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Supervised Project Report (ANTA604)

Do you see what I see? Using visual framing to support the protection and preservation of Antarctica and the Southern Ocean

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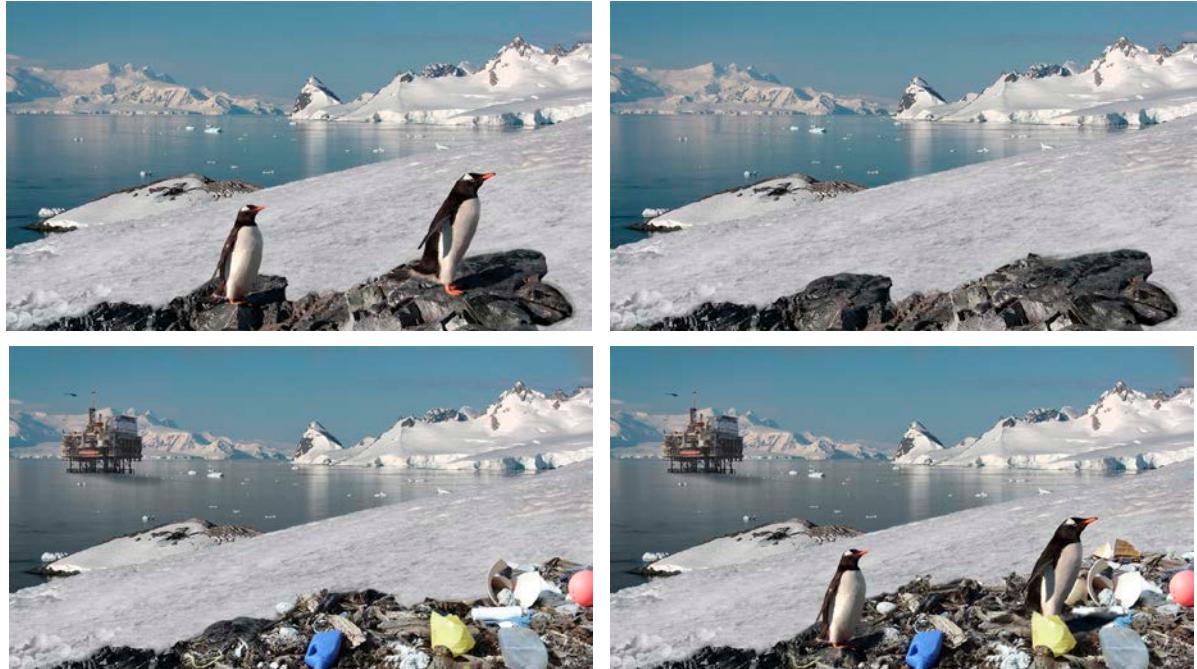
Abstract:

Research on the meta-communication concept of ‘framing’ has demonstrated that people can respond very differently to ideas, policies or even identical data when it is framed in different ways. To date most research on framing has focused on language.

The primary objectives of this research were to explore whether visual imagery presented in combination with powerful written stimulus had any impact on: a) the degree to which people believed Antarctica and the Southern Ocean were regions that should be preserved and protected from irreversible damage (salience), and b) their propensity to financially support well-known, not-for-profit (NFP) organisations that aim to protect and preserve Antarctica and the Southern Ocean. Secondary objectives included whether visual framing influenced perceptions of: 1) specific threats to these regions, 2) mitigation priorities, and 3) the effectiveness of taking various actions to protect and preserve Antarctica and the Southern Ocean.

To examine these questions, we constructed five self-complete, on-line surveys that were emailed to 15,929 currently inactive World Wide Fund for Nature (Australia) financial supporters. Approximately 2% (n=307) were completed and returned.

Results from this study showed no statistically significant differences on the primary or secondary measures. Whether this was due to the sample size being too small, the lack of variation across the sample in key measures, bias or moderating factors being at play, or whether the visual frames devised for this research were not potent enough, is unclear. Further research using different visual frames, or the same visual frames to more people or a broader, potentially less biased segment of the community is recommended.



Do you see what I see?

Using visual framing to support the preservation and protection of Antarctica and the Southern Ocean



Report compiled by:

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for the Post-graduate Certificate in Antarctic
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Introduction

The broad concept of framing can be traced back more than 30 years to work in psychology, sociology, cognitive linguistics and communication. The psychological origins lie in the experimental work by Kahneman and Tversky, for which Kahneman won the 2002 Nobel Prize in economics. Put simply, framing is a type of cognitive bias where people are influenced differently, and react differently, depending upon how information is presented to them. Research on the effects of ‘framing’ gathered pace after Tversky and Kahneman (1981) demonstrated that using alternate framings of problems or outcomes could systematically reverse decisions people make. Following Tversky and Kahneman (1981), several studies examined the effects of valence framing where presenting the same information (such as a glass “half full” or “half empty”) affects judgment and decision-making (Frisch 1993, Keren 2010).

