The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

| Grant Recipient Details	
Your name	Daniel Abugattas Salem
Project title	Do people care enough to do? Assessing attitudes towards marine wildlife: An instrument proposal – Peru
RSG reference	29.01.07
Reporting period	February 2007- November 2008
Amount of grant	£ 4880
Your email address	dabugattas@csa-upch.org
Date of this report	28/01/2009

"Men have an indistinct notion that if they keep up this activity of joint stocks and spades long enough all will at length ride somewhere, in next to no time, and for nothing; but though a crowd rushes to the depot, and the conductor shouts 'all aboard!' When the smoke has blown away and the vapour condensed, it will be perceived that a few are riding, but the rest are run over, and it will be called, and it will be, a melancholy accident."

Henry David Thoreau.

Geographical location of the project, population distribution and a brief explanation of sampling methods.

This project was carried out in the City of Lima, Department of Lima, Peru, with a current population bordering 8 million (INEI, 2007). Initially, this proposal considered limiting the sampling efforts only to Miraflores (coloured red in Map 1), one of the 43 districts of Lima and one of the 7 districts bordering the Miraflores bay, Lima's main coastline. However, restricting the sampling in this way would have represented a mayor flaw (bias) in the design and hence become a limiting issue in order to accomplish one of the main objectives of this project: creating a baseline for the entire Miraflores bay area. Therefore, in order to collect the necessary data for attitudes, knowledge and behaviours towards marine conservation in Lima, the scope of the project had to be expanded and more districts had to be included in the assessment.

Map 1: Geographical location of the project
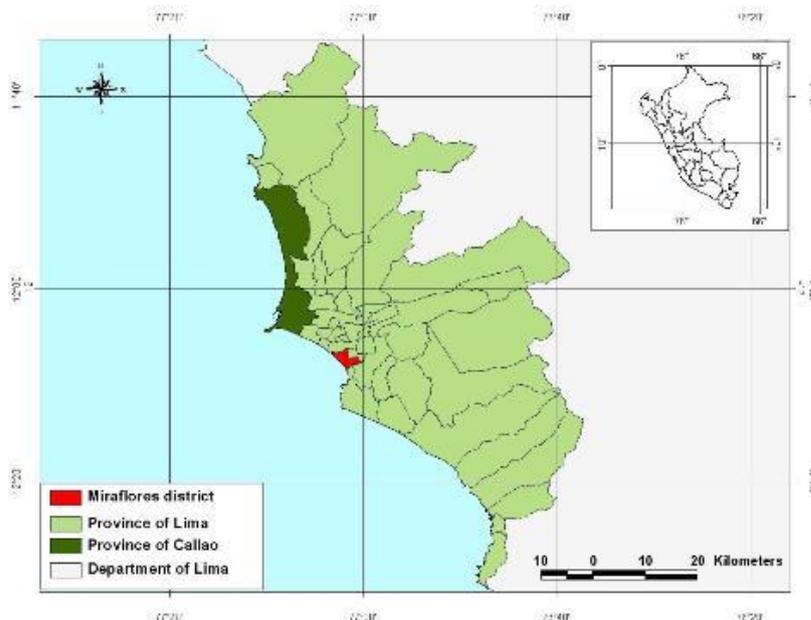
Considering the above mentioned, I redesigned the initial proposal to include two independent phases: (1) a pilot assessment (n=133), in order to test the performance of the instrument and of the pollsters; and (2) the main assessment (n=2891). In both cases the samples were randomly selected on the streets of metropolitan Lima (14 and 37 out of 43 districts were sampled for the pilot assessment and the main assessment, respectively), by a team of 32 trained pollsters that walked the streets and collected the samples. Detail of the surveyed locations is shown in map 2.

