Effects of Stereotype Threat on
Black and White Individuals' Verbal Responses in Police Encounters

Samantha Strine

Faculty Sponsor: Cynthia J. Najdowski, Ph.D

University at Albany
AT Albany
State University of New York

African Americans are stereotyped as violent and prone to crime (Devine, 1989). As a consequence, Black (but not White) citizens are concerned that police will unfairly stereotype them as criminals (Najdowski et al., 2015). Preliminary evidence suggests this stereotype threat leads Black men to engage in more suspicious nonverbal behaviors than White men in police encounters (Najdowski, 2012).

We extended prior work by examining whether stereotype threat also leads Black citizens to engage in more suspicious verbal behaviors in a staged encounter with a security guard. Our hypotheses were as follows:

- **Hypothesis 1: Black and White men will display verbal behaviors that police commonly associate with deception (see Table 1).**

- **Hypothesis 2: The more relevant the criminal stereotype is, the more men will display suspicious verbal behaviors.**

- **Hypothesis 3: Stereotype threat will mediate the effects of stereotype relevance on verbal behavior.**

Such effects could explain why police are more likely to perceive Black individuals as deceptive, and initiate police contact with Black individuals more frequently than with White individuals.

Table 1. **Behaviors Police Associate with Deception and Operationalization**

Behaviors	Dependent Variables
Logical Structure of the Statement (+)	Analytical Thinking and Cognitive Processes
Number of Details (+)	Perceptual and Spatial Information
Number of Spontaneous Corrections (+)	Analytical Thinking and Cognitive Processes
Spatial Information (+)	Spatial Information
Affective Information (+)	Tone
Temporal Information (+)	Perceptual and Spatial Information
Cognitive Operations (+)	Cognitive Processes
Number of Emotions Expressed (+)	Tone
Number of References to Others (+)	Affiliation
Negative Emotions (-)	Tone
Truth versus lie	Authenticity

(+)= more related to more honest (-)= more related to less honest

Method

38 European American and 34 African American men (M= were told they were taking part in a study about anxiety. While left alone in the laboratory, they experienced one of these two encounters:

- **Low stereotype relevance**: A White confederate dressed as a security guard asked for directions.

- **High stereotype relevance**: A White confederate dressed as a security guard asked about a theft.

The encounters were video- and audio-recorded. Videos were coded for evidence of variability in **spatial and perceptual information**, **analytical thinking**, **tone**, **cognitive processes**, **affiliation**, and **authenticity** through LIWC.

Participants indicated how much stereotype threat they felt in the encounter on 5 items adapted from Najdowski et al. (2015), which were averaged to create the **Stereotype Threat Scale** (α = .94). Responses were given on scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Results

Hypothesis 1 and 2 were partially supported. Race only affected authenticity, $F(1, 68) = 7.06$, $p = .01$ (all other Fs ≤ 2.43, *ns*). Black men used fewer authentic words compared to White men.

Stereotype relevance affected analytical thinking, tone, cognitive processes, and affiliation, all Fs$(1, 68) > 3.89$, all ps $< .05$ (all other Fs ≤ 2.30, *ns*). As stereotype relevance increased words expressing analytical thinking and affiliation increased, words associated with cognitive processes decreased, and participants' tone became more negative.

Hypothesis 3 was supported. ANOVAs revealed stereotype threat was significantly affected by race, $F(1,70) = 16.97$, $p < .001$, and stereotype threat, $F(1, 70) = 15.2$, $p < .001$. Black men felt more threat than White men, and men in the high relevance condition felt more threat than those in the low relevance condition.

Regression analyses indicated that, stereotype threat did not mediate the effect of race on authenticity (Sobel $z = -0.08$, *ns*) or stereotype relevance on analytical thinking ($z = 0.28$, *ns*), tone ($z = -1.07$, *ns*), affiliation ($z = 1.09$, *ns*), and authenticity ($z = -0.08$, *ns*). It did partially explain its effect on cognitive processes, however, Sobel $z = -2.63$, $p = .009$ (see Figure 1).

Figure 1. **Stereotype Threat Mediates the Effect of Stereotype Relevance on Frequency of Words Associated with Cognitive Processes**

$\beta = -0.44^{***} \rightarrow \beta = -0.40^{***}$

| Stereotype Relevance | $\beta = -0.34^{**}$ | Stereotype Threat | $\beta = -0.25^{*}$ | Cognitive Processes |
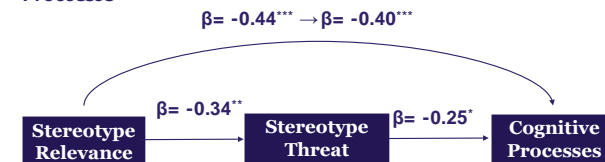
Discussion

As hypothesized, **as situational circumstances increased the relevance of the criminal stereotype, Black men's feelings of stereotype threat increased**. Moreover, **increases in relevance translated into more verbal behaviors (i.e., words reflecting cognitive processes) that police commonly perceive as displays of deception**.

These results suggest that men interacting with police officers in a situation related to criminality could be seen by police as more deceptive than they actually are. Even though no effect of race was found on cognitive processes, Black men do experience more stereotype threat than White men (see also Najdowski et al., 2015). The results also suggest that current police techniques to detect deception with verbal behaviors need to be modified to increase their accuracy and reliability. Future work should explore this as a factor that might contribute to racial disparities in real life encounters with police officers.

References are available upon request. *Please direct inquiries to the first author at sstrine@att.net*

Interdisciplinary Social Sciences

Merging Sustainable Tourism Pillars into the Business Plan Format for Tourism Micro, Small, and Medium Enterprises in Post Typhoon Haiyan Area in the Philippines

Slide

1

Blesilda P. Badoc-Gonzales, Student, University of Santo Tomas, Manila, Philippines

Belinda S. Mandigma, Faculty, Financial Management, University of Santo Tomas, Philippines

Jackson Tan, Researcher/Instructor, University of Santo Tomas, Philippines

Short Description: This paper analyzes a post disaster tourism plan in about five years after typhoon Haiyan through the lens of the five pillars of sustainability. It intends to propose a sustainable tourism plan outline for a rural post disaster tourism area which led to the formulation of a proposed business plan format for post disaster tourism Micro Small and Medium Enterprises (MSMEs).

Long Description: The study melds the sustainable pillars of the United Nations World Tourism Organization (UNWTO) in the crafting of a business plan format for tourism MSMEs located in post disaster areas to promote sustainable activities and contribute towards ecotourism resilience. The data gathering procedure and the creation of the proposed tourism business plan format anchored on the sustainable pillars which include tourism policy and governance; economic performance; investment and competitiveness; employment, decent work and human capital; poverty reduction and social inclusion; and sustainability of the natural and cultural environment. Data gathering utilized qualitative data through content analysis of the post disaster rural tourism plan of the local government unit. From the document, data were extracted and measured using documentary analysis particularly qualitative content analysis employing deductive and inductive category approaches to extract the manifest and latent codes.