After reviewing a growing collection of research on framing effects, Levin et al. (1998) categorised framing into three types: risky choice framing, attribute framing and goal framing. A famous example of the first type (risky choice framing) comes from Tversky and Kahneman’s (1981) ‘Asian disease’ example that demonstrated reversed preferences of people presented with two options, depending on whether they were presented in a positive (‘lives saved’) or negative (‘lives lost’) frame. The second type, attribute framing, has been shown to bias evaluations of objects or events. Levin and Gaeth (1998) for example, found that the quality of ground beef was evaluated more highly when it was labeled as ‘75% lean’ (a positive frame) compared to ‘25% fat’ (a negative frame). While the descriptions are empirically equivalent, the positive frame resulted in a more favourable assessment, possibly because it elicits more positive associations in the memory (Levin et al. 1998).

This study focuses on the third type – goal framing. This normally relates to the presentation of a message either in ‘gain’ terms when taking a certain action, or ‘loss’ terms when not taking a certain action. Goal framing is typically used in health related contexts to influence particular behaviors that may be either health-promoting or disease-preventing, such as promoting breast screening (Meyerowitz and Chaiken 1987) or using sunscreen

(Rothman et al. 1993). A key aspect of goal framing is that responses differ depending on whether the frame is positive or negative. Positive frames convey positive consequences from taking a certain action, whereas negative frames convey the likely negative consequences from not taking the action. Goal framing has recently been applied in two New Zealand studies by McClure et al. who examined the effects of positively- and negatively-framed messages on the preparation intentions of residents in earthquake-prone Christchurch (2009), and later in Wellington (2011). In these studies the two possible outcomes of experiencing an earthquake were framed in ‘gain’ terms as ‘surviving in good shape’ or ‘loss’ terms as ‘experiencing harm’. It is important to note however, that all goal framing studies examine loss/gain trade-offs, and none have looked at loss/maintain or maintain/gain frames (i.e. keeping the status quo as one option).

Uniquely, this study for the first time utilises a loss/maintain goal frame scenario, with an examination of the visual impact of frames to encourage the preservation and protection of Antarctica and the Southern Ocean (i.e. stimulate the goal of maintaining the current situation) versus its potential degradation (i.e. creating a deemed loss)*.

*The assumption here of course is that such a loss is avoidable and more important than any potential gain (e.g. losing marine biodiversity is more important than harvesting fish for human consumption).

Visual framing

Despite an increasing number of studies focusing on the concept of framing, the majority of these have focused on the aspect of language. Relatively little research has examined the impact of images – either as stand-alone elements, or accompanied by text (Rodriguez & Dimitrova 2011).

In the existing studies, visual framing (similarly to language framing) has been shown to influence the reactions people have, the messages they take away, and whether they take any action based on the communication they have received (Nicholson-Cole 2005).

Interestingly, a retrospective analysis of media-sourced visual framing and climate change engagement suggested that visual frames play a role in either increasing the importance of an issue (salience), or promoting a sense of empowerment, however not both at the same time (O’Neill et al. 2012)

When it comes to engaging community support for ‘greater than self’ causes, and support for not-for-profits (NFPs), little research has been undertaken to determine what types of visual frames are the most effective, and particularly when the goal of the communication is to encourage a financial contribution or general support for a cause. This is not to say that visual frames have not been applied in such circumstances, either consciously or unconsciously. For example, in 1989, Greenpeace used an image of an oil spill in the Arctic to campaign against proposed oil and mineral exploration in Antarctica. This example of a visual “loss” frame (i.e. if we don’t take action, Antarctica as a pristine unspoiled place will be lost) was credited with significantly contributing to the decision in 1991 by Antarctic Treaty members to adopt a new Environmental Protocol which incorporated a 50-year minimum ban on all mineral exploration.

The present study

Based on previous research (Gamlie & Kreiner 2013, Nicholson-Cole, 2005, O’Neill et al. 2013, Seo 2008) it was predicted that visually framing conservation outcomes for Antarctica and the Southern Ocean as either positive (‘maintain’ frame) or negative (‘lose’ frame) may influence perceptions of the salience of the issue, and inclination to take action. On the premise that Antarctica and the Southern Ocean is a wilderness region that should be preserved rather than exploited, the primary objectives of this research were to explore whether visual imagery presented with written stimulus had any influence on:

- a) the degree to which people believed Antarctica and the Southern Ocean were regions that should be preserved and protected from irreversible damage (salience), and
- b) their propensity to financially support well-known, NFP organisations that aim to protect and preserve Antarctica and the Southern Ocean.

Secondary objectives were to examine whether visual framing influenced perceptions of:

- a) specific threats to these regions,
- b) mitigation priorities,
- c) the effectiveness of taking various actions to protect and preserve Antarctica and the Southern Ocean.

Materials and methods

This research was carried out using five separate but identical online surveys of between 10 and 12 minutes in length. The only difference between the surveys was the image used in the banner of each questionnaire. Four versions of the survey each carried a different banner image, and one version had no image at all. An invitation with a link to the survey was emailed to a database of 24,084 previous (currently inactive) WWF Australia financial supporters, over a two-week period from 20th January to 6th February 2014. Sample demographics were compared to the WWF database on the basis of location and gender, however not enough data was available in the WWF database to differentiate on the basis of age. People were randomly allocated into five sub-groups and each group received a different version of the survey. Email invitations were staggered over four days during the survey period, and the emails were further subdivided on those days into morning and afternoon batches. Reminder emails were sent to those who did not open the original email invitation after 7 days, or did not click on the link to the survey after 7 days. The reminder invitation was identical to the original except for a change to the subject line of the email.