Map 2: Sampling zones in Lima and Callao
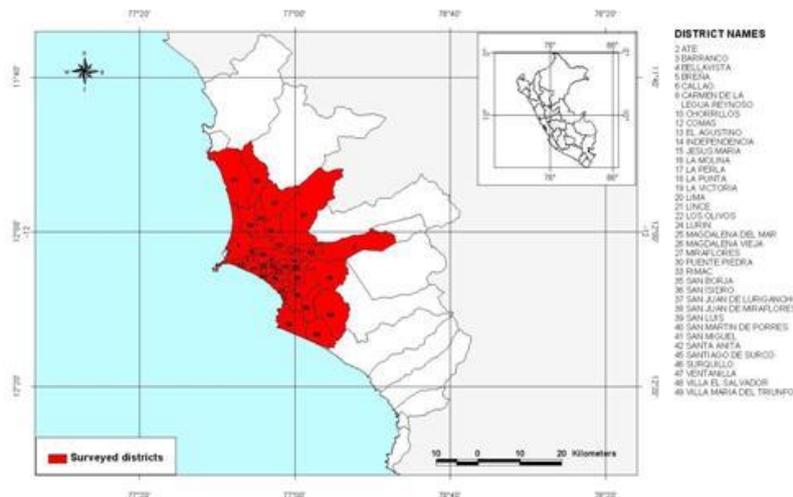
Current and historical pressures on Lima's marine ecosystems

The Peruvian population has quadrupled in the last 67 years, going from approximately 7 million (INEI, 1941) to the current figure of 28 million (INEI, 2007). Back in 1940, the population of Peru was distributed mostly along the Andes. In fact, 65% of the population was concentrated in the highlands, and only 28.3% lived along the coast. Later on, a major shift in population distribution resulted in 54.6% of the population living currently along the coast and only 32% living in the highlands. The coastal department of Lima has shown the most dramatic shift in population numbers from all of Peru, going from roughly 800,000 people in 1940 to 8.48 million in 2007, currently one third of the Peruvian population (INEI, 2007).

One cannot help to suspect that something has changed besides the number of people in the central coast of Peru. At some point in history we have taken the sea for granted (especially in Lima) and perceived it as indestructible (Majluf, 2008). The sea has provided wealth to this region for thousands of years and it still does, the Peruvian fisheries are the largest in the world based on one species and the second largest globally (FAO, 2005). The boom, decay and "spectacular revival" of the guano industry are also a consequence of the exuberance of this ecosystem (Cushman, 2003). The benefits obtained from the sea by this human community are undeniable and little has been done to explore the perception of this issue in coastal residents of Lima, until now. On top of this, pollution is also a matter of concern as for the last 60 years urban and industrial effluents form the City of Lima have been deposited into the sea without any prior treatment through 12 collectors located along Lima's coastline (SEDAPAL, 2008).

It shouldn't be a surprise that the baseline of perceived marine services diminishes year after year due to overfishing and pollution. The intense pressures imposed on this ecosystem have been able to degrade, and are still degrading, one of the more resilient systems in the world.

1. **Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

2.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Design an instrument (Likert type scale[1]) to assess attitudes, knowledge (expectations of the future) and behaviours towards marine conservation			X	The instrument is presented under the subject "outcomes of the project" in segment 3.
Pilot assessment in the District of Miraflores (n=133). Lima – Peru			X	The pilot assessment was carried out in 14 districts of lima.
Statistical validation of the instrument[2]			X	This process was done with the information gathered in the pilot assessment and corroborated with the data obtained in the main assessment. Content validity of the scale was tested with C.H. Lawshe's method (Expert criteria, see below). The reliability of the scale was tested in the pilot assessment, using Cronbach's alpha internal consistency index. As a result of this, an alpha of 0.839 was calculated for the 23 items used in the main assessment, indicating a high reliability for the instrument.
Expert criteria validation process			X	Eight judges were consulted, and even though we could accept an Item with 75% of agreement amongst judges, only items with total agreement were considered for the final scale. A marine biologist, a conservation biologist, 5 psychologists and a communications specialist acted as experts in the criteria validation process of the items.
Pollsters training workshop on the usage of the instrument (data gathering			X	Due to responsibilities with their respective universities, the pollster's team could not be gathered in one workshop, therefore, the group

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[1] A Likert-type scale consists of a series of declarative statements. The subject is asked to indicate whether he agrees or disagrees with each statement. Commonly, five options are provided: "strongly agree," "agree," "undecided," "disagree," and "strongly disagree." Other Likert-type scales include four or six steps rather than five, excluding the undecided position. In this scale only 4 answer options were provided excluding the possibility of a neutral position towards any of the statements, therefore, reducing the central tendency bias.

