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Research to the Rescue

How market research can guide behaviour change and ivory demand reduction strategies in China, saving elephants from imminent extinction

Li Chenyang • Wander Meijer

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Preface

Over the past decade, the worldwide elephant population has declined by 20,000–30,000 per year due to growing human populations, reduced habitat, trophy hunting and specifically poaching. Elephants are being slaughtered at an industrial scale for their ivory, and with an estimated 415,000 left in the wild, at the current rate the species could be extinct within the next 20 years.

Ivory has been appreciated throughout Chinese history as precious and auspicious, bringing status and good luck to the owners. Ivory has been carved for thousands of years and has adorned the households of the richest people. With the increasing wealth of large portions of the Chinese population, ivory has become within reach of the growing middle class, whereby the appreciation of ivory has shifted from the craft of carving to the perceived beauty of the material. Over the past decades, hundreds of millions of Chinese consumers have entered the middle class and are now able to afford ivory. And according to our research, the purchase of ivory in China has become widespread. As a result, a massive crisis of elephant poaching has emerged.

The Chinese government has acknowledged the plight of the elephant and a ban on commercial trade of ivory has been implemented by law as per January 1, 2018. The ban is of major importance to the eventual eradication of the market for ivory, but it must be supported by a reduction in consumer demand.

Changing behavior is difficult for individuals; changing the behavior of millions of Chinese consumers, which is rooted in a 2,000-year-old tradition and the purchasing of ivory socially undesirable is a massive undertaking. This challenge requires a powerful tool: market research. In this paper, we outline how market research identifies the (potential) buyers of ivory, what motivates them to purchase ivory products, what can deter them from doing so and the triggers that can change their behavior.

Figure 1

Introduction

The large-scale consumption of wildlife parts, products and derivatives is one of the key extinction drivers for endangered species worldwide. With China being a key destination for many of these products, conservation professionals have been exploring and leveraging the potential for targeted advocacy, social marketing and multi-media campaigns to deliver real and rapid impact in reducing this demand. TRAFFIC (a strategic alliance between the World Wildlife Fund and the International Union for Conservation of Nature), WWF and several other NGOs have implemented several behavior change interventions in recent years to reduce the demand for illegal wildlife products like ivory, rhino horn and tiger bones. Consumers, including antique collectors, outbound tourists, businessmen, and traditional Chinese medicine users have been targeted in those behavior change interventions.

Within this context, a "game-changing" ban on commercial processing and the trade in elephant ivory was announced by the State Council, China's Cabinet on 30 December 2016. TRAFFIC and WWF then commissioned GlobeScan to conduct the largest-ever ivory consumer research in China. This research seeks to discover the nature of ivory consumption in 15 large cities in China, totaling to 226 million inhabitants, aims to understand consumers' perception toward the ivory ban and to assess effective messaging and mechanisms for demand reduction. The research will also serve as the foundation of TRAFFIC and WWF's future behavior change strategies and interventions and to serve as a pre-implementation benchmark for measuring the impact of the ban on the demand for ivory.

Methodology

The research study was conducted between June – November 2017, with a three-phased approach:

1. Literature review of relevant studies conducted earlier on this topic
2. Qualitative phase, which included eight in-depth interviews with Chinese consumers in Beijing, Shanghai, Guangzhou and Chengdu, and eight focus group discussions with Chinese consumers in the same cities
3. (a) Quantitative survey: 2,027 structured on-line interviews of Chinese consumers in 15 major cities. (b) This will be followed by a post-ban quantitative survey with another 2,000 consumers mid-2018.

The objectives of the survey can be summarized as follows:

1. Identify the key consumer/buyer segments of elephant ivory (products)
2. Identify the prevalence and frequency of purchase/use of these products plus the major motivations driving purchase/use of these products
3. Analyze psychosocial and socio-demographic characteristics, attitudinal dimensions and other aspects of each consumer segment, in order to gain insight into:
   - The specific triggers, motivations and drivers for purchase of ivory products
   - The underlying desire to purchase or own ivory and the barriers which will deter (potential) buyers from purchasing ivory
   - Awareness of and attitudes toward legislative provisions, penalties and other deterrents restricting or prohibiting the use of these products
4. The testing of various concept messages as input for future ivory demand reduction communication campaigns and behavior change interventions.

While the data and key metrics are specific for the 15 cities, the underlying patterns on segmentation, purchase drivers and effective messages are relevant for ivory buyers overall in China, and the results are providing crucial input for campaigns in 2018 and beyond.