Rationale for image choice

In order to remove variables other than those being tested, the same stock photo image was digitally altered to create landscape scenes that were identical apart from the removal or addition of various elements. The ‘original’ image was chosen as a representation of both the terrestrial and marine elements of Antarctica, in order to reflect WWFs conservation focus on ‘Antarctica and the Southern Ocean’. The elements of the four final images were chosen to represent either a positive condition (“maintain” frame) or a negative condition (“lose” frame) (Figure 1). Penguins (an iconic symbol of Antarctic wildlife) were removed or added to these scenes to test whether the presence of wildlife had any influence on the power of the positive or negative frame.

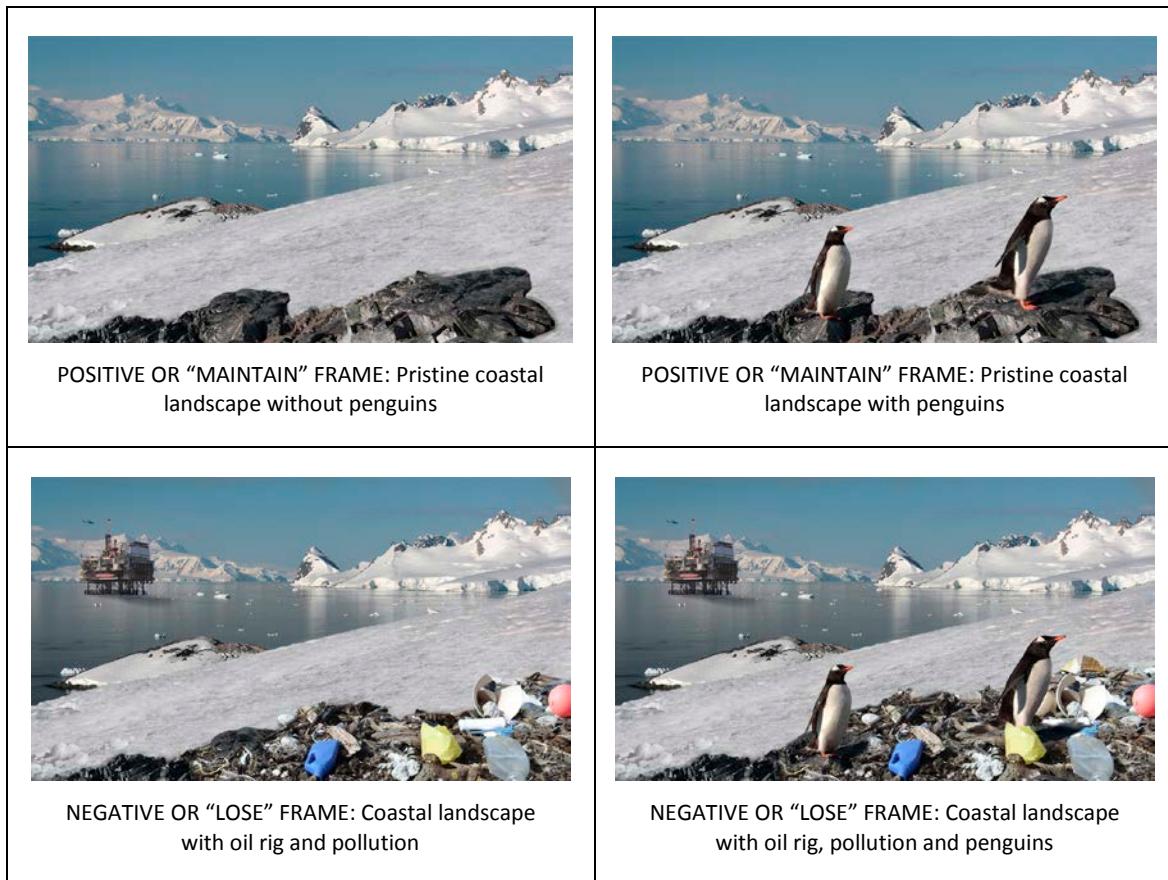


Figure 1: The digital alterations to the coastal Antarctic landscape to create positive and negative frames.

Structure of the survey

Before being presented with the survey questions, respondents were asked to carefully read a written 'stimulus'. This consisted of a few short paragraphs of information about Antarctica and the Southern Ocean that suggested some potential threats posed to this region. The stimulus was designed to reflect the tone and style of information that WWF and other not-for-profit conservation organisations regularly provide to their supporters, in order to measure responses in something close to a 'real world' communications scenario. Respondents were then presented with the first primary research question: "*Thinking about Antarctica and the Southern Ocean, how important is it to preserve and protect these regions from irreversible damage?*", and were asked to rate this from 0 to 10 (0 being not important at all, and 10 being very important). While there are distinct semantic differences between the terms 'preserve' (maintain without change) and 'protect' (keep safe from harm or damage), they are often used interchangeably in communications from conservation organisations such as WWF, Greenpeace and Australian Conservation

Foundation. Both terms were used in tandem throughout the survey to avoid any confusion or uncertainty caused by using just one or the other.

