

Supplement 3 Details of the Difference in Differences Analyses

List of Abbreviations

WaveNum: This represents the DiD coefficient which presents the interaction effect between the treatment group and the specified survey wave. For example, WaveNum = 2 × TreatGroup indicates how much better the treatment group did in the 2nd Wave, relative to the control group.

Num.Obs.: Number of observations used in the analysis.

R2: Coefficient of determination or R-squared, which indicates the proportion of variance in the dependent variable explained by the independent variables in the regression model. In simple terms, it is a measure of the explanatory power of the independent variables in interpreting changes in the dependent variable.

R2 Adj.: Adjusted R-squared, which adjusts the R-squared value for the number of predictors in the model.

R2 Within: R-squared within, which represents the extent of variance in the dependent variable explained by the independent variables within each group or category.

R2 Within Adj.: Adjusted R-squared within, which adjusts the R-squared within value by the number of predictors in the model within each group or category.

AIC: Akaike Information Criterion, which measures the relative quality of a statistical model for a given set of data. Lower AIC values indicate better-fitting models. These values are used in comparison with results from competing models to determine the model with the best fit for the data.

BIC: Bayesian Information Criterion, which is a value similar to AIC that measures the relative quality of the statistical model for a given set of data. Compared to the AIC, it penalises more complex models more heavily. Lower values here indicate better-fitting models.

RMSE: Root Mean Square Error, which represents the average deviation between predicted and observed outcomes from the analysis. A lower RMSE indicates a better fitting model that provides a more reliable and accurate estimates of the treatment effect.

Std.Errors: Standard errors of the coefficients estimated in the model.

FE: Fixed Effects, which indicates whether there was the inclusion of fixed effects in the regression model for specific categories such as W1_ExperimentGroup, survey_wave, and WaveNum.

p: p-values for each analysis

Numbers in the brackets indicate the 95% confidence interval values.

Table S2 Self-reported interested in Quaternary Geoheritage

DiD Results for Quaternary Geoheritage Interest (Self-Reported)

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	0.067	0.056	0.003
	[-0.302, 0.436], p=0.720	[-0.519, 0.630], p=0.845	[-0.441, 0.447], p=0.990
WaveNum = 3 × Treated	0.073	-0.056	0.155
	[-0.282, 0.429], p=0.683	[-0.611, 0.500], p=0.840	[-0.310, 0.620], p=0.504
Num.Obs.	225	108	117
R2	0.643	0.396	0.751
R2 Adj.	0.452	0.049	0.610
R2 Within	0.001	0.002	0.009
R2 Within Adj.	-0.012	-0.027	-0.018
AIC	419.4	222.7	189.2
BIC	689.3	330.0	308.0
RMSE	0.43	0.47	0.38
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

TableS3 Self-reported level of knowledge about Quaternary Geoheritage

DiD Results for Quaternary Geoheritage Knowledge (Self-Reported)

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	-0.251	-0.302	-0.106
	[-0.738, 0.235], p=0.307	[-1.115, 0.512], p=0.458	[-0.689, 0.477], p=0.715
WaveNum = 3 × Treated	-0.087	-0.222	-0.101
	[-0.637, 0.463], p=0.753	[-1.029, 0.585], p=0.581	[-0.848, 0.647], p=0.787
Num.Obs.	234	117	117
R2	0.610	0.596	0.640
R2 Adj.	0.401	0.367	0.436
R2 Within	0.006	0.008	0.002
R2 Within Adj.	-0.007	-0.019	-0.025
AIC	650.0	335.4	300.5
BIC	933.4	454.1	419.3
RMSE	0.68	0.70	0.61
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