Background: MSMEs play a significant role in employment generation and provision of livelihood in the developing world (UNDP, 2016) however, 40% of small businesses who have been subjected to catastrophes have slim or zero chances of recovery (Federal Emergency Management Agency as cited by Tech News, 2017). In the five years of the aftermath of typhoon Haiyan (Yolanda) as depicted in Figure 1, the level of sustainability in a post disaster rural area has not been given much emphasis. Knowing the current status of this sector in the context of tourism resilience and sustainability will open windows for a more accurate policy planning and further tourism development.

Figure 1. The Surf Camp Resort in Guiuan Eastern Samar before (left photo) Typhoon Haiyan and its current remnants (right

Research Question: Does the Tourism Plan for a rural post Haiyan area embody the five pillars of sustainability?

Methods: The post disaster tourism plan of one of the rural areas devastated by typhoon Haiyan underwent document analysis using content analysis to extract information through manifest coding and latent coding. The documentary analysis protocol was used in analyzing the tourism plan for the rural post disaster area and was analyzed with the lens of the five pillars of sustainability (UNWTO, 2013) as the basis of the questions. The pillars guided the identification of manifest codes, latent codes and emerging concepts in the document.

Results: The post disaster tourism plan was dubbed as an Inception Phase towards the development of a Tourism Masterplan for a rural post disaster area which has been hardly hit by Typhoon Haiyan last November 8, 2013. The document consisted of 34 pages in all and 79% of the document was devoted to tourism sites identification, clustering and proposed initial infrastructure developments strategies of identified sites which was presented through a photo documentation. Figure 2 shows the result of the plan's content analysis.
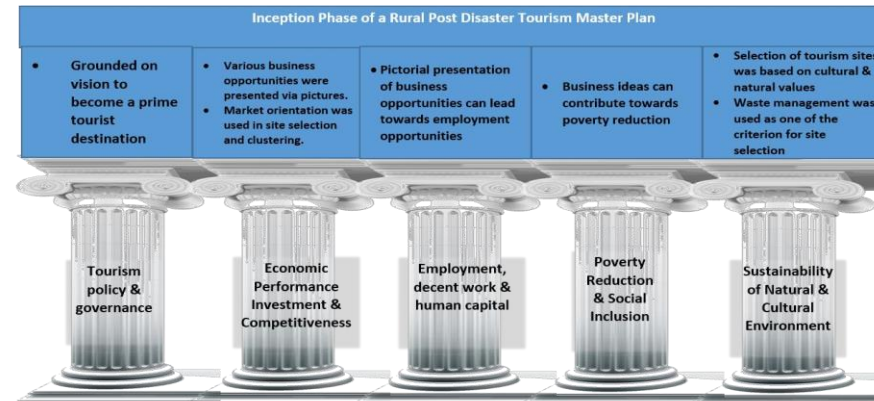

Figure 2. Documentary Analysis of a Rural Post Haiyan Tourism Master Plan

With regard to tourism policy and governance, the terms strategies and stakeholder engagement frequently appeared in the document however the inception phase though guided with a vision and was based on legal and environmental laws, it was devoid of a strong policy that could guide post disaster rural tourism. Its strength lie on its recognition of the threats and hazards that the area was prone to and its involvement of different stakeholders particularly on site selection yet initial policies were not formulated to counter the aforementioned threats and stakeholders were not clearly identified nor their roles properly delineated.

For the pillar on economic performance, investment and competitiveness, the plan acknowledges the importance of data collection and the evaluation of data through public consultation. It recognizes the market on site selection through the creation of clusters to form tourism circuits that would attract specific tourist-types. More so, the site selection used the Department of Tourism (DOT) standards in the assessment ranking and it identified tourism products strengths and weaknesses. The business ideas and proposed strategies were presented through pictorial presentation. The plan however did not indicate the intention to conduct a regular and comprehensive data collection on economic performance such as tourist arrivals and pertinent information. It does not also stipulate initial policies on sustainable investments and public tourism related infrastructures though the pictorial presentations of development strategies highlight the installation of light infrastructures, wooden cottages and nature parks.

Interdisciplinary Social Sciences

Merging Sustainable Tourism Pillars into the Business Plan Format for Tourism Micro, Small, and Medium Enterprises in Post Typhoon Haiyan Area in the Philippines

Blesilda P. Badoc-Gonzales, Student, University of Santo Tomas, Manila, Philippines
Belinda S. Mandigma, Faculty, Financial Management, University of Santo Tomas, Philippines
Jackson Tan, Researcher/Instructor, University of Santo Tomas, Philippines

The development strategies presented via pictorial presentation thus provides business ideas as economic opportunities for each site presented. In connection to this, the aforementioned business ideas connotes possible employment and provision of decent work albeit limited. Thus, for the pillar on employment, decent work and human capital, initial policies on human resource planning based on the current industry needs and future development is an important factor in the plan. It also entails the involvement of the private sector to formulate skills assessment, training design and pertinent accreditation of training and academic institutions that would intend to fill in the skills gap and training needs.

Pictorial presentations of proposed development indicate economic contributions through increased tourist arrivals which may alleviate rural poverty and economic slump due to typhoon Haiyan. However for the pillar on poverty reduction and social inclusion, the plan failed to indicate measurable outcomes linked to poverty reduction and social inclusion. It does not also stipulate the need for stakeholders to assist poor tourism businesses and the recognition of the needs of disadvantaged groups. For the pillar on sustainability of the natural and cultural environment, the terms "cultural" and "natural" frequently appeared in the document which was mostly used in the context of assessment criteria and identification of strengths and weaknesses of selected tourism sites. Emerging codes included spiritual and adventure tourism which was used to categorize the tourism sites in the creation of the proposed tourism circuits. However, though the document used waste management in the criterion for site selection, it did not seem to stipulate waste management mechanisms and policies to conserve natural and cultural heritage. It does not also aim to orient tourism businesses on sustainable operations and monitoring of natural and cultural conditions of tourism sites were not given emphasis.

Conclusions: The inception phase of the post Haiyan rural tourism plan was limited in many ways if analyzed through the lens of the five pillars of sustainability by UNWTO as seen in figure 2. The initial document however leaves a trail of many potentials for further development and flourishing but its limitations could also affect the growth of tourism MSMEs which would rely on the guidance of a tourism masterplan. Thus, this paper presents a proposed outline for a rural post disaster tourism plan anchored on the five pillars of sustainability which became the basis for the proposed business plan format for post disaster tourism MSMEs (figure 3).