The first primary question was followed by a series of supporting research questions (Appendix I), which explored other issues including perceptions of specific threats to Antarctica and the Southern Ocean, perceived priorities of potential mitigation actions, and some basic values (Schwartz 2009) associated with preserving and protecting Antarctica. Included in these questions was the second primary measure – the likelihood of donating to well-known conservation organisations in the future. Finally, some demographic data was collected such as age, gender, education, employment and income.

Results

Response rates, demographics and data accuracy

Of the 24,084 total emails sent, 15,929 were successfully delivered and 307 surveys were completed, giving a response rate of 2%. Respondents were generally well educated (64% with a university degree or higher), the majority were in a relationship (67%), without children in the household (71%), and mainly employed (67%) or retired (18%). Almost half the respondents (48%) were aged between 45 and 64. The demographic profile of the total respondents was similar to the WWF database on the basis of location, but comprised 17% more females and 24% fewer males (Figure 2). Based on the sample size of 307 respondents, a total population of 24,084 and a confidence level of 95%, the confidence interval at maximum variation (50%) was calculated at $\pm 5.56\%$. (This assumes the WWF ‘non active donors’ database is a defined target population group as was the case in this survey. These results cannot be projected to the Australian general population).

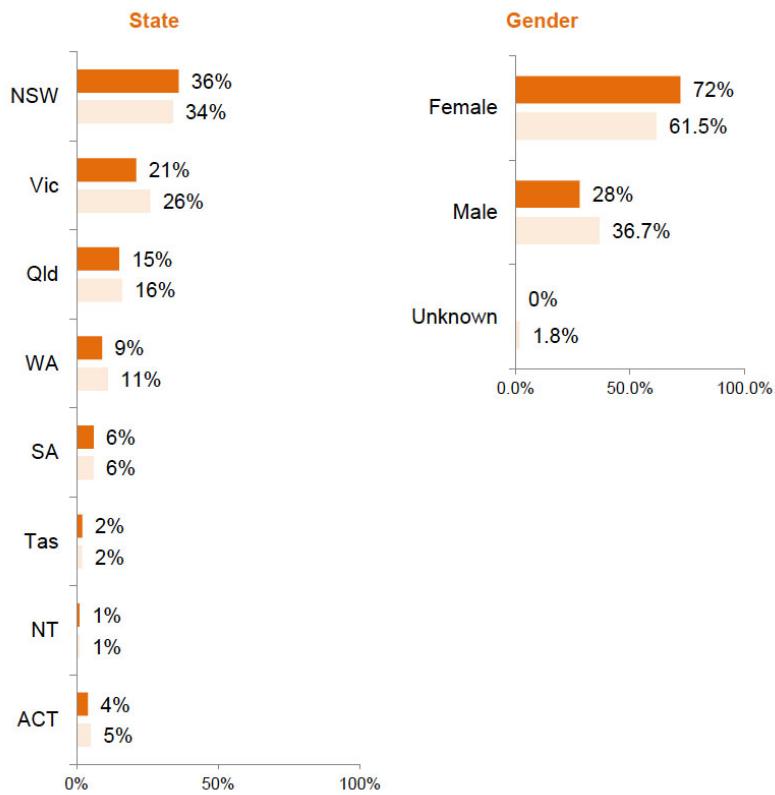


Figure 2: Comparison of the total sample ($n=307$) in dark orange, and the WWF database (light orange), showing that the location demographic by State was similar, but there were slightly more female and slightly fewer male respondents compared to the WWF database.

Framing effect

The outcomes of this study showed no statistically significant differences between questionnaire versions for the first primary measure – the importance of preserving and protecting Antarctica and the Southern Ocean from irreversible damage. There was a distinct lack of variation across the sample, with 95% of respondents providing an importance rating of 9 or 10 out of 10 for the first primary research question (mean score $9.7 \pm 2.42\%$). This result made it impossible to discern differences between questionnaire versions, and so the outcomes of the visual framing element of the research were inconclusive. In addition, there were no statistically significant differences between the questionnaire versions for the other primary measure – the propensity to donate in the future, nor for any of the supporting research questions, including perceptions of potential threats, mitigation priorities and their effectiveness, or basic values.

Other observations

An analysis of collective responses to the supporting research questions did produce some interesting results (unrelated to framing). In paired comparisons of the digitally manipulated landscape scenes, respondents were asked which image most makes them feel that protecting Antarctica and the Southern Ocean is important (Appendix I, Questions 8-13). There was no discernable difference for most of these questions, however for two of the comparisons there was a strong preference for one image over the other. Between the two positive images showing a pristine landscape (Question 11), 86% preferred the image without penguins, versus 6% for the scene that included penguins (7% no preference) (Figure 3). In a comparison of the two negative landscape images showing the oil rig and pollution (Question 12), 77% preferred the version without penguins, versus 10% for the image that included penguins (13% no preference) (Figure 4).