Table S4 Photo knowledge test question on Quaternary geoheritage sites

DiD Results for Quaternary Geoheritage Photo Quiz Scores

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	-0.197	-0.467	0.019
	[-0.740, 0.347], p=0.474	[-1.324, 0.391], p=0.277	[-0.763, 0.801], p=0.962
WaveNum = 3 × Treated	0.016	-0.006	-0.075
	[-0.518, 0.551], p=0.951	[-0.852, 0.841], p=0.989	[-0.790, 0.641], p=0.834
Num.Obs.	225	114	111
R2	0.660	0.607	0.689
R2 Adj.	0.478	0.384	0.511
R2 Within	0.006	0.027	0.001
R2 Within Adj.	-0.008	-0.000	-0.027
AIC	586.9	312.7	274.6
BIC	856.7	427.7	385.7
RMSE	0.63	0.66	0.58
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

Table S5 Protection Priority for Quaternary Geoheritage Sites

DiD Results for Quaternary Geoheritage Protection Priority

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	0.537	0.227	0.517
	[-0.375, 1.448], p=0.244	[-0.995, 1.449], p=0.708	[-0.785, 1.818], p=0.427
WaveNum = 3 × Treated	0.319	0.197	0.308
	[-0.613, 1.251], p=0.497	[-1.111, 1.505], p=0.761	[-1.043, 1.660], p=0.647
Num.Obs.	222	105	117
R2	0.625	0.467	0.674
R2 Adj.	0.424	0.161	0.489
R2 Within	0.011	0.003	0.009
R2 Within Adj.	-0.003	-0.027	-0.018
AIC	809.3	362.9	442.7
BIC	1074.7	466.4	561.4
RMSE	1.05	0.94	1.11
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

Table S6 Self-reported interest in the geocultural relationship

DiD Results for Interest in QuatGeo / Archaeology Relationship

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	0.165	0.067	0.193
	[-0.191, 0.520], p=0.358	[-0.479, 0.612], p=0.806	[-0.279, 0.664], p=0.413
WaveNum = 3 × Treated	0.357	0.167	0.562
	[0.004, 0.709], p=0.048	[-0.277, 0.610], p=0.452	[-0.046, 1.170], p=0.069
Num.Obs.	225	114	111
R2	0.625	0.480	0.713
R2 Adj.	0.424	0.183	0.549
R2 Within	0.027	0.006	0.068
R2 Within Adj.	0.013	-0.022	0.042
AIC	426.5	224.4	203.5
BIC	696.4	339.3	314.6
RMSE	0.44	0.45	0.42
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

Table S7 Self-reported knowledge in the geocultural relationship

DiD Results for Quiz Score on QuatGeo / Archaeology Relationship

	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	0.037	-0.150	0.280
	[-0.635, 0.708], p=0.914	[-1.265, 0.965], p=0.787	[-0.625, 1.184], p=0.535
WaveNum = 3 × Treated	-0.157	-0.294	0.043
	[-0.791, 0.477], p=0.623	[-1.281, 0.692], p=0.549	[-0.869, 0.956], p=0.924
Num.Obs.	225	114	111
R2	0.410	0.406	0.420
R2 Adj.	0.095	0.068	0.088
R2 Within	0.002	0.005	0.005
R2 Within Adj.	-0.011	-0.023	-0.023
AIC	723.3	381.1	348.0
BIC	993.2	496.0	459.0
RMSE	0.85	0.89	0.80
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X

Table S8 Knowledge test question score on the geocultural relationship

DiD Results for Self-Reported Knowledge on QuatGeo / Archaeology Relationship			
	All	Specialists	NonSpecialists
WaveNum = 2 × Treated	-0.007	-0.091	0.011
	[-0.318, 0.305], p=0.966	[-0.533, 0.352], p=0.674	[-0.410, 0.432], p=0.957
WaveNum = 3 × Treated	0.080	-0.000	0.135
	[-0.254, 0.414], p=0.633	[-0.665, 0.665], p=1.000	[-0.248, 0.519], p=0.477
Num.Obs.	165	66	99
R2	0.650	0.614	0.683
R2 Adj.	0.459	0.373	0.499
R2 Within	0.003	0.003	0.008
R2 Within Adj.	-0.016	-0.046	-0.024
AIC	245.0	107.1	137.4
BIC	428.2	164.1	233.4
RMSE	0.36	0.37	0.33
Std.Errors	by: email	by: email	by: email
FE: email	X	X	X
FE: WaveNum	X	X	X