References:

Tech News (2017). Natural disasters can have major impact on business. Retrieved April 13, 2019 from: https://activeco.com/natural-disasters-can-major-impact-business/

TripAdvisor Philippines (n.d.) The Surf Camp Resort before Typhoon Haiyan. Retrieved June 5, 2019 from: https://www.tripadvisor.com.ph/ShowUserReviews-g298467-d965990-r540944789-Calicoan_Island-Samar_Island_Visayas.html

UNDP (2016). MSME key to community climate resilience. Retrieved from April 13, 2019 from: https://www.adaptation-undp.org/msme-key-community-climate-resilience

UNWTO (2013). Sustainable Tourism for Development Guidebook: Enhancing capacities for sustainable tourism for development in developing countries. Retrieved April 13, 2019 from: http://whc.unesco.org/sustainabletourismtoolkit/sites/default/files/13.%20UNWTO%20%282013%29%20Sustainable%20Tourism%20for%20Development%20Guidebook.pdf

Proposed Business Plan Format for Tourism MSMEs

I. Introduction	V. Human Resource Management Plan	
II. Business Concept	VI. Market Overview and Marketing Plan	
III. Business Environment and Potential Hazards/Impacts	VII. Risk and Business Disaster Preparedness Measures	
IV. Tourism Product Concept	VIII. Social and Environmental Contributions	
	IX. Financial Plan	

Proposed Outline for a Rural Post Disaster Tourism Plan

Legal and Environmental Basis	Regular and comprehensive collection of tourism data subjected to external validation	Human Resources (HR) policy for the tourism sector	Specific actions and measurable outcomes for poverty reduction	Tourism policies and strategies on natural and cultural heritage.
Strong policy for post disaster tourism covering economic, environmental & cultural areas.	Balance between Investment and Sustainable Tourism	HR planning consultation with stakeholders	Pro poor strategies for tourism destinations	Comprehensive approach on solid waste management.
	Significant levels of investment in tourism-related infrastructure	Policies to enforce decent work in the tourism sector	Engagement of poor communities in providing tourism facilities and visits	Promotion for the use of renewable energy for tourism establishments.
Mechanism to monitor policies	System for setting, inspecting and reporting on quality standards of tourism products and attractions	Skills gap and training needs assessment matched with industry and future development needs.	Structures that provides advice and assistance to poor communities on tourism business development, operation and promotions.	Policies to address climate change, sustainability issues and resource constraints.
Stakeholder engagement in governance	Quality accreditation of tourism training institutions and academic courses subject	Tourism policies and strategies for the needs of disadvantaged groups.	Effective application and monitoring of Environmental/ Sustainability Impact Assessment in tourism developments.	
Private sector and private-public partnership	Steps to identify tourism product gaps to increase diversification	Engagement of the private sector in skills assessment and design and provision of training course	Local consultation on the development and operation of tourism in communities.	Capacity building and advice to tourism businesses to enhance the sustainability of their operations.
	Risk minimization and crisis management for the security of both the community and tourist.			

Tourism policy & governance

Economic Performance Investment & Competitiveness

Employment, decent work & human capital

Poverty Reduction & Social Inclusion

Sustainability of Natural & Cultural Environment

Figure 3. Proposed Framework for a Sustainable Rural Tourism Plan and Business Plan Format for Tourism MSMEs

Interdisciplinary Social Sciences

Abstract

It is important to understand Swedish tourists' perceptions of Thailand and know the significance of primary and secondary images to their decision to visit the country, which would make Thailand's tourism industry more competitive since the country is considered to be a destination for Swedish tourists.

A total of 128 Swedish tourists who had visited Thailand participated in a survey. Furthermore, the model used to show the impact of the primary and secondary images shows that the external influence of the secondary image has a statistically significant effect on Swedish tourists' decision to visit Thailand and that the before-trip rating, which is based on the tourists' knowledge, which is a primary image, is an important factor for deciding to visit Thailand.

Moreover, based on external influences, this study found that the main sources of external influence are friends, and the secondary sources are family.

Background:

By law, Swedes are allowed to have minimum of five weeks of paid vacation per year. Swedish tourists use their free time to travel to many countries across the world. As a tourist destination, Thailand has grown to become an important tourist destination for Swedes. The number of tourists visiting Thailand has significantly grown by 50% from 2002 to 2012. Image is one of the keys for convincing tourists to visit foreign countries, and Thailand has a mix of images. Primary image is the perception of the traveler. Secondary images are external influences based on information from other sources, such as news and marketing materials. Primary image is gained through personal experiences, while secondary image is formed based on preconceived notions constructed through the views and opinions of others or through personal beliefs and understanding

Research questions:

How do primary and secondary images impact the decision of Swedish tourists to visit Thailand?

Method:

This study uses SEM (structural equation model), which allows multiple regression, and the independent variables represent the factors that shape the destination image as mentioned in the literature, which are time spent on the trip, previous travel experience in Thailand, Thailand's rating prior to visit, and external influence from other media.

The dependent variable is visiting Thailand, and it is a latent variable that is formed by four items, which are beyond expectations of the trip, recommending the trip to others, rating after the trip, and the possibility to repeat the trip. This part is the measurement model for SEM because not all items have been loaded into this dependent variable. Only items with a Cronbach's alpha of 0.7 have been accepted.

Sample:

A total of 128 Swedish tourists were surveyed with regard to their views and opinions about Thailand as a destination as well as its related image. The online survey was provided for the tourists to complete within one month.

Result:

Result:

Parameter	Standardized	T-value	P-value
Visiting Thailand→Beyond expectations of the trip	0.449**	--	***
Visiting Thailand→ Recommending the trip to others	0.664**	5.242	***
Visiting Thailand→Rating after the trip	0.846**	4.283	***
Visiting Thailand→ Possibility to repeat the trip	0.466**	3.592	***
External influence→Visiting Thailand	0.518**	3.800	***
Experience traveling to Thailand→Visiting Thailand	0.026	0.294	0.769
Thailand's rating prior to travel →Visiting Thailand	0.299**	2.857	0.004
Staying time in Thailand→ Visiting Thailand	0.132	1.432	0.152

The model fit for SEM for model 1, CFI=0.975, RMSEA=0.037, and SRMR =0.07, which is considered to be a good fit for this model.

**Statistically significant at a confidence level of 99%; a critical t-value of 2.58 was used.
* Statistically significant at a confidence level of 95%; a critical t-value of 1.96.
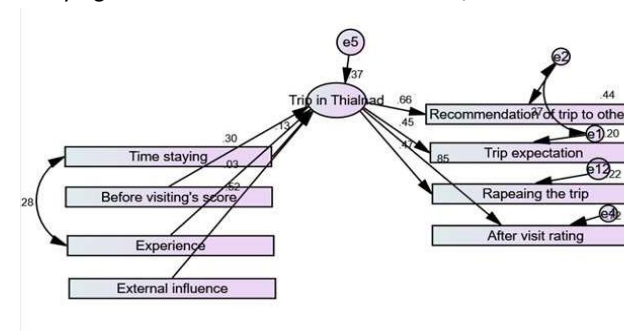
Conclusion:

Although both primary and secondary images should have played an important role in tourists' decision to visit a travel destination, this study does not show a statistically significant relationship between primary image and visiting Thailand. On the other hand, two secondary images, which are rating of the trip prior to visiting Thailand and external influence, have a statistically significant relationship with visiting Thailand. It is important to consider the appropriate media and marketing materials to enhance the secondary image, and based on this study, the external influence of word of mouth from friends and family plays an important role in having a better image and enhancing the possibility of visiting Thailand.

References

Baloglu, S., McCleary, K.W. (1999). A model of destination image formation. Annals of Tourism Research, 26 (4), 868-897.
Beerli, A., Martín, J.D. (2004). A model of destination image formation. Annals of Tourism Research, 31 (3), 657-681.
Echtner, C.M., Ritchie, J.R.B. (1991). The Meaning and Measurement of Destination Image. Journal of Travel Studies, 2 (2), 2-12.