The 15 cities are segmented into Layer 1, 2 and 3, as per TRAFFIC's definition, to reflect the ivory trade and consumption in China. The reason for grouping cities by layers is to have a view on the dynamics of ivory trade by type of markets (cities). Initially, cities in Layer 1 were the most active ivory markets, cities in Layer 2 were moderately active markets and cities in Layer 3 were the least active markets. However, based on TRAFFIC's physical market monitoring results, the trade seemed to have moved to Layer 2 and 3 cities, which is further confirmed by this survey. TRAFFIC nominated these cities as being strategic and active centers of the ivory trade in China, rather than being representative of China as a whole.

Figure 2. Cities surveyed in China

Source: https://www.travelchinaguide.com/map/

Legend:
- Layer 1 cities
- Layer 2 cities
- Layer 3 cities

Segmentation analysis

In order to identify homogenous groups of ivory consumers in terms of their behavior, intentions, attitudes and motives, we developed a custom segmentation using the Decision Tree statistical algorithm. The model was used to predict the likelihood of buying ivory after the ban is imposed, and to identify segments of respondents sharing similar patterns of responses to the question on past purchases, intention to purchase and advocacy for ivory consumption.

Input variables included attitudes, motives and barriers, past and intended purchasing and agreement/disagreement with the ban. The analysis shows that key differentiators among the groups relate to *behaviors* rather than *attitudes and psychographics*. Based on this predictive modeling, we identified three distinct segments:

- *Diehard Buyers:* 97.3% are likely to buy ivory in spite the ban and are very likely to recommend purchasing ivory.
- *Ban Influenced Citizens*: 100% of them will stop buying ivory after the ban is imposed. The difference between the two is in the likelihood to recommend ivory to family members or friends.
- *Rejecters:* not buying nor intending to buy ivory independently of whether the ban is imposed or not.

In total, we distinguished eight segments, but whereas these could have been more descriptive of the population, this more detailed description was of less practical value, so we opted for three segments. This three-segment solution has resulted in delivering the highest practical value, with robust, interpretable, applicable and trackable segmentation.

Figure 2 illustrates the position of each segment in relation to their likelihood to recommend purchasing ivory after the implementation of the ban (x-axis), and their intention to purchase ivory after the ban is implemented (y-axis). The size of each segment is proportionate to the size of the bubble on the map.

Based on earlier research and the results of the qualitative stage, our premise was that the ban or illegality should result in reduced demand. Though not a determinant component of the segmentation algorithm, the segments were plotted on a third, highly correlated axis. The color of each bubble indicates the strength of the segment's concern that ivory might be illegal to buy, which the study has found to be among the most powerful inhibitors of ivory purchase. The darker the blue, the more inhibited members of these segments are by the illegality of ivory.

Figure 3. Segmentation map
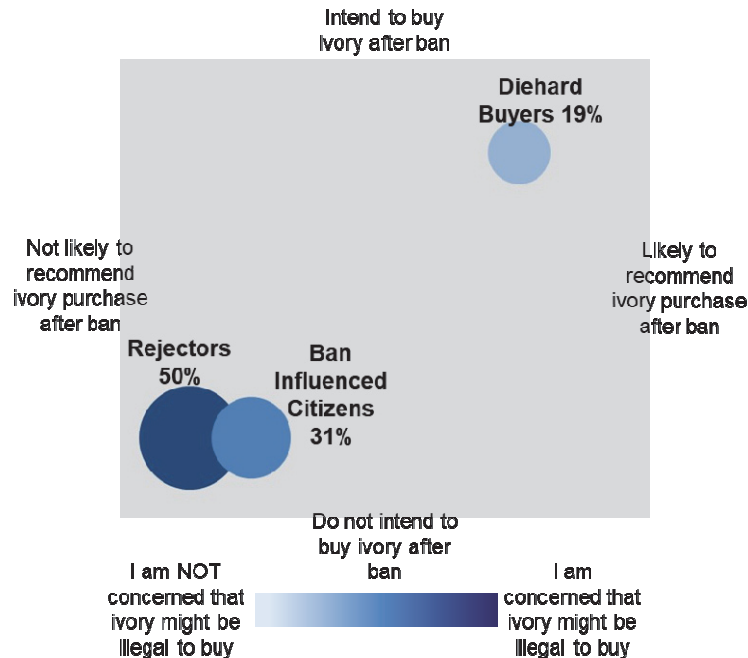
This resulted in three clear segments:

1. *Diehard Buyers (19% of all consumers)* are the most inclined to purchase elephant ivory before and after the ban is implemented, and will most drive future ivory demand (post-ban). However, six in ten say that they are likely to reconsider their purchases. Diehard Buyers are more driven than other buyers by traditional beliefs (e.g., "ivory brings luck and fortune") and by the social role of ivory (e.g., "I feel respected," "ivory enhances my social status"). Their leading barriers related to endangered elephants and legality are not as strong as for other buyers. Instead, they are more concerned by risks related to investment or counterfeit items. Typical Diehard Buyers' citations include: "*I feel good and respected when I wear ivory. As long as I want it, I will find ways to buy it*" **or** *"Even if there is risk and may not be worth the investment, collecting ivory products for appreciation purpose is fine for me"* **and** *"Most consumers who love ivory will not change their minds no matter what you said about ivory."*

