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**Exploring self-based consumer behaviour approaches to
understanding demand reduction for rhino horn and ivory**

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ABSTRACT

Within our lifetimes, iconic species that walked the earth for some 50 million years - elephant and rhino, for example - could vanish. Why? In making sense of the mystery that finds buyers paying inflated prices of some \$97,000 per kilo for some wildlife commodities that are without obvious utility, governments, NGOs and law enforcement agencies recognise that demand for illegal wildlife products must be better understood if the trade is to end.

An influential premise cited by Belk (1988) and developed in the consumer marketing literature is that “we cannot hope to understand consumer behaviour without first gaining some understanding of the meanings that consumers attach to possessions. That we are what we have is perhaps the most basic and powerful fact of consumer behaviour.” (1988, p.139). Despite this foundational principle, research informed by this concept has not been widely applied to understanding consumer decision-making for illegal wildlife products.

To address this, the present research is one of the first to test dimensions conferred upon two illegal wildlife products using theory based on this evidence with the aim of understanding the drivers behind consumers’ buying decisions. In three studies, I demonstrate that it is possible to fill a gap in the literature by applying self-based customer brand frameworks to explore consumer relationships to high profile illegal wildlife products.

Findings show that while attributes conferred by consumers on rhino horn and ivory may be aligned to positive self-actualisation through the bestowing of status and affluence, inconsistencies in brand image and with moral values discourage self-relevance. The effect of the latter implies that purchase behaviour would be negatively impacted. The research highlights the role of self-relevance and awareness campaigns in driving consumer intentions to adopt new behaviours and reverse environmentally deleterious consumption decisions, whilst providing insights for both research and practice.

DECLARATION

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DEDICATION

To my mother, father, Tom and Wendy

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1 Introduction

1.1 Motivation & research questions

How do we account for the curious tragedy that within our human lifetimes, iconic species that have walked the earth for 50 million years could simply vanish? How do we make sense of the mystery that finds buyers paying some \$97,000 on average per kilo for a commodity that is without obvious utility, such as rhino horn (Haas and Ferreira, 2016)? And how should we explain the ineffectiveness of \$1.3bn worth of international commitments from NGOs and governments in reversing this tragic trend (World Bank Group, 2016)? NGOs, governments and researchers have yet to come to agreed conclusions to these same questions. Yet in searching for answers, they have come to one consensus: governments, international NGOs and international law enforcement agencies have recognised that consumer demand for illegal wildlife products needs to be better understood, mapped and modelled.

The illegal wildlife trade (IWT), with an estimated value of between \$7bn and \$23bn per year (United Nations Office on Drugs and Crime 2016), is a major and ongoing issue for conservation and increasingly for environmental sustainability, fuelled by consumer demand around the globe (Sas Rolfes et al. 2019). Further facts demonstrate the scale of the problem. Between 2014 and 2017 an elephant was slaughtered every 36 seconds, equating to 100,000 individuals killed increasingly to satisfy the trade in elephant ivory, and leading to complete extinction of the species by 2025 at these rates of decline (United for Wildlife, 2016). In addition, every year during the same period 1000 rhino were killed to satisfy the trade in their horn (Save the Rhino, 2018); they too face the potentiality of being hunted to extinction. With their decimation comes myriad losses: the destruction of the natural habitats they inhabit, the

collapse of biodiversity, and subsequent reductions in ever-decreasing carbon absorption and water reserves for our planet (Schneider, 2008).

High-level commitments to tackle consumer demand for illegal wildlife, for example the White House's National Strategy for Combatting Wildlife Trafficking (2014), the inter-governmental declarations made at the London Conference on the Illegal Wildlife Trade (2014, 2018) and the UN General Assembly (2017) recognised an urgent need to explore new approaches, including the application of behavioural change methods to influence consumer attitudes, values, beliefs, motivations and drivers of purchase (Burgess et al., 2020; Challender and MacMillan 2014). Numerous, repeated calls to action in the conservation literature have urged the adoption of consumer marketing and psychology approaches to promote a better understanding of consumer decision-making even as the implementation of demand reduction campaigns has proliferated (Burgess et al., 2003; St John, Edwards-Jones & Jones, 2011; Milner-Gulland, 2012; Wright et al., 2015). However, critical questions remain about the most effective way to understand and shape the behaviour of consumers in demand markets for two of the most high profile of these goods, ivory and rhino horn. This is reflected by a gap in the literature.

