Empathy Café

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

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Ecuador & Biodiversity Conservation

Number of Species in Ecuador

Birds	Amphibians	Reptiles	Mammals	Plants
1616	422	394	362	25,560
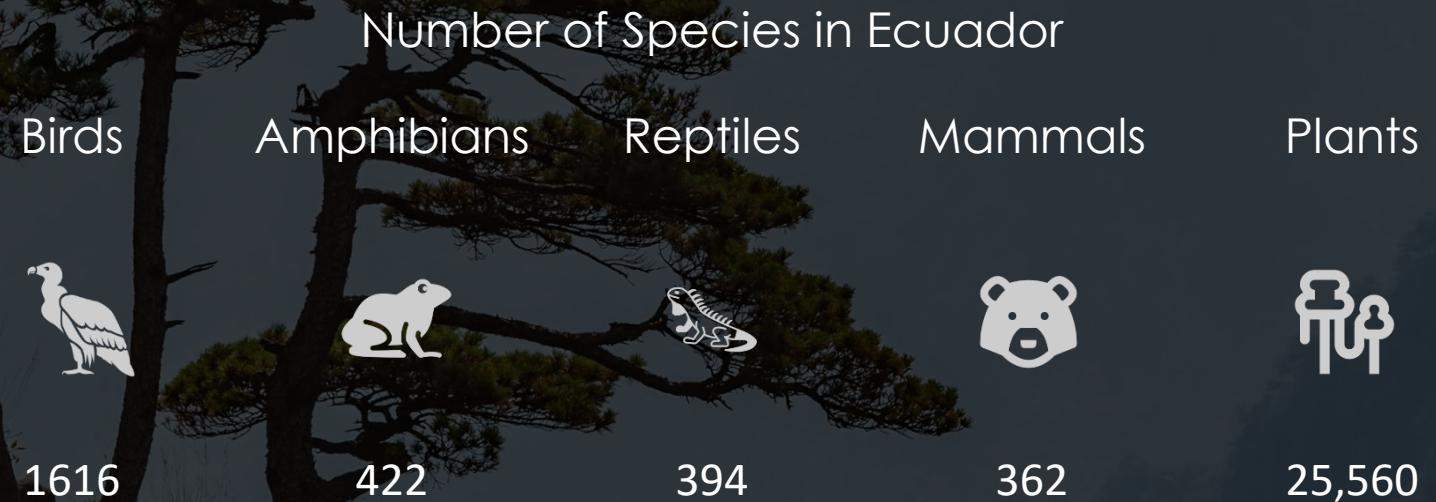
Mestanza-Ramón et al., 2020

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Research Question

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

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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

Predictors of Willingness to Protect

- 2 Sociodemografic: 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"

Psychological Distance

Temporal   Social   Spatial   Hypothetical

Liberman & Trope, 2014

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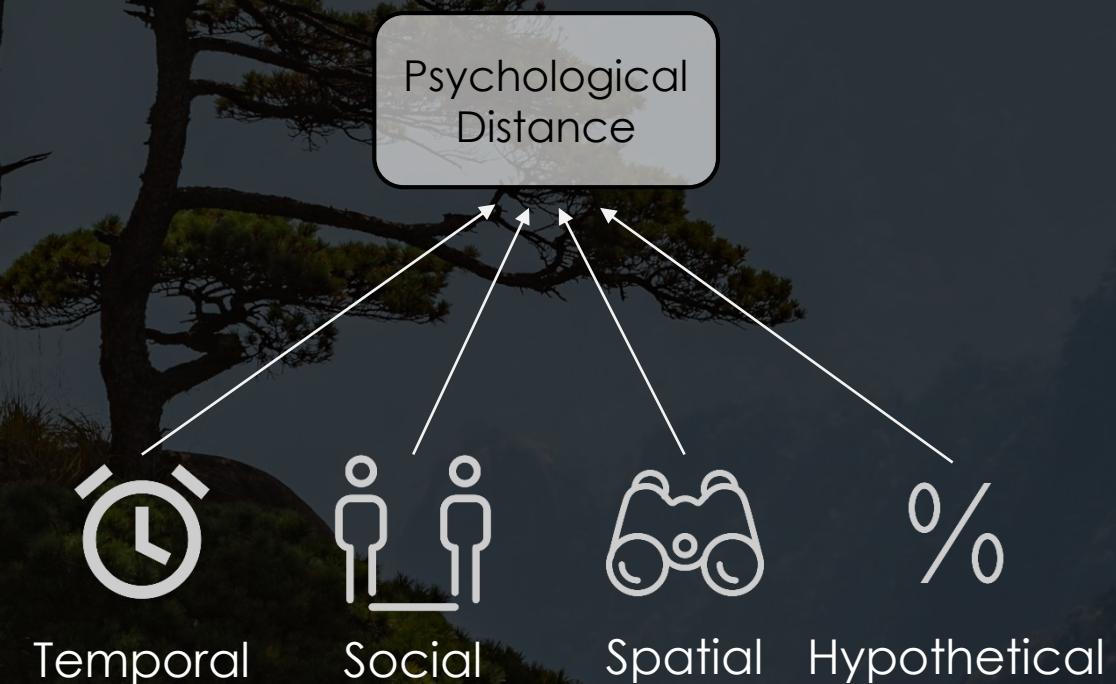
Psychological Distance