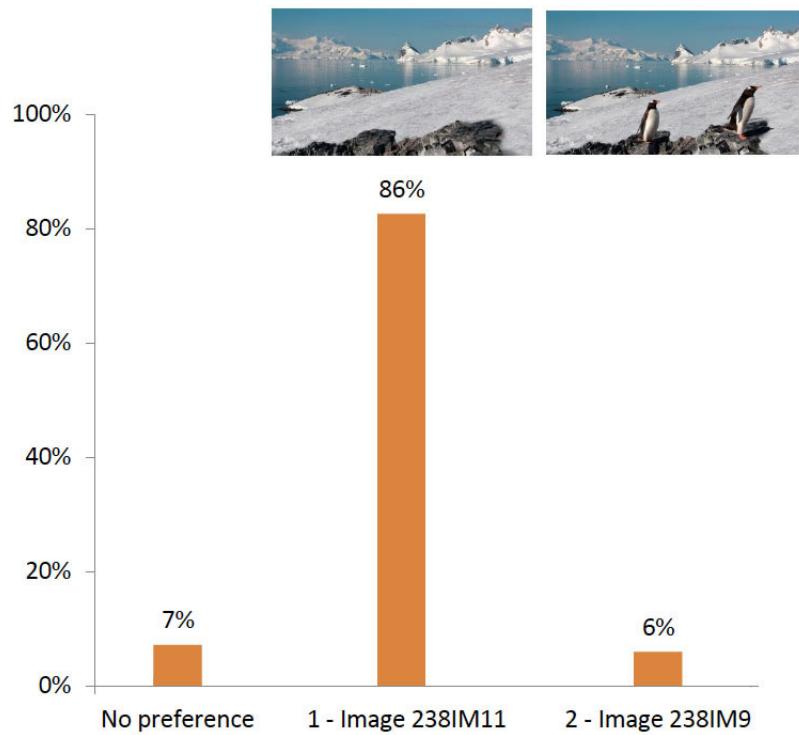


Figure 3: Result of the paired comparison of the two positive landscape scenes (Q11), showing a strong preference for the pristine landscape image without penguins.

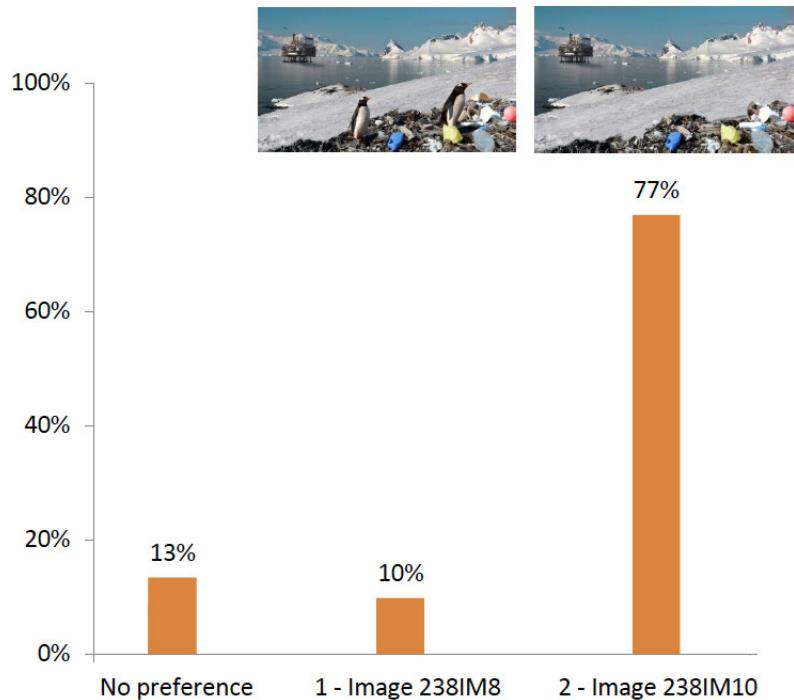


Figure 4: Result of paired comparison of the two negative landscape scenes (Q12), showing a strong preference for the polluted image without penguins.

Whilst there were no statistically significant differences in the collective responses between age, employment status, income level, or household situation, there appear to be a number of differences on the basis of gender. Females showed slightly higher mean scores in rating potential threats (Question 2) where mean scores for females ranged between 9.1 and 9.3 out of 10, and males were between 8.1 and 8.8 out of 10. Females were also more likely than males to endorse positive responses at the maximal level, indicating ‘strong’ agreement with certain statements, or signaling more definite intentions to undertake particular personal actions to mitigate environmental threats to Antarctica. For example, Question 6 (Appendix I) asked: “*To what extent do you agree or disagree with each of the following statements? Antarctica and the Southern Ocean should be preserved and protected ...*” with a list of possible responses (modeled on the Schwartz theory of basic values – Schwartz 2009). More females (85%) than males (60%) ‘strongly agreed’ with several of the listed responses (Table 1). For Question 7: ‘*How likely are you personally to take each of the following actions to help preserve and protect Antarctica and the Southern Ocean?*’, more females than males responded with ‘definitely would’ to several of these listed actions (Table 1).

Table 1: Gender differences in responses to some supporting research questions, showing that women demonstrated stronger endorsement at the maximal level of positive responses.