An influential and fundamental premise cited by Belk and developed in the consumer literature is that “we cannot hope to understand consumer behaviour without first gaining some understanding of the meanings that consumers attach to possessions. That we are what we have is perhaps the most basic and powerful fact of consumer behaviour.” (Belk, 1988, p.139). Yet this seminal concept has largely been overlooked by conservationists researching consumer behaviour in relation to illegal wildlife products. Within the disciplines of marketing and consumer psychology, Belk's premise has been operationalised in the concept of brand attachment, and brand attitude strength is a key model used to assess the extent to which consumers rely on a brand to address relevant needs (Park et al. 2010). Brand

attachment aims to understand how brands relate to the customer's own self, and can highlight how a brand is both personally meaningful and beneficial. Yet despite this foundational premise, research informed by this seminal concept has not been forthcoming in the literature in understanding consumer behaviour in relation to illegal wildlife products. To address this, the present study is one of the first to test the dimensions conferred upon two illegal wildlife products by consumers using theory based on this premise, with the aim of better understanding the drivers behind consumers' buying decisions.

A significant part of consumption for some wildlife products (for example, fur used in clothing items) appears to be driven by complex social forces such as lifestyle and recreational choices, as well as individual aspirations and a desire for social status in both an individual's personal and corporate circle (Milliken, Shaw, and Emslie 2012). These motivations mean that prices can rise, triggering an anthropogenic Allee effect whereby increasing rarity fuels demand (Hall et al., 2008); one example of this phenomenon is rhino horn in Viet Nam. One further key determinant of demand for any product is income. Within South East Asia, economic development has resulted in increased affluence and disposable income (OECD 2018). It is in this context of growing wealth that the conservation literature reveals a consensus of opinion that increasing affluence, particularly in urban areas, is a driver of demand for certain types of wildlife product (Milliken, Shaw, and Emslie 2012; Challender and MacMillan 2014; Gao and Clark 2014; Gao et al. 2016; Felbab-Brown 2011). The present research posits that these may be termed "luxury products".

Whilst the consumer marketing literature states that we tend to know what luxury is when we perceive it, luxury is not always straightforward to define (Kapferer 1997; Beverland 2004), and can be described in abstract terms even by consumers (Kemp 1998). Key components include a strong element of human involvement, perceived (not necessarily real) limited supply (Husic and Cicic 2009; Dubois and Paternault 1995), the conferring of

status and prestige (Thomson, n.d.), that the good is seen as special, it is emotionally relevant to the person concerned, and that its value is recognised by others (Bauer, Heinrich, and Martin 2007). Further attributes include the more transcendent qualities of fascination, enlightenment, and an ‘ability to make the consumer dream’ as conceptualised in Dubois’s ‘dream formula’ (Dubois and Paternault 1995). Culture, history, marketing and endorsement feature in dimensions of Beverland’s luxury brand model (Beverland 2004). Price has been found to be a signal of quality in the persuasive psychology literature (Cialdini and Cialdini 1993); in economic terms, luxury objects are those whose price/quality relationship is the highest in the market (Kapferer 1997). The trouble invested in acquiring an item is positively correlated with the value assigned to it (Cialdini and Cialdini 1993), suggesting that the barriers of illegality and high price may even increase the luxury value of high value wildlife products. Instead of being perceived as a barrier to purchase, the high cost of these products makes them both desirable and aspirational, with purchases tied to the expression of social and economic status (Truong, Dang & Hall, 2016, Miliken & Shaw, 2012; Burgess et al., 2018). Though specific reasons behind consumers’ decisions to buy or consume vary by product, it seems likely that the perception of some illegal wildlife products as luxury goods could be fuelling their purchase (Vigneron and Johnson 2004). As such, purchasing these items reinforces the notion that purchases act as signs of, and enhancers of, status given their twin characteristics of high value and scarcity (Hübschle 2016; Gao and Clark 2014).

To date, in the specific context of the relatively high-value market for rhino horn and ivory items, previous research has identified a lack of empirical research in the marketing and conservation literature on the drivers of consumers’ purchase decisions for these goods and, crucially, the meanings these items hold for consumers, despite the initiation of several interventions which seek to influence this (St John, Edwards-Jones & Jones, 2011; Challender & MacMillan, 2014; Nadal & Aguayo, 2014). The application of models issuing from Belk’s

(1988) theories of self-extension has received little to no attention in this context, despite playing a foundational role in analysing consumers' relationships to purchases.