2. The second group we identified are the *Ban Influenced Citizens (31%).* This group's purchase behavior is different from the two other consumer segments, i.e., 7 in 10 have purchased ivory in the past, and although they demonstrate a desire to purchase ivory in the near future, none of them intend to buy ivory after the ban is implemented. They are strongly influenced by fear of law enforcement and strong penalties for purchasing ivory, and as a result, this segment could be significantly reduced in size after the upcoming ban on ivory is implemented. Typical Ban Influenced Citizens' remarks are: "*Every time when I want to buy ivory, I was struggling between guilt and desire toward ivory*" **or** *"To be honest, I plan to buy ivory as early as possible before the ban. Otherwise, it will be difficult for me to purchase in the future"* **and** *"I will feel happy if I could find stores selling ivory even when the ban is enforced, but still feel scared and worried on its legality."*

3. The third segment we identified are the so-called *Rejecters (50%)* who reject the idea of purchasing ivory in the future. Despite the fact that 24% of this group are past buyers of ivory, only a few have made repeat purchases, and none of them intend to purchase ivory in the future. They are the most concerned about the environmental consequences of purchasing ivory amongst all segments and have a vastly different outlook and feeling toward ivory and ivory-related issues than the other segments. Rejecters' attitudes and feelings are cited as follows: "*I could still recall the advertisement about elephant parents and their kids and the harm humans are doing to them*" **or** *"You are killing elephants at the same time when you buy ivory products"* **and** *"I was shocked and felt sick when I saw red (blood) stains on the ivory product; I gave up ivory since then."*

Drivers of ivory purchase

Important motivations for ivory purchase are its artistic value, its uniqueness and heritage, followed by gifting. Among the traditional beliefs, "wards off evil spirits" and "has healing power" are revealed as motivations, though not as strong, whereas purchasing ivory to "ensure prosperity of the family" is also important. Other drivers are "its beautiful appearance," "rareness" and "ivory being a precious material [with] high investment value". The Chinese consumers we spoke to phrased this as follows: *"An art piece is not only about its craftsmanship. The materials it uses also serve as an important part contributing to the beauty of the art"* **or** *"There's one time when I had to go to the hospital, I wore an ivory bracelet that day as a good luck charm for myself"* **and** *"Any kinds of investments will bear a risk, I don't think ivory's risk is much larger than other products."* Figure 4 ranks the drivers of ivory purchase identified in order of importance:

Figure 4. Drivers of ivory purchase
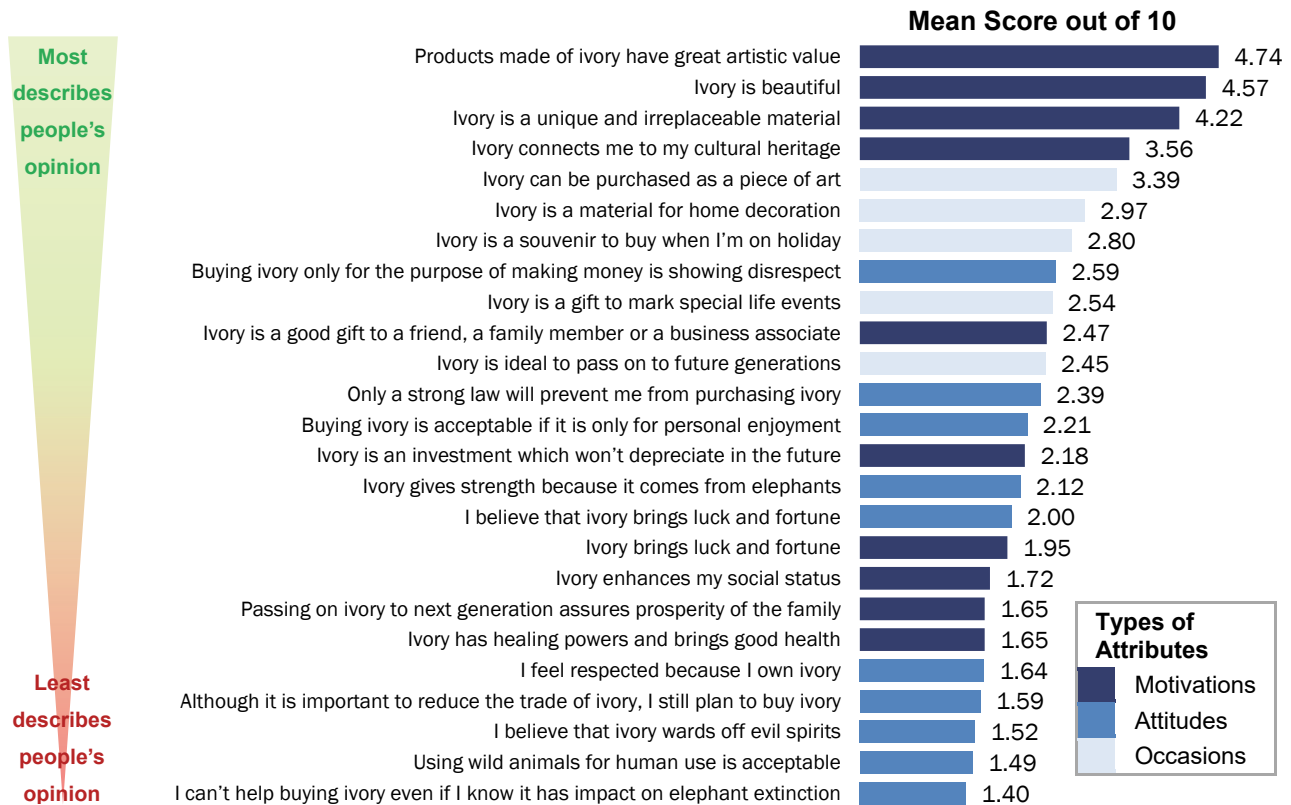
When we look at drivers linked to specific consumer segments or sub-groups, we see that 'artistic value and beauty' are especially strong for female consumers, Millennials, Layer 1 citizens and rejecters. 'Uniqueness' is also important for these groups, but a little less so, whereas 'gifting' is then less important for these groups, but relatively more important as drivers for other segments we distinguished: male consumers, elderlies (51+), Layer 3 citizens, diehard buyers and regular travelers. The most important driver overall for these latter groups is social status'. This is visualized in figure 5.

Figure 5. Strengths of drivers per sub-groups

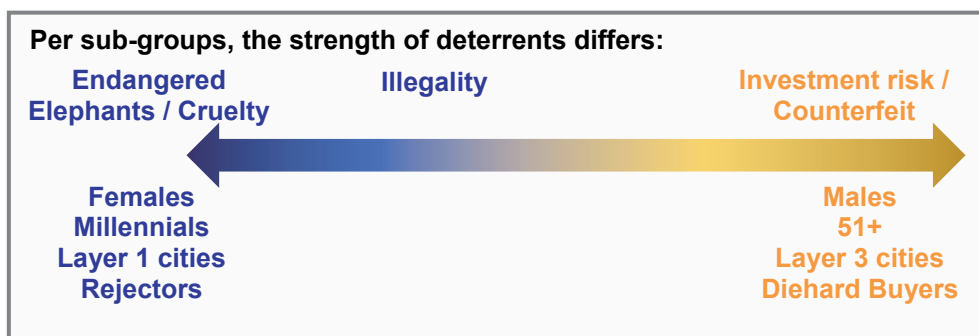
Ivory purchase deterrents

Amongst the deterrents for purchasing ivory, *environmental issues top the chart* followed by a *regulatory/legal approach*: legislation with strong penalties is considered an effective way to stop people from buying ivory. In the words of consumers interviewed: *"I could still recall an advertisement with the elephant parents and kids"* **or** *"You are killing elephants at the same time buying products from a killed animal"* **and** *"I really love ivory products, but I think my feeling will be a bit mixed and contradicting – I guess I will feel happy to have found ivory even if the ban is enforced, but at the same time will feel scared and worried about the legality of the ivory piece"*.

