 in Table 4.4). In Models #2 and #4, new network ties from Earthwatch was not a significant predictor of post-trip support for activism. Given that each time the independent variable new network ties from Earthwatch was included in the regression models it was not significant and had a standardized regression coefficient less than .1, and in one of the models indicated a negative effect, Hypothesis 3 was not supported. In other words, new network ties from Earthwatch had no significant effect on post-trip planned social movement participation. None of the control variables – gender, age, education, and marital status – was significant for this hypothesis.

Hypothesis 4:

Perceived self-efficacy gains from Earthwatch will have a positive effect on support for activism.

In order to test this hypothesis, I regressed the independent variable Perceived self-efficacy gains from Earthwatch on the dependent variable post-trip support for activism (see Model #3, and Model #4, in Table 4.4). In Models #3 and #4, Perceived self-efficacy gains from Earthwatch was not a significant predictor of post-trip support for activism. Given that each time the independent variable Perceived self-efficacy gains from Earthwatch was included in the regression models it was not significant, Hypothesis 4 was not supported. In other words, Perceived self-efficacy gains from Earthwatch had no significant effect on post-trip support for activism. None of the control variables – gender, age, education, and marital status – was significant for this hypothesis.

TABLE 4.5: EFFECTS OF PRE-TRIP VARIABLES, EARTHWATCH VARIABLES, AND SOCIAL CHARACTERISTICS ON POST-TRIP NETWORK TIES (Unstandardized Coefficients in Parentheses)^a

Independent Variables	Post-Trip Network Ties Model #1	Post-Trip Network Ties Model #2	Post-Trip Network Ties Model #3	Post-Trip Network Ties Model #4
<i>Pre-Trip Variables</i>				
Social Movement	.293***	.309**	.297*	.311**
Participation	(.054)	(.056)	(.056)	(.057)
Activism Support	.017	.028	.043	.040
	(.006)	(.097)	(.015)	(.014)
Network Ties	.090	.099	.111	.108
	(.086)	(.093)	(.111)	(.106)
Self-Efficacy	.018	-.041	.017	-.028
	(.014)	(-.031)	(.013)	(-.022)
Personal as Political	.012	.011	-.013	.006
	(.012)	(.011)	(-.013)	(.006)
<i>Earthwatch Variables</i>				
First Trip	.137*	.180**	.129*	.160*
	(.438)	(.571)	(.425)	(.518)
International Trip	.039	.019	.024	.012
	(.117)	(.057)	(.074)	(.037)
Environmental Trip	-.044	-.053	-.059	-.056
	(-.133)	(-.160)	(-.183)	(-.170)
Network Ties Established		.187**		.139
		(.104)		(.079)
Self-Efficacy Gains			.149*	.769
			(.126)	(.048)
Adjusted R-Square	.114	.159	.143	.160
N	271	260	261	253

*p<.05 **p<.01 ***p<.001

^a Controlled in all equations, but not shown here, are gender, age, education, and marital status. None of the control variable coefficients were significant.

Hypothesis 5:

New network ties from Earthwatch during an Earthwatch expedition will have a positive effect on overall network ties.

In order to test this hypothesis, I regressed the independent variable new network ties from Earthwatch on the dependent variable post-trip network ties (see Model #2, and Model #4, in Table 4.5). In Model #2, new network ties from Earthwatch was a positive and significant predictor of post-trip network ties, ($p < .01$). new network ties from Earthwatch had a standardized regression coefficient of .187, with an adjusted R-square of .159. In Model #4, new network ties from Earthwatch was not a significant predictor of post-trip network ties. Given that in one of models in which the independent variable new network ties from Earthwatch was included it was significant and had a standardized regression coefficient of more than .1, Hypothesis 5 was supported at level two only. In other words, new network ties from Earthwatch had a positive and significant effect on post-trip network ties. None of the control variables – gender, age, education, and marital status – was significant for this hypothesis.

Hypothesis 6:

Perceived self-efficacy gains from Earthwatch will have a positive effect on overall network ties.