Therefore, advancing research frameworks evolving from Belk's (1988) fundamental premise, the present research develops self-extension and attachment theories applied in consumer marketing contexts to unearth findings on the psychological needs addressed by products derived from rhino and elephant ivory, two highly threatened species, in the two largest consumer markets of China and Vietnam.

Including the use of data from a large-scale field study conducted in Vietnam, the present research design explores how consumer behaviour frameworks built to understand the dimensions conferred on these products, most prominently brand attachment-aversion (Park, Eisingerich & Park, 2013), may be applied in order to better understand buyers' emotional engagement with these products. This research explores how applying these constructs creates valuable new insights for understanding the drivers behind customers' decisions whilst providing actionable insights for managers, NGOs and actors wishing to reduce demand through interventions.

The nature of the market for these products has dramatically changed over the past decade. In the case of rhino horn, anecdotal evidence points to prices rising from \$5,000 per kilo in 2009 (Haas & Ferreira, 2016) to between \$32,000-\$225,000 per kilogram on global black markets in recent years (Shepherd et al., 2017), potentially restricting the strata of those able to purchase to an affluent elite (IFAW, 2011, Dahlberg and WWF, 2013). Now thought to be linked to complex social and corporate choices, status, lifestyle, and aspiration (Miliken & Shaw, 2012; Burgess et al., 2018), price rises for rhino horn and ivory point to a dramatic increase in demand as high-value or aspirational consumer purchases tied to expressing high status (Truong, Dang & Hall, 2016). Though specific reasons behind consumers' decisions to buy or consume varies by product, research suggests that consumer demand for certain types

of wildlife product also appears to be fuelled by rarity, which in turn increases desirability in some consumer decision scenarios (Courchamp et al., 2006), including those focused on luxury goods (Vigneron & Johnson, 2004). As such, purchasing these items has reinforced the notion that purchases are signifiers and enhancers of status given their twin characteristics of high value and scarcity (Gao & Clark, 2014; Hübschle, 2016).

To provide new insights into how influencing behaviour may be achieved, the meanings conferred on items by consumers, motivations for buying, and attitudes towards purchasing rhino horn and ivory are the focus of the present research. An emphasis on the self-relevance of these items is a feature of the research frameworks adopted. Throughout, parallels with meanings, motivations and attitudes towards buying premium and luxury consumer products are also analysed for the first time in this context. Empirical data on attitudes to ivory consumption has also never been collected to date in Vietnam.

This study tests three central hypotheses in unravelling the end consumer market, or ‘demand market’, for these items as follows: first, this thesis hypothesises that the overall characteristics of consumers’ perceptions of these items support the positive achievement of consumers’ goals; secondly, using self-based and luxury brand frameworks, it asserts that the self-expansionary dimensions conferred on these high-value wildlife products overlap with those conferred on other high-value consumer discretionary items, for which luxury goods are used as a proxy. Finally, using self-based brand frameworks, it tests the assertion that the particular attitudes and perceptions of consumers regarding the material, social, and cultural attributes of these items are aligned to positive self-actualisation for consumers through the conferring of status and affluence.

1.2 Summary of thesis and main findings

For this research, the focus chosen was demand for illegal wildlife species in Vietnam and China, specifically rhino horn and ivory, with tiger and pangolin touched upon in Study 1 because of their inclusion in a number of demand market initiatives and given potential parallels in market dynamics.

In the context of this research, the definition of ‘brand’ generally agreed upon in the literature as a collection of attributes, values, images or multidimensional constructs (De Chernatony & Dall’Olmo Riley, 1998; White, Breazeale & Webster, 2012) was chosen to appropriately represent the attributes of the two illegal wildlife products under examination. By way of its three studies, this research demonstrates that overall, consumers’ conferred ivory and rhino horn with dimensions which could support positive self-extension, but that for the majority of consumers these dimensions are not self-relevant. The overall characteristics of consumers’ perceptions of the attributes of these items are found to be aligned with those of luxury goods from a perceived value, social and cultural perspective. However, in the case of rhino horn and ivory products, while consumer attitudes regarding these products show that the dimensions of status and affluence are conferred upon them by consumers, the majority of more affluent consumers reflect a lack of self-relevance in the case of the illegal wildlife products in scope, supported by positive awareness of environmental values in a broader social and cultural context. Ultimately this should lead to a lower propensity of intention to buy. This builds on prior research which finds that consumers reject brands to prevent bringing undesired meaning into their lives (Banister & Hogg, 2004; Lee, Motion & Conroy 2009; Muñiz & Hamer 2001; Thompson & Arsel 2004; Thompson, Rindfleisch & Arsel 2006).