[2] A necessary step towards creating a useful and appropriate instrument. Internal consistency (consistency of results across items within a single test), validity (measuring what it is supposed to measure) and reliability (measuring something consistently throughout time) was calculated using the Statistical Analysis Software: SPSS® Base 15.0 for MAC®

and systematization)				was divided and 2 workshops had to be scheduled in order to complete the training process. A third workshop had to be scheduled for the group participating in data systematization, in order to explain how to enter the data properly into the database.
Assessment of attitudes towards marine wildlife in the City of Lima			X	The full assessment was expanded to a total of 37 districts and around 3500 individuals were surveyed from which only 2981 could be included in the assessment. The remaining had to be excluded from the sample due to incomplete information provided by the respondents. The sampling procedure consisted of personal interviews based on the instrument developed for this project (see Annex 1). Pollsters approached subjects, of both sexes and all ages, in public spaces and asked if they were willing to participate in the assessment. The first approach included a thorough explanation of the project objectives and goals. Complete honesty was explicitly requested in all cases and, respondents were verbally assured that participation would remain absolutely anonymous.
To involve an interdisciplinary group of students in the implementation of the project.			X	The pollster's team was formed of undergraduate students from the areas of Psychology, Biology and Communications. We worked with the same team for the pilot and main assessment. A list of the participants' names can be found in annex 2.
Establishment of a baseline of attitudes, knowledge and behaviours towards marine conservation for the City of Lima.			X	The information collected with this project represents the first baseline of attitudes, knowledge and behaviours for the population of Lima concerning marine conservation issues. It is important to mention that the city of Lima is the most populated area of the Pacific coast of South America, therefore, the actions and decisions undertaken by this community will ultimately play a decisive role in the future of this marine ecosystem.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The biggest difficulty that arose during the implementation of the project was the expansion of the sampling area whilst trying to stay on schedule with the planned activities. The inclusion of several

new districts (37) in the assessment represented an operational challenge, both, in the gathering and the systematization of the data. The number of surveys each pollster had to perform increased considerably and so did the number of sites they had to visit all around Lima. This meant that each pollster had to complete 150 surveys in 3 public places. Therefore, this issue was tackled by re-designing the sampling operational strategy. It is important to mention that a major factor that helped in the success of the assessment was, unquestionably, the commitment and excellent work shown by the pollsters.

3. Briefly describe the three most important outcomes of your project.

A. The first instrument to specifically assess attitudes, knowledge and behaviours towards marine conservation in the city of Lima.

The instrument has 6 socio-demographic and economic questions and 23 items, it consists of propositions that the respondent can agree or disagree with. The answer options for the items were specified to: CA (completely agree), A (agree), D (disagree), and CD (completely disagree). No intermediate or neutral option was included to avoid central tendency bias. The socio-demographic and economic information collected from each participant included the variables of age, sex, place of birth, district of residence, religion, family monthly income and level of education. Family monthly income in Peruvian Nuevos Soles was divided in three ranges: from 0 to 1000, from 1001 to 4000 and from 4001 upward. This gross division responds to the current socio-economic structures and family income dynamics in Lima (Ipsos Apoyo, 2005). This was also done to encourage response from the participants, given that the answer to this question reveals very intimate and delicate information. The items included in the instrument were divided in three domains: 7 items for expectations of the future, 10 for attitudes and 6 for behaviours (the instrument structure is summarized in Table 1).

Table 1: Domains assessed by the instrument

Domain	Category	Description
Knowledge: expectations of the future[3]	Rational Optimism	Agreement with an optimist proposition when there is evidence supporting such proposition.
	Irrational Optimism	Agreement with an optimist proposition when there is no evidence supporting such proposition.
	Rational Pessimism	Agreement with a pessimistic proposition when there is evidence supporting such proposition.
	Irrational Pessimism	Disagreement with an optimistic proposition when there is evidence supporting such proposition.

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[3] Expectations of the future: Initially this dimension was considered as "knowledge" but a new category was needed, considering the little importance that knowledge per se has in relation with the objectives of the present study. The expectation that an individual has concerning the future of marine ecosystems reveals more clearly the interaction between his attitudes and his knowledge on this issue. In this sense, we can explore the role that information, or the lack of it, is playing in the subject.