Estimating the economic value of the sport fishing site in Minnesota using the individual travel cost model

Pattaraphongpan Chaiyamart PhD candidate, natural resources science, University of Minnesota

UNIVERSITY OF MINNESOTA
Driven to Discover®

Abstract

Sport fishing is considered to be one of the biggest industries in Minnesota, as well as in the whole America. The Sport Fishing Association (1996) has ranked Minnesota number 4 in terms of freshwater fishing's overall economic impact on America. The association has reported that freshwater fishing in Minnesota has generated $1.9 billion (14% of the total national expenditures). The main sport fishing area in Minnesota is Ely. Gathering information regarding the sport fishing recreation's economic value using the individual travel cost model and its socioeconomic factors will improve this industry in Minnesota and benefit many, including the federal government, local administrative officers, business sector, and local community. The economic value of sport fishing in the Ely area is $13,834,367; and only the socioeconomic factors of age, family size, and trout fishing experience have a statistically significant impact on the demands of anglers.

Background

In Minnesota, sport fishing is a very popular sport. The Minnesota Department of Natura Resources (DNR) reports that fishing in the state currently supports 23.6 million resident and nonresident anglers (Gartner, 2002). Statistics shows that the DNR sells over 98,000 trout stamps annually and that the number of trout and salmon stamps sold increased from 42,412 in 1982 (first year) to 96,271 in 1997. The price of the stamps increased from $5 in 1997 to $8.5 in 1998. Moreover, every year anglers spend more than $1.8 billion on fishing-related recreation in the state, with the largest portion of that amount spent on boats, gas, and lodging. According to a previous study (Gartner, 2002), in Northeastern Minnesota, over 37% of the anglers mostly engage in stream fishing for brook trout, rainbow trout and some steelhead salmon.
The Ely area is a very famous destination as it is the main fishing site in Northeastern Minnesota, so it is important to study anglers' behavior and estimate the industry's economic value to implement better through projects and policies.

Research questions
. To estimate the value of fishing recreation sites in the most significant region of Ely using the travel cost methodology.
To determine the relationship between the dependent variable (visits) and the independent variables (travel cost, income, years of fishing experience, family size, education as a demand function).

Methods
The individual travel cost model is also used in this research since the data gathered are secondary data from a previous study (Gartner, 2002). Data were collected by sending questionnaires to trout and salmon license holders. Travel Cost Model(TCM) should be based on the theory of consumer choices, the preferences of the visitors, and the economic constraints that influence their choices (socioeconomic characteristic variables, travel cost variables).
The first model studies the socioeconomic factors that have an impact on the visitors' demand, and this study uses a double-log model because the estimated coefficient of these factors would represent elasticity or sensitivity to demand.
$lnVisits = \beta o + \beta ln(TC) + \beta ln(socioeconomic\ variables)$ (age, education, income, salmon fishing experience, trout fishing experience)
The second model will be used to estimate the economic value of the fishing site. A semi-log model was used. The dependent variable is the number of visits; and independent variables are total cost, age, education, income, family size, trout fishing experience, and salmon fishing experience.
$lnVisits = \beta\_0 + \beta\_TC + \beta\_age + \beta\_(family\ size) + \beta\_(trout\ fishing\ experience)$
The area under the demand curve integrates the demand function from the beginning price TC and begins to choke the price when no trip is made (TC, choke). The formula for individual consumer surplus (CS) is as follows:
$CS = \int visit(TC)\ dTC = -Visits/\beta tc$; this is a measure of the benefit (economic value) derived from recreational visits as a whole.
βtc = estimated coefficient for the TC variable, and consumer surplus per trip per person = CS/visits = $-1/\beta tc$.

Sample
Secondary data were collected by Gartner (2002). A survey was mailed to anglers who have permit to fish in the Ely area, and 842 anglers returned their questionnaire.

Results

For model 1:

Variable	Coefficient of double-log (t-value)
Constant	6.300924(8.40)
Travel cost	−0.2988068(−7.28)
Family size	−0.2335811(−1.96)
Age	−1.069072(−4.86)
Income	−0.0249352(−0.22)
Education	0.0521672(0.40)
Trout experience	0.4077749(4.69)
Salmon experience	−0.0642578(−0.76)

For model 2:

Variable	Coefficient of semi-log (t-value)
Constant	3.16346 (18.72)
Total cost	−0.0023387 (−6.20)
Age	−0.0256461 (−7.76)
Trout fishing experience	0.0262693 (9.08)
Family size	−0.0444169 (−1.60)

With an adj-R-squared of 28%, the estimated value of the Ely recreation site per person per trip is $-1/\beta\_TC$, tc = travel cost variable. The estimated coefficient for the travel cost variable is −0.0023, so the recreation site's estimated value is (−1/−0.0023) = $427.58.

Table 1. Annual total values of trout and salmon sport fishing in region 2 (Ely)

Activity angler	(1) Total Number of trips	(2) Average expenditure per angler trip	(3)Total annual expenditures 1*2* average anglers	(4) Average CS as computed by TCM per trip	(5)Annual total resource value
Fishing	9804.5567	$132.7129	$4,293,931	427.58	$13,834,367

Conclusion
The annual economic value of the Ely site is $13.8 million, which is 3.22 times bigger than 4.2 million in out-of-pocket travel expenses. The socioeconomic factors of family size, trout fishing experience, and age have an impact on the demand of anglers to visit Ely.
The public sector might need more information to support their decision, such as information on the real economic value of the recreation sites, economic impact, socioeconomic characteristic for marketing management, visiting time of the year, or type of fishing that anglers enjoy the most. Consumer surplus would help the public sector set the tax and the price of the permit. Furthermore, the private sector would benefit from knowing the characteristics of anglers so that it can provide better products to satisfy them.

References
Fulton, D., Gartner, W., Love, L., and Erkkila, D(2002)Economic Impact and Social Benefits Study of Coldwater Angling in Minnesota. University of Minnesota Tourism Center.
Fleischer, A., & Tsur, Y. (2000). Measuring the recreational value of agricultural landscape. European Review of Agricultural Economics, 27(3), 385–398.
McKean, John R., Johnson, Donn., Taylor, R.G. (2001). "The Value of Sport Fishing in the Snake River Basin of Central Idaho". Western Agricultural Economics Association, 2001 Annual Meeting.1-16.

Interdisciplinary Social Sciences

ENVIRONMENTAL CHANGES THROUGH AN INTERDISCIPLINARY APPROACH

Sara Aparecida de Paula, Leonardo Freire de Mello
World Political Economy Postgraduate Programme, Universidade Federal do ABC (Federal University of ABC)
Rua Arcturus, 03 Jardim Antares- São Bernardo do Campo - Brazil
{s.paula@ufabc.edu.br, leonardo.mello@ufabc.edu.br}

Abstract. This paper is part of a Masters' thesis. The expanded abstract brings the central question which is the relation between population and environment as well as aspects influenced by this relation. Since this theme has been mainly debated inside natural sciences, the main challenge is to bring natural sciences concepts such as Anthropocene into Human and Social sciences discussions. It was verified that energy supplies and agriculture production are the main sources of greenhouse gases, and because of that we ought to understand how this system is organized inside political-economy contexts. This path was important to recover how structural inequalities are vital to analyze the patterns of human transformation on the environment, and its impacts on society as well.
Keywords: Mobility, Global Environmental Change, Anthropocene

Introduction/Research question

This research is an attemp to make a discussion amon demography, political economy and environmental issues, for this reason, we discuss about population dynamics and beheaviour, intending to understand how human behaviour may affect the environment. The structure built produces inequalities which need to be understood in an interdisciplinary approach

The question is: How population behaviour on consumption impacts the environment?