In order to test this hypothesis, I regressed the independent variable Perceived self-efficacy gains from Earthwatch on the dependent variable post-trip network ties (see Model #3 and Model #4, in Table 4.5). In Model #3, Perceived self-efficacy gains from Earthwatch influenced post-trip network ties ($p < .05$). Perceived self-efficacy gains from Earthwatch had a standardized regression coefficient of .149, with an adjusted r-square of .143. In Model #4, Perceived self-efficacy gains from Earthwatch did not influence post-trip network ties. However, given that in Model #3 the independent variable perceived self-efficacy gains from Earthwatch was significant and had a standardized regression coefficient greater than .1, Hypothesis 6 was supported at level two only. In other words, perceived self-efficacy gains from Earthwatch had a positive and significant effect on post-trip network ties. None of the control variables – gender, age, education, and marital status – was significant for this hypothesis.

TABLE 4.6: EFFECTS OF PRE-TRIP VARIABLES, EARTHWATCH VARIABLES, AND SOCIAL CHARACTERISTICS ON POST-TRIP SELF-EFFICACY (Unstandardized Coefficients in Parentheses)^a

Independent Variables	Post-Trip Self-efficacy Model #1	Post-Trip Self-efficacy Model #2	Post-Trip Self-efficacy Model #3	Post-Trip Self-efficacy Model #4
<i>Pre-Trip Variables</i>				
Social Movement Participation	.056 (.014)	.044 (.011)	.039 (.098)	.051 (.013)
Activism Support	.031 (.015)	.041 (.019)	.038 (.018)	.037 (.017)
Network Ties	-.067 (-.091)	-.042 (-.055)	-.052 (-.070)	-.037 (-.049)
Self-Efficacy	.528*** (.547)	.498*** (.516)	.517*** (.533)	.486*** (.501)
Personal as Political	.084 (.117)	.051 (.071)	.069 (.097)	.045 (.063)
<i>Earthwatch Variables</i>				
First Trip	.022 (.097)	.016 (.069)	.018 (.081)	.012 (.051)
International Trip	.016 (.067)	-.034 (-.137)	.003 (.011)	-.023 (-.092)
Environmental Trip	.028 (.116)	.043 (.178)	.034 (.139)	.040 (.165)
Network Ties Established		.181*** (.138)		.127 (.096)
Self-Efficacy Gains			.160** (.181)	.099 (.111)
Adjusted R-Square	.347	.379	.360	.372
N	267	256	258	250

*p<.05 **p<.01 ***p<.001

^a Controlled in all equations, but not shown here, are gender, age, education, and marital status. None of the control variable coefficients were significant.

Hypothesis 7:

New network ties from Earthwatch during an Earthwatch expedition will have a positive effect on overall perceived self-efficacy.

In order to test this hypothesis, I regressed the independent variable new network ties from Earthwatch on the dependent variable post-trip self-efficacy (see Model #2 and Model #4 in Table 4.6). In Model #2, new network ties from Earthwatch was a positive and significant predictor of post-trip self-efficacy ($p < .001$), and had a standardized regression coefficient of .181, with an adjusted R-square of .379. In Model #4, new network ties from Earthwatch was not significant predictor of post-trip self-efficacy. Given that in one model in which the independent variable new network ties from Earthwatch was it was both positive and significant and had a standardized regression coefficient of at least .1, Hypothesis 7 was supported at level two only. In other words, new network ties from Earthwatch had a positive and significant effect on post-trip self-efficacy. None of the control variables – gender, age, education, and marital status – was significant.

Hypothesis 8:

Perceived self-efficacy gains from Earthwatch will have a positive effect on overall self-efficacy.

In order to test this hypothesis, I regressed the independent variable Perceived self-efficacy gains from Earthwatch on the dependent variable post-trip self-efficacy (see Model #3 and Model #4, Table 4.6). In Model #3, Perceived self-efficacy gains from Earthwatch was a positive and significant predictor of post-trip self-efficacy ($p < .001$), with a standardized regression coefficient of .160 and an adjusted r-square of .360. In Model #4, Perceived self-efficacy gains from Earthwatch was not a significant predictor of post-trip self-efficacy. Given that in one model in which the independent variable perceived self-efficacy gains from Earthwatch was included it was significant and had a standardized regression coefficient greater than .1, Hypothesis 8 was supported at level two. In other words, Perceived self-efficacy gains from Earthwatch had a significant effect on post-trip self-efficacy. None of the control variables – gender, age, education, and marital status – were significant.