Attitudes (Kellert, 1978)[4]	Domination Attitudes	They denote a preoccupation for maintaining control of nature's components.
	Aesthetic Attitudes	A special valuation of the perceptual aspects of beauty derived from nature's observations.
	Utilitarian Attitudes: Management	Practical value of natural resources.
	Conservation Attitudes	Special concern for maintaining healthy processes in marine ecosystems.
	Coexistence Attitudes	Special consideration when interacting with marine and coastal species
	Adscription of Responsibility	Adscription of responsibility of the care of their marine ecosystem
Behaviours[5]	Unsustainable behaviours	Behaviours that have a negative impact on the coastal environment
	Sustainable Behaviours	Behaviours that have a positive impact on the coastal environment

Some of the items were adapted from the NEP scale (Dunlap et. al, 2000), a survey designed by Jennifer Wolch, (Wolch, 2001) and some have been developed specifically for this project. The attitudinal categories are a modified scheme of Kellert's typology of attitudinal dimensions (Kellert, 1978).

B. The baseline information of knowledge (expectations of the future), attitudes and behaviours towards marine conservation in Lima.

As stated above, the information collected during the length of this RSG represents the first baseline of attitudes, knowledge and behaviours for the population of Lima concerning marine conservation issues. It is important to mention that the city of Lima is the most populated area of the Pacific coast of South America. In other words, this is the biggest human community on the Pacific coast and specifically within the Humboldt ecosystem. Therefore, the actions and decisions undertaken by this community will ultimately play a decisive role in the future of the more productive marine ecosystem in the world. Furthermore, conservation initiatives have not been able to measure their impacts and results objectively in terms of behavioural modification and attitude change because no baseline data was available to compare these variables before and after campaigns. Consequently, this baseline and this instrument enable conservation researchers and practitioners to evaluate their progress in enhancing awareness and participation of the local community.

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[4] Attitudes: This component has been divided in 6 types of attitudes (Table 1). Even though attitudes do not explain behaviour in a causal manner, they are a good indicator of the future lines of action that an individual is prone to execute (Barr, 2006).

[5] Behaviours: This dimension is divided into two categories (Sustainable and unsustainable behaviour), and is presented in the form of propositions that describe actions to which the respondent can agree or disagree to perform.

C. The possibility of developing future studies (monitoring and evaluation of future attitude and behaviour modification strategies)

One of the major contributions of the present project is the opening of the field of conservation psychology in Peru. Working with psychology and communication students as part of the pollster team has resulted in 3 undergraduate psychology students deciding to work this subject on their thesis and 2 communication students proposing a communication strategy to raise awareness of the environmental problems in Miraflores as their thesis. They will be able (and have been encouraged) to use the baseline data and the instrument as a measure of success of their own communication strategies.

With the existence of this new baseline there are possibilities for replication and adaptation of the tools here developed along the Peruvian coastline. In fact, a new assessment is planned in San Juan de Marcona (a mining and fishing coastal town in the south of Peru that is very different to the City of Lima and its characteristics) as part of the activities undertaken there by the Centre for Environmental Sustainability (CSA).

The aim is to have other researchers and segments of the population using the obtained results; therefore, they will be made available to all future researchers involved in behavioural or attitudinal modification initiatives for conservation purposes.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

It is important to consider that in this specific project the local community was the subject under study. For that reason, the involvement of the local communities is reflected in the approximately 3500 respondents that kindly agreed to participate in the survey.

Also, the involvement of students from different universities and careers as part of the team has resulted in very interesting synergies amongst them and in their individual interests. As mentioned above, 5 of the students (from psychology and communication) have directed their attention to the current state of Lima's marine environment, deciding to develop their thesis on the subject using the tool developed for this project and the assembled baseline.

Furthermore, and most recently, I have been part of a course on *Ecology and Conservation of marine/coastal vertebrates* where I was able to share my work with 15 biology students from Cayetano Heredia University. I gave a lecture at Punta San Juan de Marcona on the methods and tools that the social science has to offer, and their importance for conservation practice. The main objective of this lecture was to propose an incorporation and revalorization of qualitative and quantitative psychological and social data in conservation research.

5. Are there any plans to continue this work?

Yes, this work is the first step in an ongoing effort to promote a sustainable interaction with our marine ecosystems, raising environmental awareness and exploring the role of the individual in finding solutions to environmental problems.