Building on this, the research uses brand attachment-aversion findings to develop managerial insights which may help to inform campaign design for influencing consumption. These insights suggest that whilst ivory and rhino horn products may be conferred with status-

elevating properties within society because of a variety of attributes such as high price, if they are not self-relevant and are misaligned with a number of consumers' values and identity, brand self-distance will be negatively-valenced and that this will have a subsequently negative effect on attachment. In terms of wildlife products, given that brand prominence was found to be mixed and therefore these items' prominence in consumers' lives is relatively low implying a lack of relevance, the opportunity to increase levels of this measure could facilitate increased aversion from ambivalent consumers. Findings demonstrate that effective interventions would benefit from understanding how to reduce self-relevance, focusing on consumers who were found to be most open to environmentally-aware behaviours and, counterintuitively, in this case, those with ambivalent views on intentions to buy.

Further supporting this, the findings of this research go on to support the conceptualisation of the 'values-driven protagonist', derived from Luedicke, Thompson & Giesler's (2010) 'moral protagonist', whose persona includes a self-based approach to product decision-making that is designed to both project and reflect back an individual's values-driven choices; this includes their perspectives on environmental issues and the concept of a future world amongst other dimensions. Here, 'values' reflects centrally-held global beliefs which have a higher consumer meaning that is grounded in existential concerns, for example cultural and interpersonal relations, and one's life projects, including the reflection of a 'future legacy' orientation in which one feels responsible for maintaining the integrity of a future world, alongside an appropriate and globally relevant contemporary perspective (Thompson, 1996; Vinson, Scott & Lamont, 1977); 'protagonist' reflects the identity work performed by the individual which links their consumption practices and personal identities to a consequential, collectively shared values-based project, ensuring engagement in a collective project of saving a group, society, and even the world (Luedicke, Thompson & Giesler, 2010).

Given that the application of models issuing from Belk's (1988) theories of self-extension has received little to no attention in this context, despite playing a foundational role in analysing consumers' relationships to purchases, Study 1 provides a foundation for those studies which follow by using Belk's (1988) overarching principles as a framework for understanding the meanings conferred by consumers on these items. Using the aggregated findings of 137 in-country interventions found to have been seeking to influence demand for these items, bringing together and analysing this data for the first time in the literature, Study 1 tests H1 and H2 by unearthing the dimensions conferred on rhino horn and ivory by consumers through the lens of two frameworks drawn from the consumer marketing literature emanating from Belk's (1988) theoretical findings. Four dimensions of Richins' (1994a) framework were used to test latent product meaning, whilst Vigneron & Johnson's (2004) measurement scale tests whether the attributes of luxury items are present in the perceptions of consumers in relation to these goods. The study took into account any 'demand reduction' interventions found to have been enacted in two end markets for illegal wildlife, China and Vietnam, between 2004-2014. Also identified was the output of these initiatives, what gaps are emerging and what the research might do to fill these.

Studies 2 and 3 sit at opposite ends of the methodological spectrum. Study 2 comprised a large-scale online survey, whilst Study 3 took a QUAL + qual mixed methods approach (Morse, 2010) involving a thematic analysis of free text gathered in the online survey and a series of in-depth interviews, taking a phenomenological approach, as a supplementary component. As previous work has identified that the relatively wealthy are a key group consuming rhino horn in Vietnam, specifically with businessmen aged between 35 and 55 recurring as identified users, a relatively affluent demographic was targeted using the methods in the research in order to focus on this group's attitudes, brand preferences, and psychological attachments to purchases including illegal wildlife purchases.

Study 2 combined a quantitative exploration of attitudes towards purchasing rhino horn and ivory with estimating prevalence of purchase. Using a broad, large scale survey, it tested the hypothesis that there are parallels between why consumers make choices to buy these high-value wildlife products and buying premium and luxury consumer products or brands, and that those purchasing were a relatively small group. Three frameworks were used to do this: first, Unmatched Count Technique to calculate prevalence; second, the brand attachment-aversion construct adapted from Park, Eisingerich and Park (2013) and finally emotional territory mapping adapted from Woods (2015) and Aaker (1988). These frameworks aimed to measure which dimensions were being conferred on the purchase items in question and which basic psychological needs are being addressed by these products, as well as to measure motivations, attitudes, and the target audience for future campaigns. In the context of this research, the relationship object was the illegal wildlife product and consumers' attachment or aversion to it was examined and measured. In this context we define attachment as the strength of the bond connecting the product, in this case the illegal wildlife product, with the self.