Questions and responses	Females	Males
Q1: Thinking about Antarctica and the Southern Ocean, how important is it to preserve and protect these regions from irreversible damage? (mean score /10)	9.8	9.5
Q2: Please rate the following threats in terms of the danger they pose to Antarctica and the Southern Ocean (mean score /10)		
Marine pollution	9.1	8.1
Oil and mineral exploration	9.2	8.5
Unsustainable harvesting of marine life	9.3	8.8
Climate change	9.3	8.7
Q6: Antarctica and the Southern Ocean should be preserved and protected.... ... because we have a moral duty to protect unique and fragile ecosystems		
Strongly agree	85%	60%
Agree	15%	32%
Q6: Antarctica and the Southern Ocean should be preserved and protected.... ... for future generations		
Strongly agree	65%	41%
Agree	29%	47%
Q6: Antarctica and the Southern Ocean should be preserved and protected.... ... to protect places with significant natural beauty		
Strongly agree	56%	39%
Q7: How likely are you personally to take each of the following actions to help preserve and protect Antarctica and the Southern Ocean?		
'Definitely would' use fewer plastic products	59%	39%
'Definitely would' make safe and sustainable seafood choices	67%	46%
'Definitely would' sign an online petition to be sent to a politician	72%	51%

Discussion

Framing effect

The primary objective of this research was to examine whether visual framing influenced the degree of importance people attributed to preserving and protecting Antarctica and the Southern Ocean, and their propensity to signal an intention to financially support this cause. No framing effect was seen in this study for either of these primary measures, nor for any of the secondary research questions being whether visual framing influenced perceptions of threats, possible mitigation actions and basic values around Antarctica and the Southern Ocean. It cannot however be concluded that visual framing had no influence. It's possible, for example, that it served to reinforce pre-existing ideas among some respondents, or had some effect that was not measured.

One possible reason that no framing effect was discernible in this study could be due to the lack of variation across the sample and the sample size. The importance of preserving and protecting Antarctica and the Southern Ocean was rated very highly (9/10 or 10/10) by 95% of respondents, and it was therefore not possible to discern any significant difference between questionnaire versions.

Another possible reason are factors such as bias and framing moderators which can negate the effect of framing. Previous research on language-based frames for example have suggested that for more informed or ‘biased’ individuals, the impact of language framing can be greatly reduced (Smith 1996). In a consumer study for example on the effects of product education and education in general, Smith (1996) found that increased product knowledge and a higher education level also reduced the effects of framing. Various aspects of an individual’s disposition have also been identified in previous research as having a neutralizing effect on experimenter-presented frames. Given the overall high level of education of the sample, the fact that all respondents had financially supported a conservation organization with many of them still doing so, and would have and still do receive extensive communication from WWF at least on conservation issues, some or all of these factors may have come into play.

As such, whether the sample size was too small to detect small variations in a framing effect, whether bias or moderating factors were in play, or whether the visual frames devised for this research were not potent enough, is unclear. Further research using different visual frames, or the same visual frames to a broader, potentially less biased segment of the community is recommended.

Other observations of note

Image emotivism

In the paired image comparisons, the strong preference for the pristine landscape scenes without penguins is counterintuitive and inconsistent with previous research on the emotive power of cute or beautiful animals. Many environmental campaigns have been successfully waged on behalf of attractive animals including wolves, whales and seals (Huddy & Gunnthorsdottir 2000), and the success of such emotionally-based appeals in the environmental and animal rights movements has been widely studied by persuasion researchers (Roser & Thompson 1995, Rosselli et al. 1995 and Fabrigar & Petty, 1998). Reasons for favouring an image without penguins in the paired comparison of two polluted scenes are unclear. It's possible that by being devoid of animal life this scene was made bleaker and more emotively powerful, perhaps by implying that the pollution affected the survival of the penguins. Further research is required to explore the effects of animals and emotivism in this visual component.

Gender variations

In this study, women were more likely than men to indicate concern about some of the potential threats to Antarctica and the Southern Ocean, strongly endorse certain basic values, or show more definite intent to undertake specific personal actions to mitigate environmental threats to Antarctica. These findings reflect previous research that demonstrates that females have higher levels of ecocentric concern for the environment (value nature for its own sake), exhibit more environmentally friendly behavior (Casey & Scott 2006) and make stronger links between the environment and things that they value (Stern et al. 1993). Gender differences seen here and in other research have implications for those NFPs engaging in pro-environmental communication.

Conclusion

Results from this study showed no statistically significant differences on the two primary measures – the degree to which people believed Antarctica and the Southern Ocean were regions that should be preserved and protected from irreversible damage (salience), and propensity to financially support well-known, NFP organisations that aim to preserve and protect Antarctica and the Southern Ocean.

This result was in part driven by a lack of variation across the sample, with 95% of respondents for example providing an importance rating of 9 or 10 out of 10 at the beginning of the survey. Therefore, this made it difficult to detect any framing effect that possibly existed, and so the outcomes were inconclusive.

Previous research on language-based frames has suggested that for more informed or ‘biased’ individuals, the impact of framing is minimal. Whether that is the case here, or whether the visual frames chosen were not powerful enough is indeterminable. Coleman (2010) suggested that framing theory can explain and predict the effects of visual content and that “visual framing provides an important new direction for theory building and future research”. Further research using a broader, potentially less biased segment of the general population is recommended.

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Appendix I – Survey questions

Introduction page



CONFIDENTIAL SURVEY

This research is directed at Australian's aged over 18 years old.

It is being conducted as part of an academic study by a student at the University of Canterbury. The university ethics committee has approved this research.

The questionnaire will take around 10 minutes to complete depending on your responses.

Instructions

Please read each question and follow the instructions to record your reply.