A similar assessment is being planned in San Juan de Marcona for this year, as part of a bigger initiative that aims to describe the different perceptions and interactions between different coastal populations along the Peruvian coastline.

6. How do you plan to share the results of your work with others?

Considering that the main results of this project are two: (1) the created instrument and (2) the information gathered with the instrument; I have shared my results in two different areas.

I presented the instrument and its preliminary psychometric properties in 2007 at the American Psychological Association 115th Annual Convention in San Francisco, from which an unexpected opportunity to share the results with the psychological community appeared. The project and the instrument where covered by an article in a widely read psychology magazine, the *Monitor on Psychology*. I'll refer to this issue later in segment 10, under the subject of project publicity. Furthermore, I will make the instrument available to conservation researchers and practitioners through the RSGF and the Centre for Environmental Sustainability websites.

On the other hand, the information gathered with the instrument was presented and discussed as part of a symposium at the XXIX International Congress of Psychology in Berlin (2008) under the title of: *The culture that was born of the sea, and then turned its back to it*. This was an excellent opportunity to share the results outside of Peru and present the current problem in the City of Lima to its full extent within a socio-cultural and historical perspective. This paper has been submitted to the *Journal of Comparative Psychology* and it is currently under revision.

The immediate communicational objective has to be the revitalization of the public debate on the importance of maintaining a healthy marine ecosystem in Lima and its implications on public health, human development and quality of life. What is being done with the Miraflores Bay is not only detrimental to marine biodiversity, but a flagrant violation of human rights. I have plans on preparing a short documentary presenting, in very simple terms, the main factors affecting this situation along with the perception that Limeninans have on this issue, as an attempt of informing the layman and raising the public and political debate in Lima.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The anticipated length of the project was exceeded due to unforeseen limitations in the original proposal. A timescale was presented (Table 2), considering a total of 10 months for the completion of the project; however, the actual length of the project was of 18 months. Initially, Miraflores was the only district to be surveyed, therefore, activities concerning data gathering and processing were scheduled to last 3 months, from start to end. However, this had to vary, as mentioned above, due to the larger sampling efforts needed in order to include and assess a representative sample of the population of the City of Lima.

Considering that the letter of acceptance of the project was issued on May the 24th, 2007 and that the funds were received, approximately a month later, we can establish that the RSG funds were used from July 2007 to October 2008 (a 15 month period). The modified timescale of the project's

activities presents the actual development of the project. As shown in Table 2, data gathering and processing took 10 months to complete, 7 months more than originally planned, altering with this the course of the original proposal.

Table 2: Anticipated vs. actual length of the project

ACTIVITY /MONTH	M-07	J	J	A	S	O	N	D	J-08	F	M	A	M	J	J	A	S	O	N	D
Item development*	X	X																		
Instrument design		X	X																	
Expert criteria validation process**			X	X																
Data gathering***				X	X	X														
Data processing					X	X														
Statistical validation process****						X	X	X												
Draft Report							X	X												
Final Report and Instrument									X	X										

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[   ]  : Actual timescale of the project
  X    : Timescale presented in the proposal
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*Item development: During the item development process, test questions were created, in order to reflect the key topics to be assessed. These are logical derivations of the indicators that were measured (see Table 1). This process is in itself the assembly of the instrument.

**Expert criteria validation process: A common procedure used in psychometric design to increase content validity (logical validity) of the instrument. 8 judges reviewed the items developed and grade them in a 3-point scale, then the Aiken's V statistical test was used to determine which items were appropriate for the instrument.

***Data gathering: This activity took place in public places across the 37 districts surveyed in the City of Lima from September 2007 through to March 2008. 32 pollsters were trained to collect the data appropriately. The sample was accidental and probabilistic.

