

A lush green forest with a waterfall cascading down rocks. The scene is filled with dense vegetation, including large green leaves and ferns in the foreground. The waterfall is the central focus, with water flowing over dark, mossy rocks. The background is a dense wall of green trees and foliage.

Empathy Café

Ecuadorian Children's Willingness to Protect
Endangered Species – Identifying Behavioral
Predictors in a Biodiversity Hotspot

Ecuador & Biodiversity Conservation

Number of Species in Ecuador

Birds



1616

Amphibians



422

Reptiles



394

Mammals



362

Plants



25,560

Mestanza-Ramón et al., 2020

Research Question

Aim: Investigate knowledge, attitudes and behaviors of young people in Ecuador.



Willingness to Protect Endangered Animals

“I am willing to convince my peers at school that the protection of endangered animals is important.”

“In the classroom, I am willing to defend the idea that we need to care about conserving endangered animals.”

“I am willing to participate in an activity at my school for the protection of endangered animals.”


Stern et al., 1999; Hermann & Menzel, 2013

Challenge: Creating a survey for children


- Think-aloud method (van Someren et al. 1994)
- Reduced scales
- Simplified wording (David et al. 2014)
- Word response format (Mellor & Moore, 2014)

→ Reliable Cronbach's alphas indicate success

Ecuador y sus animales – Parte 2
Un poco más sobre los animales de Ecuador



¡Hola, aquí estamos otra vez!




Por favor, recuerda llenar el código primero. Es muy importante que no lo olvides.

En primer lugar, nos gustaría pedirte que nos proporciones la siguiente información

(1) Las dos primeras letras del nombre de tu mamá.

(2) El día de tu cumpleaños (sólo el día; por ejemplo, 7 de abril = 07).

(3) Las dos primeras letras del nombre de tu papá.



A continuación, verás una lista de algunos animales de Ecuador. ¿Cuál es el nivel de peligro de extinción que ellos enfrentan en nuestro país?

Marca con una X el nivel que tú crees que corresponde a cada animal. Si no conoces el animal, indícalo con una X también.

Animales	Nivel de peligro de extinción				No conozco el animal
	0 No está en peligro	1 Bajo nivel de peligro	2 Medio nivel de peligro	3 Alto nivel de peligro	
Mono Chorongo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delfín amazónico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tucán andino	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jaguar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oso de anteojos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cóndor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colibrí pico de espada	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Armadillo gigante	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tortuga verde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anaconda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Predictors of Willingness to Protect

- 2 Sociodemographic: Gender & Place of Growing up
- 4 Psychological:
 - Psychological Distance
 - Caring Beliefs
 - Dispositional Empathy with Endangered Animals
 - Threat Perception

Psychological Distance

“Psychological distance describes the perceived distance to certain objects, events, or actions“



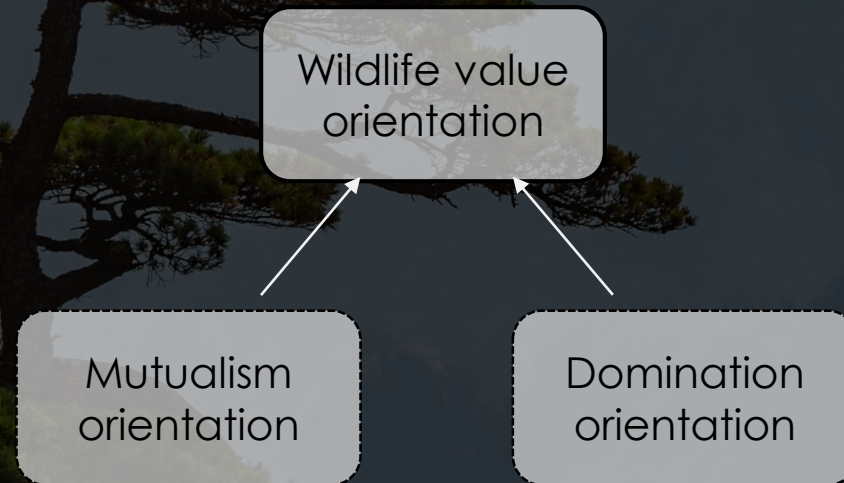
Liberman & Trope, 2014

Psychological Distance

- *“I am concerned by the decline of endangered animals in my geographical surroundings” (spatial distance).*
- *“I will be affected, in the near future, by the decline of endangered animals” (temporal distance).*
- *“I am personally affected by the decline of endangered animals” (social distance).*
- *“The extinction of endangered animals is very likely” (hypothetical distance).*

Caring Beliefs

- “The extent to which someone cares about wellbeing of a wild animal“
- Subdimension of wildlife value orientation



Büssing et al., 2019; Hermann
& Menzel, 2013

Dispositional Empathy with Endangered Animals

“the ability to understand the natural world and to comprehend and share its emotions”



Tam, 2013

Threat perception

“perceived threat level of selected native Ecuadorian animal species”



Species	Silvery woolly monkey	Amazon river dolphin	Plate-billed mountain toucan	Jaguar	Andean bear	Andean condor	Sword-billed hummingbird	Giant armadillo	Green sea turtle	Common anaconda
Scientific name	<i>Lagothrix poeppigii</i>	<i>Inia geoffrensis</i>	<i>Andigena laminirostris</i>	<i>Panthera onca</i>	<i>Tremarctos ornatus</i>	<i>Vultur gryphus</i>	<i>Ensifera ensifera</i>	<i>Priodontes maximus</i>	<i>Chelonia mydas</i>	<i>Eunectes murinus</i>
Threat level	EN	EN	NT	NT	VU	NT	LC	VU	EN	Not listed
"I don't know the animal"	63.4	30.9	48.9	18.1	18.6	12.1	47.4	55.4	30.7	33.8
Sample Size ¹	142	139	141	138	140	140	137	130	140	145
M	1.52	1.83	1.58	1.43	1.77	1.81	1.64	2.10	1.76	1.61
SD	1.00	1.04	1.11	1.12	1.10	1.16	1.10	0.95	1.12	1.38

Regression Results

Table 3. Results of regression on willingness to protect endangered animals.

Predictor variables	<i>B</i>	<i>SE</i>	β	<i>T</i>	<i>p</i>
Constant	.79	-	-	1.42	.161
Gender	.43*	.19	.17*	2.25	.027
Place of growing up	.10	.09	.06	1.11	.270
Psychological distance	-.18	.11	-.16	-1.63	.108
Caring beliefs	.30*	.13	.26*	2.38	.020
Dispositional empathy	.24**	.12	.29**	2.00	.049
Threat perception jaguar	.04	.09	.04	.40	.690
Threat perception Andean bear	.14	.09	.13	1.53	.129
Threat perception Andean condor	.22**	.09	.15**	2.60	.013

* $p < .05$; ** $p < .01$; Gender coded as 0 = *male*, 1 = *female*; $R^2 = .56$; R^2 adjusted = .52; Total

degrees of freedom = 88.



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