- *"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

Wildlife value orientation

Mutualism orientation

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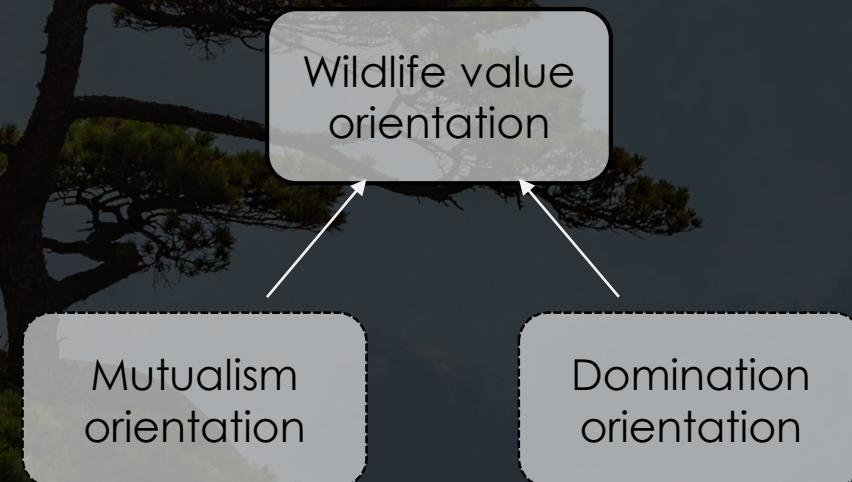
Büssing et al., 2019; Hermann & Menzel, 2013

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Dispositional Empathy with Endangered Animals

"the ability to understand the natural world and to comprehend and share its emotions"

DEEA

Perspective Taking   Empathic Concern

Tam, 2013

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Threat perception

"perceived threat level of selected native Ecuadorian animal species"
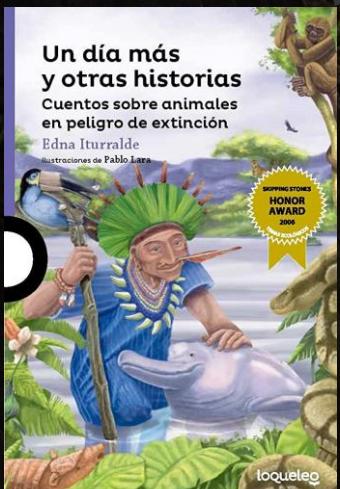
Species	Silvery woolly monkey	Amazon river dolphin	Plate-billed mountain toucan	Jaguar	Andean bear	Andean condor	Sword-billed humming bird	Giant armadillo	Green sea turtle	Common anaconda
Scientific name	*Lagothrix poeppigii*	*Inia geoffrensis*	*Andigena laminirostris*	*Panthera onca*	*Tremarctos ornatus*	*Vultur gryphus*	*Ensifera ensifera*	*Priodontes maximus*	*Chelonia mydas*	*Eunectes murinus*
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