****Statistical validation process: A necessary step towards creating a useful and appropriate instrument. Internal consistency (consistency of results across items within a single test), validity (measuring what it is supposed to measure) and reliability (measuring something consistently throughout time) were calculated using the Statistical Analysis Software: SPSS® Base 15.0 for MAC®

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Pollsters Training workshop on the usage of the Instrument	60	60	0	Even though only 1 workshop was budgeted, a total of 3 workshops were organized
Pollsters (*Per diem*, Food, Transportation, etc.) 32 Pollsters/ **£40 per person**	900	1280	-380	As explained in segment 2, the sampling area was considerably enlarged, therefore the amount each pollster received was increased by £10 and 2 more pollsters joined the team.
Office supplies	300	300	0	
Transportation (Fuel)	200	270	-70	As a result of the increase in the sampling area larger distances had to be travelled
Statistical Analysis Assistant	500	300	200	One of my co-workers at the CSA helped me with part of the analysis reducing the Statistical Analysis Assistant work load
Statistical Analysis Software: SPSS® Base 15.0 for Windows®	320	320	0	
Lap top	800	800	0	
Publication	400	0	400	Due to the difference originated by the increase of expenditure for the pollsters, this item could not be completed as planned.
Contingency Funds	200	200	0	4 members of the pollster's team were hired to introduce data in the database.
Stipend	1200	1200	0	
TOTAL	4880	**4730**		The remaining £150 will be destined to print materials for decision makers. These will be distributed in every district's Municipality.
				Exchange rate £ / $: 1.924364754 Exchange rate S/. / $: 3.11

9. Looking ahead, what do you feel are the important next steps?

One of the clearer results obtained by the assessment is that respondents agree with the fact that the bay is polluted and degraded, but are largely unaware of the factors influencing the situation. In consequence, an important next step is to properly inform the population about the real condition

of the Miraflores Bay, especially to the users (fishermen and surfers, who are present all year, and also to the large number of visitors that crowd the beaches every summer).

Another important next step is to promote research initiatives that can take advantage of the information gathered by this project and replicate the assessment in different locations.

An additional next step is to share the results of the project with the municipalities of every coastal district, since they are responsible for the beaches management and clean up.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The RSGF logo was used in every material related to the project, including all of the surveys used for the pilot and final assessments, as it is shown in annex 1.

Also, the RSGF logo was present in both of my presentations at the American Psychological Association (APA, 2007)[6] annual convention in San Francisco, where the statistical validation of the instrument was presented, and at the International Congress of Psychology (ICP, 2008)[7] in Berlin, were results were discussed within a socio-historical perspective.

As a result of the presentation in San Francisco, the project was covered by the *Monitor on Psychology* magazine in an article called "*Seaing more Clearly*", in which the RSGF is mentioned explicitly as the funding agency behind this project. Monitor staff Erika Packard wrote the article and it appeared in Volume 38, No. 9 October 2007. The original article can be found at the *American Psychological Association* website (http://www.apa.org/monitor/oct07/seaing.html) or it can be accessed through a link on the RSGF site.

11. Any other comments?

a.) Fortunately, Dr. Patricia Majluf, director of the Centre for Environmental Sustainability at Cayetano Heredia University (UPCH), has shown great interest in the field of Conservation Psychology and is being of great support in order to continue this work. The structure of a Conservation Psychology graduate program has already been presented to the Faculty Council as a joint venture between the CSA and the Psychology Faculty at UPCH. This would be the first educational program on Conservation Psychology in all of South America.

b.) I would like to express my deepest gratitude to the Rufford Small Grant Foundation for making this project a reality. I would also like to thank the unconditional support of the team at the Centre for Environmental Sustainability (CSA) of the Cayetano Heredia University and every student and respondent that made this possible.

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[6] 2007: 115th Annual Convention. American Psychological Association – APA (San Francisco): *Assessing Attitudes towards Marine wildlife – Do people care enough to do? An Instrument Proposal*.

[7] 2008: XXIX International Congress of Psychology – ICP (Berlin, 2008). The Culture that was born of the sea, and then turned its back to it

c.) Thanks to Dr. Elise L. Amel for organizing the session at San Francisco were the instrument was presented.

d.) Finally, I would like to thank Dr. Ethel Tobach from the American Museum of Natural History and Dr. Regina A. Kresseley from the J. W. Goethe-University Frankfurt am Main for inviting me to share my results in Berlin.