Our hypothesis is: Nowadays, society is mainly based on an intensive pattern of consumption. Despite of that, structure of populations and economy across the world are deeply different, with inequalities between Global North and Global South. These differences imposes some vulnerabilities and risks to the Global South in face to environmental changes, and understand them is central to this research.

Methodology

It is an exploratory research, by this way the first step is the systematization of academic literature about demography, population and environment, global environmental changes, consumption, lifestyles, and Anthropocene.

Documentary Research on reports published by the International Panel for Climate Change (IPCC).

Inclusion of *Coupled-Human and Natural Systems* (CHANS) to understand the relations of population and environment in the Anthropocene, mainly about how population consume across the world.

Source: Google Images

DISCUSSION AND RESULTS

THE GREAT ACCELERATION
SOCIO-ECONOMIC TRENDS — EARTH SYSTEM TRENDS
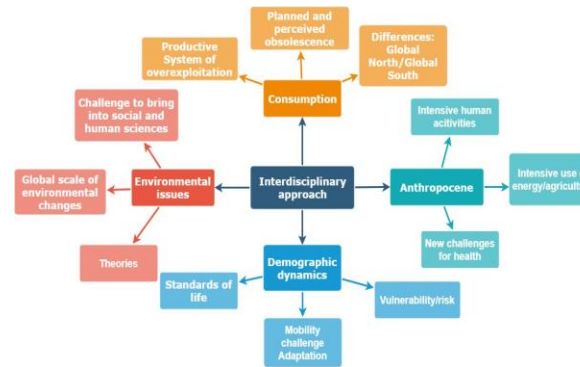
Final Considerations

It is necessary to bring an integrative and systemic approach as it brings the hypothesis that social and economic system is central to environmental changes and how it impacts different people.

It is important to consider differences between Global North and Global South to understand how vulnerability and risks are built in each place.

This paper aimed to bring Anthropocene to discussion. It helps to understand in which aspects Humankind is changing planetary systems. It also discusses the economic system and how monopolization represents a challenge for human and other species as a whole.
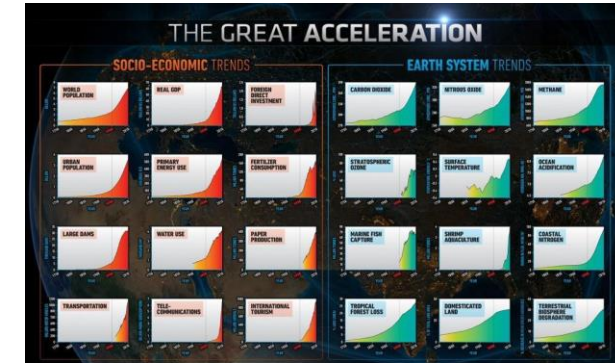
References

ARTAXO, P. Uma nova era geológica em nosso planeta: O Antropoceno? **Revista USP**, 2014, n. 103, 13-24.

CRUTZEN, P. J. Geology of mankind. **Nature,** [s.l.], v. 415, n. 6867, p.23-23, 3 jan. 2002. Available in: http://www.nature.com/nature/journal/v415/n6867/full/415023a.html?foxtrotcallback=true. Access in: 08 January 2018.

CURRAN, S. R.; DE SHERBININ, A. Completing the picture: the challenges of bringing "consumption" into the population-environment equation. **Population and Environment**, v. 26, n. 2, p. 107-131, 2004.

HOGAN, D. População e Meio Ambiente: a emergência de um novo campo de estudos. In: HOGAN, D. (Org.) **Dinâmica populacional e mudança ambiental: cenários para o desenvolvimento brasileiro.** Campinas: Núcleo de Estudos de População-Nepo/Unicamp, 2007.

IDMC. Global Report on Internal Displacement. 2018. Available in: http://www.internal-displacement.org/global-report/grid2018/. Access in: 25 February 2019.

IPCC. Climate Change 2007: Synthesis Report. Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.). IPCC, Geneva, Switzerland, 2007.

IPCC. Climate Change 2014: Synthesis Report. Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.). IPCC, Geneva, Switzerland, 2014, 151 pp.

KLARE, M. **Raising Powers, Shrinking Planet.** Oxford: Oneworld Publications, 2008.

MELLO, L. F. População, consumo e mudança climática. In: HOGAN, D.; MARANDOLA, E. (orgs.) **População e Mudança Climática: Dimensões humanas das mudanças ambientais globais.** Campinas: NEPO, Brasília: UNFPA, 2009.

Early Academic Achievement:
Examining Reciprocal Links Between School Engagement & Externalizing Behaviors

Anjolii Diaz, PhD[1], Carlos Valiente[2], PhD & Jodi Swanson[2], PhD
Ball State University - Muncie, IN (USA)[1] & Arizona State University - Tempe, AZ (USA)[2]

INTRODUCTION

Identifying factors that influence achievement is important, as it is central to children's future success, including academic progress, mental and physical health, and future employment (Valiente et al., 2008).

School engagement is a multifaceted construct that includes feelings, behaviors, and thoughts about school, and is an important factor in academic performance (Skinner et al., 2014). Indices of engagement, such as participation and school liking, are indicative of motivation (Skinner et al., 2014) and are positively related to academic competence (Ladd & Burgess, 2001). Indeed, children who demonstrate self-directed behavior and are actively involved in the classroom profit from educational experiences and are rewarded for such behavior, reinforcing their pursuit of academic success (Skinner & Belmont, 1993). In contrast, externalizing behaviors are associated with deficits in achievement, including poor literacy and math skills (Dobbs et al., 2006; Doctoroff et al., 2006).

Engagement and externalizing behavior may reciprocally influence each other in ways that affect achievement: For example, problem behaviors may increase negative attitudes toward school (French & Conrad, 2001), whereas engagement in school may limit the time and energy necessary for inappropriate behavior (Wang & Fredricks, 2014). Nonetheless, few studies have used longitudinal data to investigate reciprocal relations between early school engagement and externalizing behavior and later achievement. Hence, the goal of this study was to document the concurrent and longitudinal relations between children's school engagement and externalizing behaviors and their academic achievement.

METHODS

In a longitudinal sample of 291 children (135 girls) from kindergarten to 2nd grade, a cross-lagged panel design was used with 7 latent variables. Latent variables included *engagement* (teachers' reports on the TRSSA [Birch & Ladd, 1997] and SLAQ [Ladd & Price, 1987]), and *externalizing behavior* in kindergarten, 1st grade, and 2nd grade (parent reports on the MacArthur HBQ, Armstrong, 2003) and *achievement* in 2nd grade with the WJ-III (Woodcock, McGrew & Mather, 2007). Engagement and problem behavior were assessed in the fall and achievement during the spring.