TABLE 4.7: EFFECTS OF PRE-TRIP VARIABLES, EARTHWATCH VARIABLES, AND SOCIAL CHARACTERISTICS ON POST-TRIP PERSONAL AS POLITICAL (Unstandardized Coefficients in Parentheses)

Independent Variables	Post-Trip Personal as Political Model #1	Post-Trip Personal as Political Model #2	Post-Trip Personal as Political Model #3	Post-Trip Personal as Political Model #4
<i>Pre-Trip Variables</i>				
Social Movement Participation	.088 (.016)	.086 (.016)	.108 (.020)	.113 (.021)
Activism Support	-.033 (-.011)	-.019 (-.006)	-.016 (-.054)	-.010 (-.003)
Network Ties	-.021 (-.021)	-.006 (-.006)	-.020 (-.019)	-.011 (-.011)
Self-Efficacy	-.041 (-.031)	-.089 (-.068)	-.061 (-.046)	-.086 (-.066)
Personal as Political	.607* (.623)	.583*** (.608)	.574*** (.595)	.563*** (.593)
Age^a	-.179* (-.015)	-.143 (-.013)	-.155* (-.013)	-.164* (-.014)
<i>Earthwatch Variables</i>				
First Trip	-.073 (-.232)	-.065 (-.208)	-.076 (-.242)	-.078 (-.252)
International Trip	-.032 (-.097)	-.056 (-.170)	-.044 (-.131)	-.052 (-.159)
Environmental Trip	.045 (.135)	.036 (.111)	.031 (.093)	.027 (.082)
Network Ties Established		.220*** (.123)		.083 (.046)
Self-Efficacy Gains			.275*** (.227)	.231*** (.194)
Adjusted R-Square	.382	.426	.439	.448
N	256	247	250	243

*p<.05 **p<.01 ***p<.001

^a Controlled in all equations, but not shown here, are gender, age, education, and marital status. Only the control variable coefficient for age was significant.

^b Controlled in the equation for model #5, but not shown here, are six Earthwatch variable interaction terms: network ties x first trip, network ties x international trip, network ties x environmental trip, and self-efficacy gains x first trip, self-efficacy gains x international trip, self-efficacy gains x environmental trip. None of the interaction terms were significant.

Hypothesis 9:

New network ties from Earthwatch during an Earthwatch expedition will have a positive effect on seeing the personal as political.

In order to test this hypothesis, I regressed the independent variable new network ties from Earthwatch on the dependent variable post-trip seeing the personal as political (see Model #2 and Model #4, in Table 4.7). In Model #2, new network ties from Earthwatch was a positive and significant predictor of post-trip seeing the personal as political ($p < .001$), with a standardized regression coefficient of .220, and an adjusted r-square of .426. In Model #4, Earthwatch perceived network ties was not a significant predictor of post-trip self-efficacy. Given that in one model in which the independent variable new network ties from Earthwatch was included it was both positive and significant and had a standardized regression coefficient of at least .1, Hypothesis 9 was supported at level two. In other words, new network ties from Earthwatch had a significant positive effect on post-trip seeing the personal as political. One control variable – age – was negatively significant in Model #4, with a standardized regression coefficient of -.164.

Hypothesis 10:

Perceived self-efficacy gains from Earthwatch will have a positive effect on seeing the personal as political.

In order to test this hypothesis, I regressed the independent variable Perceived self-efficacy gains from Earthwatch on the dependent variable post-trip seeing the personal as political (see Model #3 and Model #4 in Table 4.7). In Model #3, Perceived self-efficacy gains from Earthwatch was a positive and significant predictor of post-trip seeing the personal as political ($p < .001$), and had a standardized regression coefficient of .275 and an adjusted r-square of .439. In Model #4, Perceived self-efficacy gains from Earthwatch had a standardized regression coefficient of .231 and was a positive and significant predictor of post-trip seeing the personal as political ($p < .001$), with an adjusted r-square of .448. Given that in two models in which the independent variable Perceived self-efficacy gains from Earthwatch was included, it was positive and significant and had a standardized regression coefficient of .1 or greater, Hypothesis 10 was supported at level one. In other words, Perceived self-efficacy gains from Earthwatch had a positive and significant effect on post-trip seeing the personal as political.

Only one control variable was negatively significant ($p < .05$): age. In Model #3, the regression coefficient for age was -.155. In other words, the older the participants, the less likely they were to experience changes in post-trip seeing the personal as political as a result of an Earthwatch trip.