DO NOT use the 'Back' and 'Forward' buttons in the browser. Please use the buttons at the bottom of each screen.

Confidentiality

This survey is conducted with full regard to Australian Privacy laws and is confidential. Your name will not be associated with the information you provide. The information you provide will only be used for research purposes.

By completing the survey, you consent to publication of the results of the project with the understanding that anonymity will be preserved.

Vawser and Associates is assisting the University of Canterbury with the data collection. If you would like any further information on privacy or this survey, please contact our privacy officer
Privacyofficer@vawserandassociates.com.au

S1 Please indicate your age group? [Single choice]

Under 18 years	1	Terminate
18 to 24 years	2	Next
25 to 34 years	3	Next
35 to 44 years	4	Next
45 to 54 years	5	Next
55 to 64 years	6	Next
65 plus years	7	Next

Stimulus material

Introduction to the research - Please have a look at the picture above and then read the following carefully

Antarctica is the southernmost continent on Earth. It is the coldest, driest, and windiest continent where only cold-adapted organisms survive.

The oceans around Antarctica are some of the most pristine in the world and home to nearly 10,000 highly adapted species, many of which can be found nowhere else. Many types of penguins, albatross, whales and seals all thrive in this region.

About 98% of Antarctica is covered by an ice sheet that averages at least 1.6km (1 mile) in thickness. This ice plays a vitally important role in influencing the world's climate, reflecting back about 80% of the sun's radiation and so helping to regulate global temperatures.

Antarctica's inhospitable climate has protected it from many of the worst excesses of human exploitation, allowing it to remain relatively untouched by human activity.

However, this has begun to change over the past few decades, and now Antarctica and the Southern Ocean are under threat from:

- 1) Unsustainable harvesting of marine life
- 2) Marine pollution and debris
- 3) Climate change
- 4) Oil and mineral exploration and extraction

The following questions ask you for your opinion on various topics related to Antarctica and the Southern Ocean. There are no right or wrong answers, so please indicate how you feel about these topics.

Note: There are images in this survey that may be slow to load so please be patient.

Q1 Thinking about Antarctica and the Southern Ocean, how important is it to preserve and protect these regions from irreversible damage? [Single choice]



Q2 Please rate the following threats in terms of the danger they pose to Antarctica and the Southern Ocean. [Single choice, rotate]

	Not at all important			Neither important nor unimportant				Extremely important			
	0	1	2	3	4	5	6	7	8	9	10
Oil and mineral exploration and extraction											
Climate change											
Unsustainable harvesting of marine life											
Marine pollution and debris											

Q3 Which of the following poses the greatest threat to Antarctica and the Southern Ocean?

Click on each button in order to select rank order of threat - From '1' = highest threat to '4' = lowest threat. [Rank, rotate]

Rank
1 to 4

Oil and mineral exploration and extraction

Climate change

Unsustainable harvesting of marine life

Marine pollution and debris

Q4 Which of the following actions should be the highest priorities to preserve and protect Antarctica and the Southern Ocean?

Click on each button in order to select rank order of order of action where '1'= highest priority and '4' the lowest priority [Rank, rotate]

Rank
1 to 4

Prevent oil and mineral exploration and extraction

Combat factors contributing to climate change

Prevent unsustainable harvesting of marine life

Prevent marine pollution and debris

Q5 How effective is each of the following actions as a way to help preserve and protect Antarctica and the Southern Ocean? [Single response, rotate]

	Not effective at all	Low effectiveness	Somewhat effective	Very effective
Do whatever possible to preserve the Antarctic Treaty	1	2	3	4
Lobby the Australian government to make Antarctica and the Southern Ocean a non development zone	1	2	3	4
Actively protest to increase media and public awareness of the issues	1	2	3	4
Support scientific research looking at the health of Antarctica and the Southern Ocean	1	2	3	4
Boycott companies and brands that exploit Antarctica and the Southern Ocean	1	2	3	4
Support active conservation organisations targeting climate change (i.e ACF, Greenpeace, WWF)	1	2	3	4
Introduce huge fines for organisations that pollute Antarctica and the Southern Ocean	1	2	3	4
Encourage people to reduce their carbon footprint and energy consumption	1	2	3	4

Q6 To what extent do you agree or disagree with each of the following statements?

"Antarctica and the Southern Ocean should be preserved and protected ...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
.. to protect places with significant natural beauty"	1	2	3	4	5
.. as a symbol of adventure and exploration"	1	2	3	4	5
.. for the benefit of all"	1	2	3	4	5
.. make sure than it remains a neutral continent, dedicated to peace and science"	1	2	3	4	5
.. because we have a moral duty to protect unique and fragile ecosystems"	1	2	3	4	5
.. to insure our health and wellbeing"	1	2	3	4	5
.. because at least one place on the planet should remain relatively untouched"	1	2	3	4	5
.. for future generations"	1	2	3	4	5

Q7 How likely are you personally to take each of the following actions to help protect and preserve Antarctica and the Southern Ocean? [Single response, rotate]