For more information please email adiaz6@bsu.edu

RESULTS

Preliminary correlations and a CFA indicated latent variables could be created and constructs were related in expected directions. Structural equation modeling was used to assess the paths of interests. Model fit: $\chi^2(295) = 471.84$, $p = .00$; CFI = .95; RMSEA =.045; SRMR = 086. Model accounts for clustering by kindergarten classroom. All loadings were significant and alphas were > .70. The pattern of findings did not change when we added a path from gender to achievement.

Figure 1.
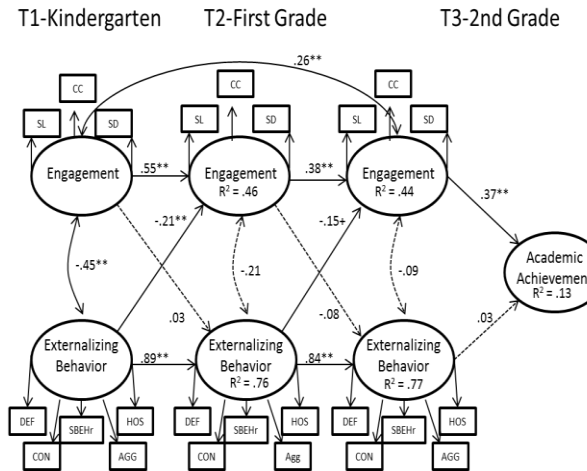
Note. SL = School liking, CC = Class cooperation, SD = Self-directed behavior, DEF = Defiance, CON = Conflict, SBEHr = Social behavior reversed, HOS = Hostility & AGG = Aggression, PC = Passage comprehension, AP = Applied problems and LW = Letter-Word identification. Solid lines represent significant paths and dotted represents hypothesized but non-significant paths.
[**]$p < .01$; [+]$p < .08$.

There was evidence that externalizing behavior predicted later engagement, but not *vice versa*. The association between externalizing behavior and engagement weakened over time. In addition, second-grade engagement predicted concurrent achievement (see Figure 1).

DISCUSSION & CONCLUSIONS

Findings suggest relations only in one direction (i.e., externalizing behavior predicted engagement) and weakened over time. Extant research suggesting bidirectional links between externalizing behavior and engagement is limited to adolescence and focuses on relations between delinquency and the emotional dimension of engagement. We examined a multidimensional construct of school engagement in a younger population, in which externalizing behavior may have more influence over negative attitudes toward school, noncompliance, and engagement in classroom activities. Furthermore, only engagement predicted achievement. Children high in engagement may place more importance on learning than less-engaged peers, which may explain why they perform better academically (Valiente et al., 2008). Data support the development of interventions that focus on decreasing early externalizing behavior.

REFERENCES

Armstrong, J.M., Goldstein, L.H., & The MacArthur Working Group on Outcome Assessment. (2003). *Manual for HBQ 1.0*. MacArthur Foundation Research Network on Psychopathology and Development, University of Pittsburgh.

Birch, S. H., & Ladd, G. W. (1997) The teacher-child relationship and children's early school adjustment. *Journal of School Psychology, 35*, 61–79.

Dobbs, J., Doctoroff, G. L., Fisher, P. H., & Arnold, D. H. (2006). The association between preschool children's socio-emotional functioning and their mathematical skills. *Journal of Applied Developmental Psychology, 27*, 97–108.

Doctoroff, G.L., Greer, J., & Arnold, D.H. (2006). The relationship between social behavior and emergent literacy in preschool boys and girls. *Journal of Applied Developmental Psychology,*27:1–13.

Ladd, G. & Price, J. (1987). Predicting children's social & school adjustment following the transition from preschool to kindergarten. *Child Development, 58*, 1168-9.

Skinner, E. & Belmont, M. (1993). Motivation in the classroom: Reciprocal effect of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*, 571-581.

French, D. C., & Conrad, J. (2001). School dropout as predicted by peer rejection and antisocial behavior. *Journal of Research on Adolescence, 11*, 225-244.

Skinner, E., Pitzer, J., & Brule, H. (2014). The role of emotion in engagement, coping, and the development of motivational resilience. In R. Pekrun & L. Linnenbrick-Gracia (Eds.), *Handbook of emotions and education*. New York, NY: Routledge

Valiente, C., Lemery-Chalfant, K., Swanson, J., & Reiser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology, 100*, 67–77.

Wang, M. T., & Fredricks, J. A. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child development, 85*, 722–737.

Woodcock, R. W., McGrew, K. S., & Mather, N. (2007). *Woodcock Johnson III Tests of Achievement*. Rolling Meadows, IL: Riverside.

Interdisciplinary Social Sciences

Is there too much? The Effects of Role Mentoring in the High School Science Classroom

Judith Stull and Shohreh Amini, Temple University, Philadelphia, PA, USA

- Keywords: High school students, graduate student mentors, science

Introduction and Relevance

Mentoring as an educational tool is not new. However, it is only in the past 3 to 4 decades that formal mentoring programs have been implemented. First begun in the work environment, it has become an established path in education first with post-docs, then graduate students, and then undergraduates. College students mentoring high school seniors is the latest strategy to be added. The value of mentoring is not in dispute. However, because of limited samples and reactivity issues, generalizations have been very limited.

The research reported here begins to address some of these issues. Data were collected from three tiers of participants (graduate students, high school science teachers, and high school students). In this project, graduate students collaborated with high school teachers for 15 hours per week, 10 of which were in their classrooms, over the course of a regular school year. To determine the effect of the graduate students, whose charge was to bring their research into the classroom and not to function as student teachers or assistants, student course grades were analyzed in terms of student characteristics and survey results, and with graduate student and teacher controls entered into the analyses. The graduate students were functioning as mentors and the hypothesis being tested was that mentoring would positively affect students' science achievement.

Research question

Underlying much of the discussion of mentoring is the assumption that mentoring is always good and that there can never be too much mentoring. Is this true?

Design, method and materials

Previous research has been deficit in that much is based on a case study approach and relies on self reports of effectiveness. This project begins the discussion by addressing some of these concerns. It is a quasi-experimental design. The dependent variable, student grades are not self-reports, and the sample is of sufficient size to support statistical analyses. Thus, the question remains as to whether there are any limits to mentoring.

In this project, high school sciences teachers were recruited from the School District of Philadelphia and the graduate students, hereafter referred to as graduate fellows, were partnered with them based on commonality of interest. To insure well working relationships within the schools, the teachers' principals were asked to nominate the teachers. To insure well working relationships within the graduate fellows' academic programs, the faculty mentors were asked to nominate potential graduate students for participation.

Data were collected from (graduate students, high school science teachers, and high school students. In this project, graduate students collaborated with high school teachers for 15 hours per week, 10 of which were in their classrooms, over the course of a regular school year. To determine the effect of the graduate students, whose charge was to bring their research into the classroom and not to function as student teachers or assistants, student course grades were analyzed in terms of student characteristics and survey results, and with graduate student and teacher controls entered into the analyses. The graduate students were functioning as mentors and the hypothesis being tested was that mentoring would positively affect students' science achievement.