4.6 Other Significant Findings

In addition to the relationships between the Earthwatch independent variables and the post-trip variables examined in the previous hypotheses, there were other significant relationships. Several consistently significant relationships were discovered between the pre-trip independent variables and the post-trip

dependent variables. The following is a description of the significant relationships, discussed by dependent variable.

Post-trip Planned Social Movement Participation

The pre-trip variable social movement participation was consistently positive and significant ($p < .001$) across each of the five multiple regression models, with regression coefficients ranging from .829 to .853 (Table 4.3). The pre-trip variable network ties was also positive and significant ($p < .01$, $p < .05$) across each of the five multiple regression models in a negative relationship between -1.48 and -1.29 . The pre-trip variable seeing the personal as political was consistently positive and significant across each of the five multiple regression models, ranging from .797 to .939. pre-trip support for activism and self-efficacy were not significantly related to post-trip planned social movement participation in any of the multiple regression models, nor were first-time versus veteran participation, international versus domestic trip destination, or environmental versus socio-cultural trips.

Post-trip Support for Activism

The pre-trip variable support for support for activism was consistently positive and significant ($p < .001$) across each of the five multiple regression models, with coefficients ranging from .687 to .692 (Table 4.1). Pre-trip social movement participation, network ties, self-efficacy, and seeing the personal as political were not significantly related to post-trip support for activism in any of the multiple regression models. In addition, first-time versus veteran participation, international versus domestic trip destination, and environmental versus socio-cultural trips were not significantly related to post-trip support for activism.

Post-trip Network Ties

The pre-trip variable social movement participation was positive and significant ($p < .05$, $p < .01$, $p < .001$) across each of the five multiple regression models and had a standardized regression coefficient of between .054 and .059 (Table 4.5). None of the remaining pre-trip variables – support for activism, network ties, self-efficacy, and seeing the personal as political – were significantly related to post-trip network ties in any of the multiple regression models. It is especially striking that pre-trip network ties did not predict post-trip network ties. In four of the five models, First-time trip participation was a positive and significant predictor of post-trip network ties, with regression coefficients ranging from .425 to .571. International versus domestic trip destination and environmental versus socio-cultural trips were not significantly related to post-trip network ties.

Post-trip Self-Efficacy

The pre-trip variable self-efficacy was consistently positive and significant ($p < .001$) across each of the five multiple regression models, with coefficients ranging from .486 to .547 (Table 4.6). None of the remaining pre-trip variables – social movement participation, support for activism, network ties, and seeing the personal as political – were significantly related to post-trip self-efficacy in any of the multiple regression models. In addition, first-time versus veteran participation, international versus domestic trip destination, and environmental versus socio-cultural trips were not significantly related to post-trip self-efficacy.

Post-trip View of Seeing the Personal as Political

The pre-trip variable seeing the personal as political was positive and significant ($p < .05$, $p < .001$) across each of the four multiple regression models, with regression coefficients ranging from .591 and .623 (Table 4.7). None of the remaining pre-trip variables – social movement participation, support for activism, network ties, and self-efficacy – was significantly related to post-trip seeing the personal as political in any of the multiple regression models. In addition, first-time versus veteran participation, international versus domestic trip destination, and environmental versus socio-cultural trips were not significantly related to post-trip seeing the personal as political.

4.7 Conclusions

This chapter included five major sections. The first was the demographic and socioeconomic characteristics of the sample. The second section included an analysis of the scale reliability and tests of multicollinearity. The third section included regression models and statistical methods for testing each hypothesis. The fourth section contained each of the ten hypotheses and a description of the findings for their support. The sixth section describes some of the other significant findings.

TABLE 4.8 HYPOTHESIS SUPPORT (1= support for the hypothesis at level one, 2= support for the hypothesis at level two, 0=lack of support at either level)

	<u>Dependent Variables</u>				
	<i>Social Movement Participation</i>	<i>Activism Support</i>	<i>Network Ties</i>	<i>Self-Efficacy</i>	<i>Personal as Political</i>
<u>Earthwatch Variables</u>					
<i>Earthwatch Network Ties Established</i>	1	0	2	2	2
<i>Earthwatch Self-Efficacy Gains</i>	0	0	2	2	1

Table 4.8 provides graphic representation of each of the ten hypotheses, indicating which were supported at both level one (the more stringent criterion) and level two. Two of the ten hypotheses were supported at level one. Five additional hypotheses were supported at level two. The following chapter will focus on interpretation and discussion of the results.