Figure 6. Deterrents of ivory purchase
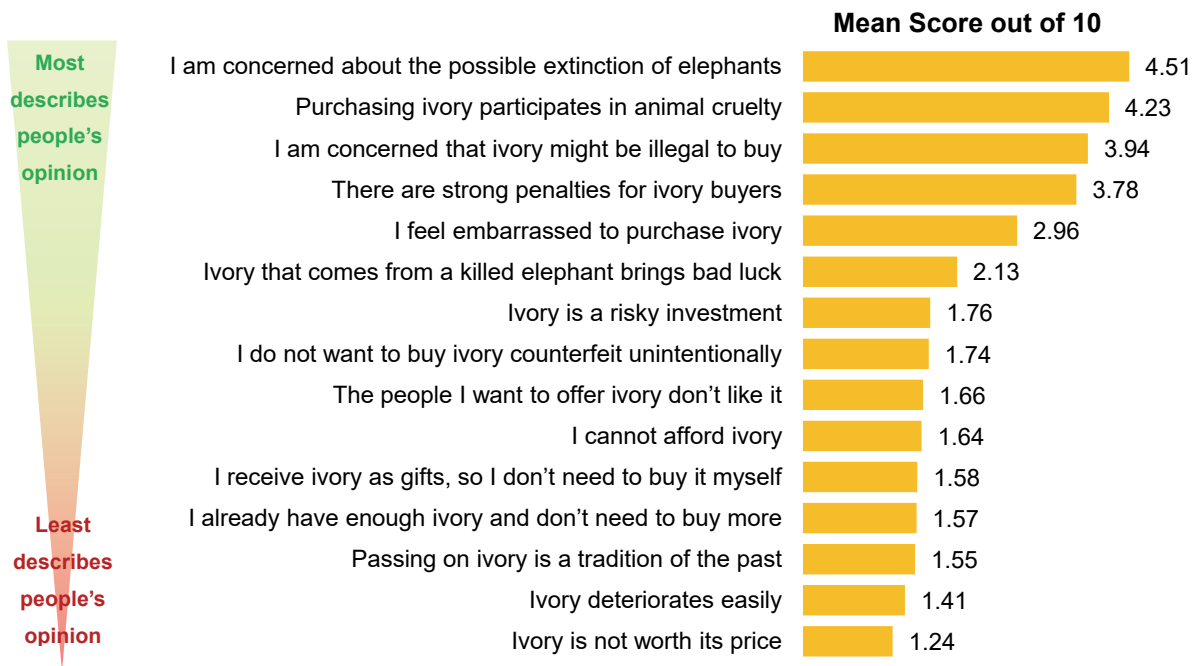
Similar to the drivers, sub-groups or specific segments have different deterrents for purchasing ivory. Environmental issues, like endangered elephants and cruelty in the killing of the species, resonate mostly with female consumers, Millennials and people living in Layer 1 cities. And obviously with the rejecters segment. Male consumers, elderly consumers, habitants of Layer 3 cities and diehard buyers are more concerned regarding the investment value or whether ivory is counterfeit when purchasing. Whether it is illegal or not is an issue for most segments, as illustrated in figure 7.

Figure 7. Strengths of deterrents per sub-group

Per sub-groups, the strength of deterrents differs:

Endangered Elephants / Cruelty	**Illegality**	**Investment risk / Counterfeit**

Females
Millennials
Layer 1 cities
Rejectors

Males
51+
Layer 3 cities
Diehard Buyers

Perception of the ivory ban

The decision of the Chinese authorities to ban the ivory trade as of January 1, 2018 is considered as a hallmark in reducing consumer demand strategies and was thus a key part of the research. Amongst the more than 2,000 consumers we interviewed in the 15 selected cities, only 19% spontaneously recalled having heard of any regulations on ivory trade. In other words: on this question, 81% indicated they were not aware of any (upcoming) legislation on ivory trade. When prompted (i.e. after being asked to read the official notice which was included in the questionnaire), 46% said they had heard about the ivory ban. We believe this high number includes a halo-effect, as at that stage, respondents had been exposed to a series of questions on ivory, the initial number of 19% is the most accurate and relevant one.

While 43% of consumers had an intention to purchase ivory before hearing of the ban, (i.e. we asked this question before asking about the ban) this number dropped to 18% after reading about the ban, after which we asked the same question again. Upon hearing of the ban, 86% of those surveyed saying that they would support the ban after learning about it.

However, there are noticeable underlying differences by sub-group:

- Of the regular overseas travelers: 62% recall having heard of the ban when prompted, and 25% intend to buy ivory post-ban;
- Of the Millennials (aged 18-30 years): 51% recall having heard of the ban when prompted, and 21% intend to buy ivory post-ban;
- And of the consumers in Layer 3 cities: 38% recall having heard of the ban when prompted, and 20% intend to buy ivory post-ban.

Level of agreement and support to the ban

In line with this finding is that the upcoming ban on the ivory trade receives a strong level of support overall: 85% of all respondents agree, whereas only 6% disagree. The support was significantly higher in Layer 1 and Layer 2 cities and among Rejectors, as can be seen in figure 8.