Data Sources: Survey data were collected in September and then in the following June (Pre/post surveys of students, teachers, and graduate fellows) and quarterly grades

The participating schools, all of which were in the School District of Philadelphia, were varied in size, focus, racial/ethnic composition, and student achievement as shown in Table 1. In addition, in this particular component of the project, there were eight teachers, seven who were female and one who was male. They ranged in years of experience from five years to nineteen years with a mean of 12 years. Lastly, six of the teachers taught biology and two taught chemistry.

Regression Analysis Results

- The model estimated was a value added model as the Quarter 1 grades were added along with the other independent variables

- Curvilinearity was addressed as both the number of hours of mentoring was entered along with this term squared.

- To understand better the effect of implementing the within-class worksheet completion process, a "value added" regression of the determinants of conceptual understanding was estimated on those students who experienced that process.

- The model is a "value added" one as differences in presenting chemistry knowledge is controlled for with the inclusion of the CCI pre-test scores. Thus any change in chemistry conceptual understanding, measured by the CCI post-test, is explained by the other variables in the model.

Table: *The Regression Analysis*

	B (Regression coefficients)	Std. Error	Beta (Standardized Coefficients)	T	p value
Quarter 1 Grade	2.683	1.576	.076	1.702	.089
Student expects to earn at least a college degree	1.071	.412	.116	2.601	.010
Number of student's out of school activities (10 item scale, 4 items support school, 6 items do not)	1.572	.273	.269	5.748	.000
Graduate fellows confidence teaching science scale (0-6)	-.002	.001	-.407	-3.389	.001
Percent of 10 hrs./week graduate fellow spent in class squared	-.388	.161	-.107	-2.412	.016
Number of pedagogies student experiences in science class (0-18)	.192	.055	.417	3.505	.001
Percent of 10 hrs./week graduate fellow spent in class	-3.421	1.021	-.148	-3.350	.001
Student was male (1=m, 0=f)	.236	.140	.075	1.692	.091
Student's positive attitude toward science scale (0 - 20)	4.154	1.469	.154	2.827	.005
Mother expects student to earn at least a college degree	-2.379	1.349	-.097	-1.763	.079
Father expects student to earn at least a college degree	70.335	2.916		24.118	.000

Results

The regression results are very interesting for several reasons.
The more out of school activities that support what happens in school reported by the student were statistically significant and positively related to the student's grade. In short, homework helps!
Mentoring is not an easy task as evidenced by the negative regression coefficient of the graduate fellow teaching confidence scale.
Too many pedagogical activities also had a negative effect on students' grades. Evidently, "less is more."
Perhaps most importantly, there appear to be limits to "mentoring time." Too little is not good nor it too much. In the analyses at hand, 4.8 hours per week or just under an hour a day proved to be the turning point.

The graduate fellows were asked to reflect on what they learned as a result of their mentoring.
Overall, they were satisfied with what they accomplished, but they did encounter difficulties.
In general, they found that they needed to be flexible, to take advantage of opportunities as they arose, to have a clear idea of what they wanted to accomplish, and to appreciate the students' limitations.

Limitations: The mentoring took place in high school science classrooms in a school district with a mandated curriculum. Whether they hold for other disciplines or age groups needs to be researched further. Are there cultural variations?

Conclusions:

There are limits to mentoring time!

Graduate science students can benefit from professional development programming focused on improving their communication and outreach skills. All of the fellows noted how much more confident they felt.
In establishing mentoring

Interdisciplinary Social Sciences

Disentangling Xenophobic Attitude in European Union Threat Perception, Economic Status, and Political Perspective

Cindy Feng
Duke University, North Carolina, United States

Introduction

Racial discrimination in Europe, manifested in xenophobic attitudes with specific ethnic preferences, is argued as being conditional on personal, psychological, economic and political factors. This research questions the factors that affect a European citizen's ethnic preference for immigrants and immigration. The researcher made effort to sort out the relationship between the aforementioned factors and the tendency of racial discrimination in the context where racial data are highly missing.

Abstract

This study investigates the impact of threat perception, economic status and political perspective on xenophobic attitudes within the ethnic majority group in European Union. Specifically, we investigate the impacts of the aforementioned factors on one's ethnic preference for immigrants. Through an SEM and logistic regression analysis, we discover that perceptions of cultural threat lead to one's ethnic preference for their same race, implying an assumed linkage between cultural opposition and racial opposition. We also discover that citizens tend to associate their country's overall well-being with preference for immigrants of the same race, but associate personal well-being with preference for immigrants of different races. Finally, we show evidence that people with right-wing ideologies tend to have stronger opposition toward the immigrant group, with immigrants of different races being more victimized.

Background

This research mainly draws inspiration from the following findings:

Material and cultural threat: cultural and material threat exists side by side but serves different psychological functions, leading to xenophobic attitudes of different ethnic preferences (Ben-Nun Bloom et al., 2015).

Theory of economic self-interest: one's political attitude reflects their narrow economic self-interest, such that individuals who perceive themselves as being financially harmed by immigrants will be more likely to oppose them (Hayes & Dowds, 2006).

Extreme Right Wing and anti-immigration: areas more supportive of extreme right-wing parties and individuals holding more right-wing ideologies demonstrate stronger anti-foreigner sentiments (Semyonov et al., 2006).

Research Question: How do the ethnic in-group's threat perception, economic status and political perspective impact their preference for immigrants of same race, of different race and of poor countries?

Sample

The 8th round of the European Social Survey (2016), which comprises 44,387 observations from 23 countries. Considering the transnational nature of the questionnaire respondents and the particularity of this study's research questions, 4,699 individuals who reported themselves foreign-born and 1,689 who reported themselves as belonging to an ethnic minority in their respective countries are dropped. Another 2,683 respondents from France and Israel are also omitted due to an excessive number of missing items and inconsistency with the object of study (the European Union), respectively. Therefore, this analysis covers a total sample of 35,316 observations from 21 European countries.

Method: Ordered Logistic Regression with variables specified in the result

Results: Ordered Logistic Regression

	Level of reluctance to adapt immigrants of same race/ethnicity		...immigrants of different races/ethnicities		...immigrants from poor countries	
	Estimate	SD	Estimate	SD	Estimate	SD
Demographics:						
Age:	0.0037	(0.0020)	0.0060**	(0.0020)	0.0097**	(0.0019)
Gender:	0.084	(0.052)	0.051	(0.052)	0.089	(0.052)
Education:	-0.50**	(0.0074)	-0.044**	(0.0074)	-0.029**	(0.0073)
Religiosity:	0.00042	(0.0084)	0.022**	(0.0085)	-0.0034	(0.0084)
Parenthood:	-0.0016	(0.053)	0.041	(0.053)	-0.043	(0.052)
Threat Perception:						
Material Threat:	0.24**	(0.015)	0.27**	(0.015)	0.27**	(0.016)
Cultural Threat:	0.16**	(0.014)	0.27**	(0.014)	0.27**	(0.014)
Economic Interest:						
Household Income:	-0.0065	(0.010)	-0.023*	(0.010)	-0.0052	(0.010)
Economic Satisfaction:	-0.033*	(0.015)	-0.021	(0.016)	-0.0032	(0.015)
Weekly Work Hours:	0.0031	(0.0018)	0.010**	(0.0018)	0.0077**	(0.0019)
Ever Unemployed:	0.059	(0.055)	-0.0089	(0.056)	0.0015	(0.056)
Political Perspective:						
Left/Right Scale:	0.051**	(0.012)	0.14**	(0.013)	0.14**	(0.012)
Interest in Politics:	-0.20**	(0.030)	-0.19**	(0.030)	-0.12**	(0.030)
Satisfaction with Government:	0.037*	(0.015)	0.025	(0.016)	0.0049	(0.015)
Satisfaction with Democracy:	0.011	(0.014)	-0.0030	(0.015)	0.021	(0.014)
Others:						
Satisfaction with Life:	-0.027	(0.014)	-0.033*	(0.014)	-0.036*	(0.014)
Trust in People:	-0.043**	(0.013)	-0.044**	(0.012)	-0.033**	(0.012)