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Regression Results

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

Predictor variables	B	SE	β	T	p
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.
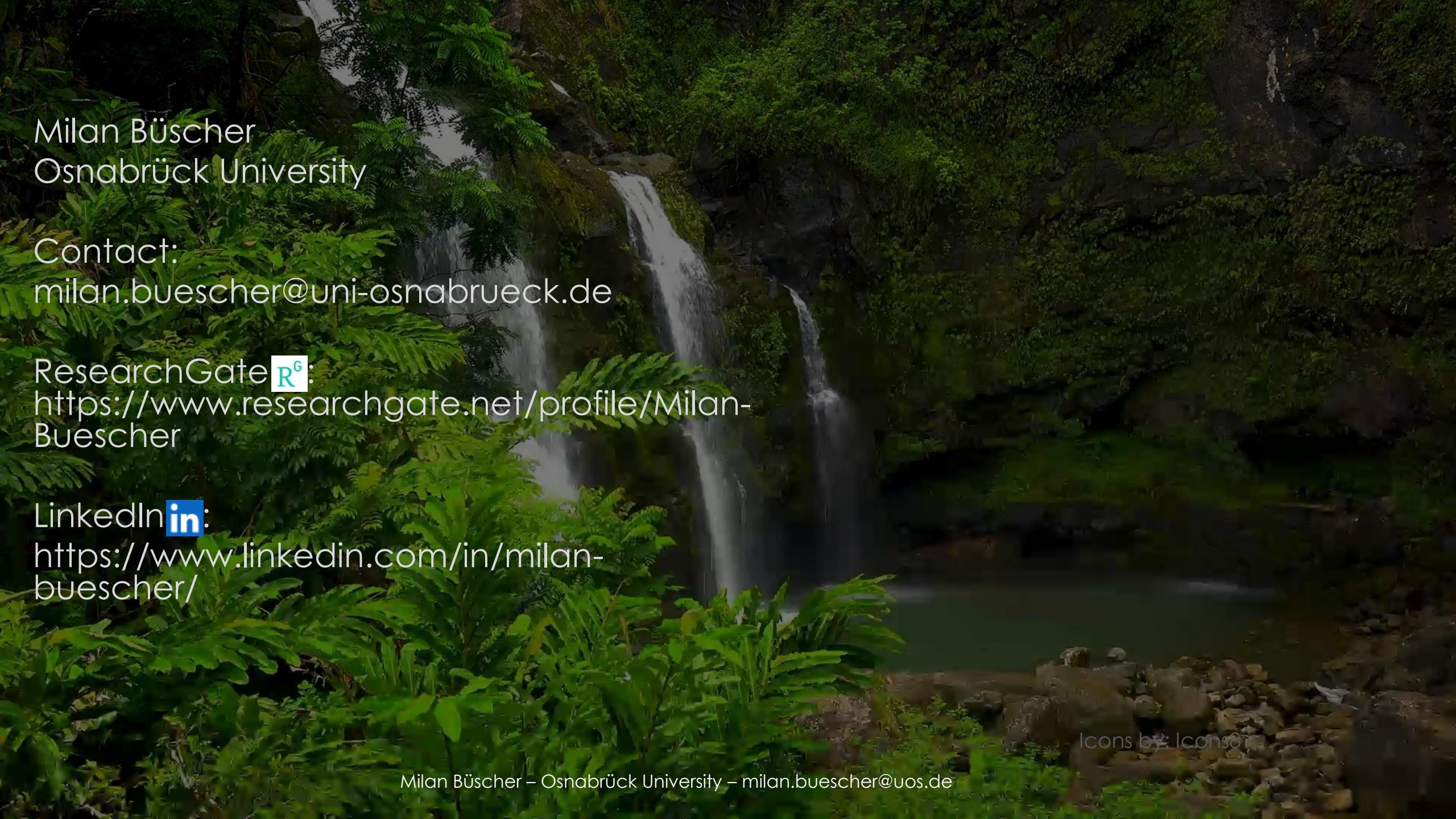
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