Figure 8. Support of legal ivory ban
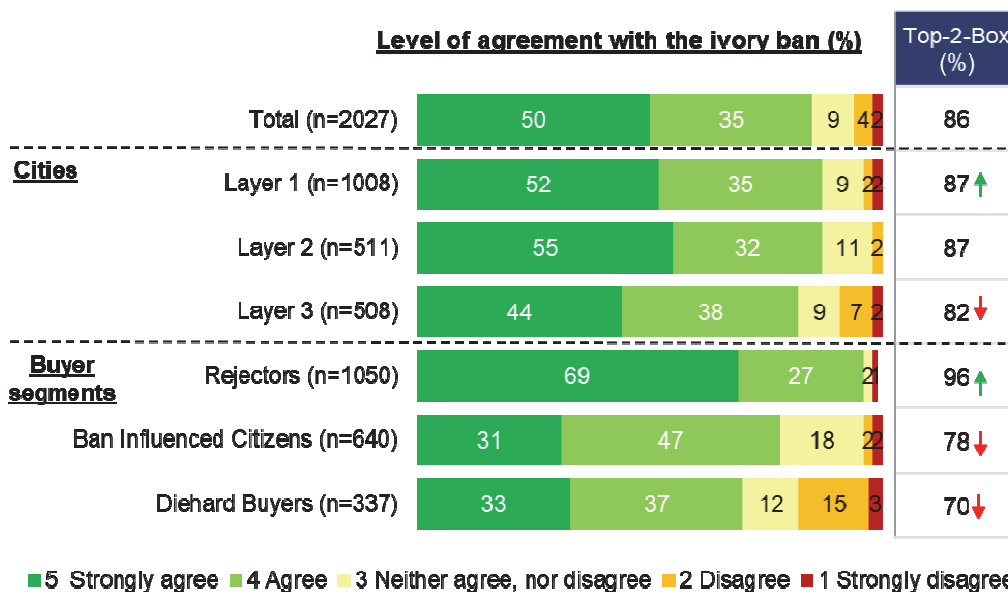
Expected impact of the ban

If properly implemented, the ivory ban is expected to be impactful and there is a perception that it will greatly influence purchase and consumption. As we saw earlier, spontaneous awareness of the ivory ban is 19%; when prompted on the ban, respondents believe that consumption will drop by at least half. However, respondents have several concerns, or doubts on the impact of the ivory ban:

- **Low awareness**: more communication on the existence of the ban is expected and needed. *"They should print it (ivory ban) and spread it to each and every household!"*
- **Alternative purchase channels**: a majority of respondents believe that as long as ivory is available, there will be channels, legally or illegally, for Chinese people to buy. *"Nobody knows about the ban; and if there's a will to get ivory, there must be a way for people to buy ivory products."*
- **Ambiguity in the ban**: some grey areas remain and respondents believe that the text is not strong enough, e.g., will it be illegal to bring ivory products from other countries? *"Most of us use official channels to buy ivory products and don't know much about the private/ black market. Therefore, once the ban is in effect, I think it will be effective."*
- **Focus on suppliers**: respondents think that the most effective way to reduce demand is to put a focus on suppliers (business owners, factories) to cut their supplies. "*It seems to be focusing more on traders and craftsmen instead of individual customers, and there aren't any serious consequences to individuals if we keep buying it."*
- **Penalties or taxes**: in order for the ban to be impactful, respondents strongly believe that heavy penalties or taxes are necessary to make the ban effective. *"After the ban is in place, I would feel a little ashamed to buy and wear ivory."*

Message testing

We have arrived at the crucial part of our research: we now know the types of consumers who purchase ivory, what motivates them to do so and what the possible deterrents are that will help to change their behavior – of which we have already identified the two most important ones: environmental and legal.

In the qualitative research, many consumers told us that they did not really know (much) about the cruelty and the shocking facts behind the ivory trade. When further describing the ivory trade, specifically the use of numerical data made them better understand the consequences. Following this, we asked them to create their own message to incite people to reduce or stop purchasing ivory.

From the lists of messages created, we needed to make them more specific in order to deliver valuable input for the campaigns aimed at changing the behavior of Chinese consumers and for this, we used a tool called *Maximum Differentiation Scaling (MaxDiff).*

MaxDiff builds upon a long-established theory about how people make choices. It assumes that respondents' choices are rather relative/comparative instead of absolute. We deployed MaxDiff because it provides a better differentiation between the importance of the items compared to rating scales. With MaxDiff, we can measure importance, preference, performance and many other variables. MaxDiff scores, if they result from "most important" vs "least important" scales, can replace other predictive modeling, e.g. regression and path analyses, which we normally use to extract derived importance scores.

Respondents were shown a set of items and were asked to indicate the item that <u>best</u> describes their opinion, and the item that <u>least</u> describes their opinion, for example:

Figure 9. Example of Max-Diff question

The items are grouped using MaxDiff algorithm, in order to ensure that each item and each pair of items is shown an equal number of times. Usually respondents see each pair of items at least two or three times. A list of 20-21 attributes typically requires from 10 to 16 sets/screens. Item scores are then estimated on a respondent level using a Hierarchical Bayes (HB) method, and transformed to a numeric scale, e.g., 5- or 10-point scale. The larger the score, the higher the importance of the item for this particular respondent.