*Note: * indicates statistical significance at 0.05 level, ** at 0.01 level.*

Conclusions

1. At the same level of anti-immigrant sentiment, materially threatened individuals show a slight preference for immigrants of the same race over immigrants of different races. Culturally threatened individuals significantly prefer immigrants of the same race over immigrants of different races and immigrants from poor countries. There is no evidence that cultural and material threat have different psychological effects on attitudes toward immigrants who are not of the same race. However, the preference of culturally threatened individuals for members of the same racial out-groups may call for a debate on the redefinition of xenophobia as cultural racism.

2. Attitudes toward immigrants of the same race are more contingent on macro-level factors such as satisfaction with the economy and government, while attitudes toward immigrants of different races are more determined by facets of individual well-being such as the individual's household income and active engagement in labor.

3. Extreme right-wing ideologies victimize immigrants from different racial groups and poor countries more than immigrants from the same racial group. Although interests in politics reduces anti-foreigner sentiment, this effect is still less pronounced for immigrants of different races and from poor countries.

References:

Ben-Nun Bloom, P., Arikan, G. & Lahav, G. (2015). The effect of perceived cultural and material threats on ethnic preferences in immigration attitudes. Ethnic and Racial Studies, 38(10), 1760-1778. DOI: 10.1080/01419870.2015.1015581.

Hayes, B. C. & Dowds, L. (2006). Social Contact, Cultural Marginality or Economic Self-Interest? Attitudes Towards Immigrants in Northern Ireland. Journal of Ethnic and Migration Studies, 32(3), 455-476. DOI: 10.1080/13691830600554890.

Semyonov M., Raijman R. and Gorodzeisky A. (2006). The rise of anti-foreigner sentiment in European societies, 1988–2000. American Sociological Review, 71(3), 426–449.

Interdisciplinary Social Sciences

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
Instituto de Biodiversidade e Sustentabilidade
NUPEM/UFRJ

The Effectiveness of Environmental Protection Councils: Participatory management and conservation of protected areas in Macaé, Rio de Janeiro, Brazil

COUTO, Suelen Ferreira Matoso (suelenmattoso@hotmail.com)
PhD student at Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil.

This presentation shows the results of preliminary research into the effectiveness and democratic nature of local environmental protection council in Macaé municipality, Brazil.

The studied city is known as the Brazilian oil capital, which has a high rate of deforestation in the Atlantic Forest, a biome that is one of the hotspots in Brazil (PROBIO, 2007). Macaé was strongly impacted by the petroleum industry that generated disorganized population growth, bringing socioeconomic, environmental and demographic impacts to the region (IBGE, 2011). Protected Areas (PA) are considered in situ strategies (SELLARS, 1997) that contribute to the conservation of species, protect genetic resources and scenic beauty, they are areas of scientific research, recreation and ecotourism (BENSUSAN, 2006). However, in Macaé, residents living around PAs generally do not participate in their management and do not have the right to decide on the use of the environment in which they live (LEAL, 2013). They are social groups with different forms of territorial appropriation, in this sense, it is observed that CUs are disputed territories. The present work is a preliminary result of my PhD research, in the interdisciplinary program of environmental sciences and conservation, of the Federal University of Rio de Janeiro. It covers two municipal PAs, using ethnographic research and interviews with members of the Environment Council, responsible for PA administration. The research consists of a literature review and the characterization of the mentioned area, in order to construct theoretical-empirical references. I try to understand whether the council is effective and whether the interests of the local people are represented in this democratic space.

For all this, we asked in this research: how the issue of environmental justice is handled by the Municipal Council of the Environment and Sustainable Development (COMMADS) of Macaé?

In the country, the creation of the Environment Councils has been strongly encouraged by the Brazilian Ministry of Environment, however, in most of the existing councils, government representation and participation is a majority, which increases the power to manipulate consensus and results the greater the representative social diversity, the greater the legitimacy of decisions).

After analyzing the minutes of the meetings in the period between 2010-2018, the most frequent topic in the Council's discussions is its own functioning, being recorded in minutes 158 times, followed by management actions for preservation or environmental conservation, with 68 mentions, and appreciation of laws, regulations and bureaucratic processes, with 51 mentions.

We see that the issues regarding the functioning of the Council still occupy a lot of space in its meetings, which may be due to the fact that there is a lack of autonomy of this council in relation to the Environment Secretariat or the short time of functioning of this Council, being still in constant adjustments. Among the issues that refer to the city's issues, management actions for preservation or environmental conservation are the most frequent, evidencing the existence of a concern with the theme. To which social groups these actions are interesting, is something that we will still analyze throughout the research. There are spaces for criticism, which is, at first, a democratic opening. The realization of this potential, however, depends on how they are later routed. The same can be said of the complaints. Environmental problems also appear among the themes, showing conflicts between ongoing actions and groups impaired by them, immediately or in the medium and long term. Works are a subject with some recurrence, which makes a lot of sense in a city in a period of economic expansion, and it is substantial that they are discussed, so that democratic decisions can be reached.

Although COMMADS was created in 2001, there is only record of minutes from the year 2010, that is, almost a decade of records have been lost.

So far, we have mapped the topics covered in COMMADS and the frequency with which they are mentioned in their meetings. How they are forwarded is something that will be addressed throughout the research.

Key words: Protected areas, environmental management, municipal councils, socio-environmental conflicts, Macaé.

BENSUSAN, N. **Conservação da biodiversidade em áreas protegidas.** Rio de Janeiro. Editora FGV. 2006. 176p.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Sinopse do Censo Demográfico 2010.** Rio de Janeiro, 2011.

LEAL, G. F. Justiça ambiental, conflitos latentes e externalizados: estudo de caso de pescadores artesanais do Norte Fluminense. **Revista Ambiente e Sociedade.** São Paulo. 16 (4): 83-102, 2013.

PROBIO. **Levantamento da Cobertura Vegetal Nativa do Bioma Mata Atlântica:** Relatório final. Rio de Janeiro: 2007.

SELLARS, R.W. **Preserving Nature in Nature Parks:** A history. London. Yale University Press. 1997. 380p.

Interdisciplinary Social Sciences