	Definitely would not	Low likelihood	Some likelihood	High likelihood	Definitely would
Send an email or letter to a politician	1	2	3	4	5
Reduce your personal carbon footprint and energy consumption	1	2	3	4	5
Sign an on-line petition to be sent to a politician	1	2	3	4	5
Become a friend of environmental organisations supporting Antarctica and the Southern Ocean	1	2	3	4	5
Donate to a well-known, environmental organisation that supports Antarctica and the Southern Ocean	1	2	3	4	5
Use fewer plastic products	1	2	3	4	5
Make safe and sustainable seafood choices	1	2	3	4	5
Volunteer to assist in fund raising	1	2	3	4	5
Vote for an environment friendly government	1	2	3	4	5
Attend a public rally or protest	1	2	3	4	5
Influence change in your community	1	2	3	4	5

Q8 We would like you to think about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other. The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

Q9 Again, we would like you to think about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other. The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

Q10 Still thinking about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other. The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

Q11 Still thinking about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other.
The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

Q12 Still thinking about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other.
The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

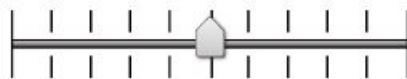
Q13 Still thinking about the impact of these images on you personally

Which of the two images below most makes you feel that protecting Antarctica and the Southern Ocean is important?

Please drag the slider in the direction that best indicates how much you prefer one image over the other.
The further you drag the slider the more you prefer that image over the other image.



Score:5



Score:5

Q14 Thinking of positive and negative images of Antarctica and the Southern Ocean, which do you think best illustrate the need to protect Antarctica and the Southern Ocean? [Single choice]

Positive images illustrating the beauty of Antarctica and the Southern Ocean	1	
Negative images illustrating the potential damage to Antarctica and the Southern Ocean	2	
Either positive or negative images - both equally effective	3	
Neither positive or negative - Neither are particularly effective	4	
Don't know / not sure	5	

Q15 We would like to better understand your past and future donation behaviour.

Which of the following best describes your past donation behaviour to well recognized environmental and conservation organisations? [Single choice]

Regularly donate	1	Next
Sometimes donate	2	Next
Rarely donate	3	Next
Haven't donated at all	4	GOTO Q17

Q16 Thinking of your past donations to environmental or conservation organizations, how confident are you that your donation money was well spent? [Single choice]

Very confident	1	Next
Somewhat confident	2	Next
Low confidence	3	Next
Not confident at all	4	Next

Q17 Thinking of the next 12 months, how likely would you be to donate to a well-known, not-for-profit environmental organisation that aims to protect and preserve Antarctica and the Southern Ocean? [Single choice]

Definitely will	1	Next
Highly likely	2	Next
Somewhat likely	3	Next
Neither likely nor unlikely	4	GOTO Q19
Somewhat unlikely	5	GOTO Q19
Highly unlikely	6	GOTO Q19
Definitely will not	7	GOTO Q19

Q18 If you were to make such a donation, how much over a 12 month period is that donation likely to be? [Single choice]

\$1 to \$49	1
\$50 to \$99	2
\$100 to \$249	3
\$250 to \$499	4
\$500 to \$749	5
\$750 to \$999	6
\$1000 or more	7

Q19 After the previous discussion we want ask this question again

Thinking about Antarctica and the Southern Ocean, how important is it to preserve and protect these regions from irreversible damage? [Single choice]

Importance	Not at all important			Neither important nor unimportant			Extremely important			
	0	1	2	3	4	5	6	7	8	9

Q20 On which device did you complete this questionnaire? [Single choice]

Desktop computer	1
Laptop computer	2
Tablet	3
Smartphone	4

Q21 What is your gender? [Single choice]

Female	1
Male	2

Q22 In which state do you live? [Single choice]

New South Wales	1
Victoria	2
Queensland	3
South Australia	4
Western Australia	5
Tasmania	6
ACT	7
Northern Territory	8
Other location	9

Q23 Please indicate your highest educational qualification at the time of this research. [Single choice]

Primary school	1
Secondary school	2
Apprenticeship / Trade qualification	3
Certificate / diploma	4
Undergraduate degree	5
Post graduate degree or higher	6
Other qualification	7

Q24 Which of the following best describes your household situation? [Single choice]

Live alone	1
Live at home with parents / guardian	2
Live with partner and no children	3
Live with partner and children	4
Live alone with children	5
Live with other singles	6
Other	7

Q25 Which of the following best describes your marital status? [Single choice]

Married (registered)	1
De-facto relationship	2
Separated	3
Divorced	4
Widowed	5
Never married	6

Q26 Please indicate the employment status of your partner / spouse. [Single choice]

Full time employed	1
Part time employed	2
Self employed	3
Unemployed	4
Full Time Student	5
Part time student / part time employed	6
Home duties	7
Retired	8
Unable to work for medical reasons	9
Other	10

Q27 Which of the following best describes your annual household income before tax? If you are single please provide your annual personal income [Single choice]

Less than \$30,000	1
\$30,00 to \$50,000	2
\$51,001 to \$70,000	3
\$71,001 to \$90,000	4
\$90,001 plus	5
Prefer not to say	6

Q28 Would you like to make any comments about the subject or this survey?

Type any comments you would like to make into the box below [Not mandatory]

Exit screen



To record your responses, please press the submit button below.

Thank you for participating in this survey.

Your opinion is important to us.

*If you would like any further information on privacy or this survey,
please contact our privacy officer Privacyofficer@vawserandassociates.com.au*