Another important reason for Using MaxDiff in this research is that is provides a better differentiation between the item importance compared to rating scales and specifically relevant for this research, is that it deals well with **cultural biases in the use of the scale**. For example, respondents in China tend to use the top portion of the scale, while respondents in Germany tend to use the middle or bottom portions of the scale. By asking consumers to choose what describes their most and least preferred messages, we've removed the cultural bias and created a better distinction.

MaxDiff scores, if they result from "most important" vs "least important" scales, can also replace other predictive modeling, e.g., regression and path analyses which we normally use to extract derived importance scores. This is due to the fact that this method, in this particular case, already indicates importance in driving the desired outcome.

Message testing in the quantitative research
The top six preferred messages from the qualitative survey were used in the quantitative survey, in which respondents had to rank these messages by order of preference and indicate which element is the most impactful in the preferred message. The message on illegal wildlife trade and its impact on endangered elephants resonated among all consumer sub-groups. The more "informative" message, although preferred by all segments, resonates significantly less among the Diehard Buyers. Instead, the message on gifting/corruption gets significantly higher ratings by this segment, which is more driven by motivations such as building relationships or status.

The following is the ranking of the six final messages tested, with the percentages of choice by the consumers:

1. **(36%)** Poaching and illegal wildlife trade of elephants is driven by people's desire for ivory products. Each year, over 20,000–30,000 African elephants are killed because of poaching. There are only 415,000 of them left, and they could be functionally extinct within the next 10–20 years if the poaching doesn't cease. David Attenborough, the father of nature documentaries, says: "The question is, are we happy to suppose that our grandchildren may never be able to see an elephant except in a picture book?"
2. **(27%)** China is one of the countries with the most severe sentencing on wildlife crime. Chinese nationals should comply with both domestic and international laws and refuse to purchase, carry and transport any ivory products. If not, one will definitely receive confiscation, great loss of fortune and even prosecution.

3. **(12%)** One-third of an elephant's tusk is within its skull, so its face must be cut off to take out the whole tusk. There is no chance for poached elephants to survive.
4. **(11%)** Ivory products have been used in China for a long time and may be regarded as auspicious items, which could ward off evil. Do you think that if ivory products come from poaching and trafficking, they still bring you good luck, good fortune and good health? Please do not purchase ivory products.
5. **(9%)** China's Customs has strict regulations and advanced detecting technologies on illicit items. Please do not risk purchasing and carrying ivory products by chance through Customs.
6. **(6%)** Many people give ivory products as gifts to build up and maintain relationships for various purposes, which undermines China's ability to crack down on corruption

After the message testing, we asked the respondents which are their preferred, or most effective, messengers, i.e. the organizations trusted to bring message in a most impactful manner to the consumers. From this, we found that organizations such as international NGOs, law enforcement agencies and Chinese NGOs are perceived to be the most influential messengers to deliver messages on ivory. Figure 10 shows this top 3, followed by other potential messengers.

Figure 10. Preferred (Most Effective) Messengers
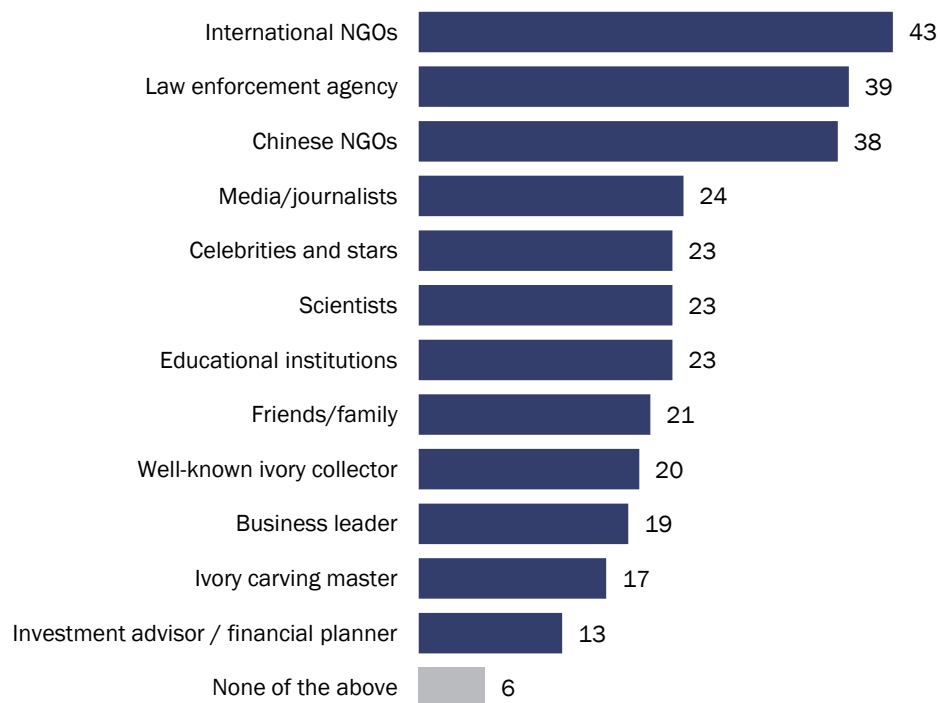
Conclusions