Annex 1: List of pollsters that participated in this project

Name	Surname	University	Faculty
Sara	Pino	UPCH	Psychology
Edna	Tong	UPCH	Psychology
Lourdes	Mochizuki	PUCP	Communication
Carla	Tello	PUCP	Communication
Cecilia	Benavides	PUCP	Communication
Vannesa	Alcázar	PUCP	Communication
Antonio	Echphil	UPCH	Psychology
Nadia	Degregori	PUCP	Communication
Carolina	Andrade	PUCP	Communication
Daniel	Nakasone	PUCP	Communication
Manuel	García	PUCP	Communication
Ruth	Polett Pulido	UPCH	Psychology
Fanny	Caballero	UPCH	Psychology
Ximena	Giraldo	PUCP	Communication
Carlos	Peralta	PUCP	Communication
Natalia	Montenegro	PUCP	Communication
Yta	Roncal	PUCP	Communication
Patricia	Velarde	PUCP	Communication
Maria José	Ferrer	PUCP	Communication
Claudia	Tejeda	PUCP	Communication
Noelia	Rivero	UPCH	Psychology
María del Carmen	Cadillo	UPCH	Psychology
Fiorella	Poma	UPCH	Psychology
Antonio	Echevarría	UPCH	Psychology
Luciana	Lopez	UPCH	Psychology
Melissa	Caballero	UPCH	Psychology
Marita	Calderón	PUCP	Communication
Efraín	Bedoya	PUCP	Communication
María Belén	Gallardo	PUCP	Communication
Alejandra	Watanabe	USMP	Communication
Katia	Nakamura	UPCH	Biology

Annex 2: Instrument to assess Attitudes, Knowledge and behaviours towards marine conservation

IMPORTANTE: Lea cuidadosamente las siguientes instrucciones	Esta encuesta es totálmente anónima
A continuación, usted encontrará una serie de enunciados en relación al Mar. Porfavor indique si usted está COMPLETAMENTE DE ACUERDO (CA), de ACUERDO (A), en DESACUERDO (D) o COMPLETAMENTE EN DESACUERDO (CD) con lo que manifiesta cada enunciado. Agradeceremos su completa honestidad.	

Datos generales			
Edad:	**Sexo:** Masculino ☐ Femenino ☐	**Distrito Ap:**	
Lugar de nacimiento:			
Distrito de residencia:			
Religión:			
Ingreso familiar mensual (s/.):	0 - 1000	1001 - 4000	4001 - más
Grado de Instrucción:	Colegio	Instituto	Universidad

#	Items	CA	A	D	CD
1	El mar es delicado y fácilmente alterable.				
2	Los humanos deben dominar al resto de la naturaleza.				
3	Me siento triste al ver el estado en el que se encuentra el mar de Lima.				
4	Debemos cuidar el mar para que las siguientes generaciones también puedan disfrutarlo.				
5	Aunque hay contaminación continua de mares, ríos y aire, la naturaleza hace que todo retorne pronto a la normalidad.				
6	La contaminación del mar es perjudicial para la salud humana.				
7	Tenemos derecho a extraer del mar todo lo que queramos.				
8	Cuando veo el mar, siento algo agradable que es difícil explicar.				
9	Todos tenemos la responsabilidad de cuidar el mar.				
10	La verdad es que sólo pienso en las playas en verano.				
11	Cuando veo a alguien ensuciando las playas me gustaría hacerle saber cuanto me molesta que lo haga.				
12	Debido a su ingenio, los seres humanos podrán sobrevivir aún cuando el medio ambiente esté muy degradado.				
13	Si la situación continúa igual, pronto muchas especies marinas van a desaparecer.				
14	Si toda la costa de Lima fuese más limpia, esta ciudad sería más bonita.				
15	Mientras que los métodos de pesca sean eficientes, no me molesta que hagan daño a otras especies marinas.				
16	Lo bueno del mar es que se limpia a si mismo por el movimiento de sus corrientes.				
17	El que niega los problemas de contaminación del mar se está tapando los ojos.				
18	Se debe eliminar a los animales marinos que interfieran con las actividades humanas.				
19	Estaría dispuesto a aceptar un pequeño incremento de mis gastos el próximo año para promover la limpieza del mar limeño.				
20	Pienso que es normal arrojar los desperdicios al mar.				
21	Por más que vea a otra persona arrojando basura al mar, siento que no es mi deber corregirlo.				
22	Apoyo que cobren impuestos a todos aquellos que originen contaminación en el mar.				
23	Si alguna especie debe sufrir por la contaminación del mar, no seremos nosotros.				
	Muchas gracias por su colaboración				