Research has to be impactful to be relevant, and if market research can help rescue elephants from extinction, then it has the potential to provide the groundwork for behavior change interventions and campaigns to help save other species currently at risk as well.

The results of the largest ivory study ever conducted in China have been workshopped by 120 representatives from the Chinese government, Chinese corporations (specifically Baidu, Alibaba and TenCent, the 'BAT Alliance' combatting the ivory trade using the internet) and local and international NGOs at the end of January 2018 in Beijing. The results of this study and workshop will be used to guide the campaigns that many NGOs have started, using the recommendations presented.

Figure 11. Opening Ivory workshop Beijing, January 29-31, 2018

Recommendations

The full report "Demand under the Ban" has been published on the WWF website and can be downloaded here: https://www.worldwildlife.org/publications/demand-under-the-ban-china-ivory-consumption-research-2017. It provides many recommendations, the most important of which we will conclude with as follows:

- **Prioritize communications explaining the ivory ban**
  - o Communicate the laws and regulations in campaigns
  - o Most resources should be dedicated to supporting the authorities to communicate how the ban is being enforced and how the ban impacts everyone on a personal level

- **Educate consumers on animal cruelty and why elephants are endangered via factual and impactful messages**
  - o The rational may be more effective than the emotional. But when the emotional lever is being pulled, harsh facts can have the most immediate effect depending on the segment
  - o Deliver message content, facts and figures about the alarming situation of endangered elephants helps to raise awareness and consciousness

- **Change the way that ivory is perceived, from a "luxury" and unique product to an outdated and socially irresponsible item**
  - o A broad, extensive digital strategy is key: further enhance and leverage the internet alliance established on 22 November 2017 on combating wildlife cybercrime (BAT coalition)
  - o Similar to other markets, like luxury products or travel, searching is vital: shopping online for ivory also involves finding out more about it, comparing prices, products, etc.; be present at this first stage of the purchase process. Interventions, campaign messages need to be connecting with / intercepting people while they are researching or shopping for ivory on the internet

- **Develop an audience-specific strategy to for a wider reach and different buyers' profiles**
  Communicate through different online and offline channels to reach:
  - Millennials (i.e., online)
  - Overseas travelers (i.e., in airports)
  - "Traditional" buyers (i.e., outdoor ads, target Layer 3 cities)

A coalition of NGOs have started campaigns that specifically target Millennials, overseas travelers and consumers in Layer 3 cities, cities which were until now not often included in the demand reduction campaigns.

The combination of the legal ban on ivory trade and targeted campaigns to deter consumers purchasing ivory should result in a reduction of desire and demand for ivory in China. In May 2018, a follow-up survey will measure the first effects of the ban and the associated campaigns.

Figure 12. WildAid's Yao Ming PSA at Beijing Capital Airport, International Arrival Hall

References

APCO Insight, The Nature Conservancy (Sept. 2015): Curbing ivory consumption in China.

Environmental Investigation Agency (Jul 2017): The ShuiDong connection: Exposing the global hub of the illegal ivory trade.

EPI and the Royal Foundation (Aug. 2014): Analysis of demand-side reduction initiatives.

National Geographic and GlobeScan (Aug. 2015): Reducing Demand for Ivory: An International Study

TRAFFIC (2016): An Act to Save African Elephants, A Ban on Commercial Ivory Trade in China: A Feasibility Study Briefing.

TRAFFIC (Apr. 2017): Closing strategy: ending ivory trade in Hong Kong.

TRAFFIC (May 2017): WILDLIFE CYBERCRIME IN CHINA, E-commerce and social media monitoring in 2016.

TRAFFIC (Jul. 2017): The US elephant ivory market: A new baseline.

TRAFFIC (Aug. 2017): Revisiting China's Ivory Markets in 2017.

TRAFFIC (Nov. 2015): DEADLY MESSAGING, Illegal ivory trade in China's social media.

USAID (Aug. 2016): What drives demand for wildlife?

WildAid (2014): Ivory Demand in China: 2012–2014.

WildAid (2015): Ivory Demand in Hong Kong.

WWF (2016). Reducing Desire for Ivory, a Psychosocial Guide to Address Ivory Consumption.

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