Study 3 took an intensive qualitative mixed methods approach to explore the drivers of brand attachment-aversion and attitudes to illegal wildlife consumption in the context of consumers' lifestyles, alongside those of consumers' self-selected most desired brands. The core component involved thematic analysis of rich free text data gathered from the large-scale survey. Here, the attachment-aversion framework was applied to test the valence of relationships, their strength, and the inherent self-relevance of these relationships as compared with respondents 'most desired' items. Secondly, given the limited research on the meaning and nature of consumers' attachments in relation to purchases of ivory and rhino horn, a phenomenological approach was taken in conducting a series of one-to-one interviews with key informants for the core component. This approach aimed to explore and integrate into the research findings the lived experiences of the research participants (Thompson, 1996; Alase,

2017). Furthermore, this approach is used in order to develop an understanding of complex issues that may not be immediately implicit in surface responses (Goulding, 2005). This provides insights not previously documented on illegal wildlife consumption and from a group perhaps best placed to motivate change in the relatively high power-distance culture societies of China and Vietnam (Hofstede, 2001).

1.3 Summary of contribution

Overall, the current research makes both theoretical and methodological contributions to the extant literature in three fields: consumer marketing, and the nascent fields of conservation psychology and conservation marketing. It does this in three ways. First, it adds to the literature on transdisciplinary approaches involving the application of marketing frameworks to conservation questions. Prior research highlights marketing approaches as one of several tools that could be usefully applied to key environmental problems faced today, including the degradation of biodiversity, increased pollution and species extinction (Balmford & Cowling, 2006; Farley, Zahvoyska & Maksymiv, 2009; Zoller, 2000; Pfund, O'Connor & Koponen, 2006). Other research has examined the need to bring together findings from diverse disciplines in order to highlight key environmental problems and their consequences, together with social marketing-based strategies to achieve effective behaviour change (Eagle, Hamann & Low, 2016; Reyers et al., 2010). Still more studies have examined the role of marketing applied to influencing energy conservation behaviours (Verhage, Dahringer & Cundiff, 1989), the determinants of consumers adopting 'green' consumer behaviour (Jansson, Marell & Nordlund, 2010), and specific marketing strategies that should be adopted to modify negative environmental behaviours, for example the use of private transportation, consumption of domestic energy, waste disposal, and domestic consumption of water (Foxall et al., 2006). A further body of research centres on drawing social science into conservation, finding that this

discipline can help to facilitate conservation policies, actions and outcomes that are more legitimate, salient, robust and effective (Nuno & St. John, 2015; Bennett et al., 2017).

Secondly, this research suggests that influential consumer marketing frameworks, such as the theory of self-extension posited by Belk (1988) and those evolving from this, can be applied to unearth empirical insights into the motivations of human consumption behaviour in a conservation context. It builds on the limited extant literature which examines the potential applications and limitations of consumer marketing applied to conservation questions (Smith, Veríssimo & MacMillan, 2010), and goes on to demonstrate that it is possible to explore the multiple facets of an individual's relationship to high profile illegal wildlife products by taking a transdisciplinary approach to generate a series of outcomes; namely, revealing new insights into consumers' emotional connection to these purchases, measuring parallels with purchases of similarly high-value goods, and examining attitudes expressed by consumers in relation to both sets of products.

Finally, this research adds to the limited literature providing an empirical understanding of consumer attitudes towards buying illegal wildlife in key demand markets (Hinsley, Verissimo & Roberts, 2015). Prior literature focused on demand reduction campaigns for ivory and rhino horn in China and Vietnam highlights limitations in their construction and gaps between these efforts compared with best practice in social marketing (Greenfield & Verissimo, 2019). Further, a limited number of studies consider attitudes towards a single wildlife product (Truong, Dang & Hall, 2016; Dang Vu & Nielsen, 2018). This research adds to the nascent body of literature by offering new insights into the scope of extant interventions and into the nature of relationships formed between consumers and two wildlife products. Based on this, the current research makes theoretical and actionable contributions to the literature on reducing demand for illegal wildlife products.

Managerially, the results of this research suggest that practitioners can shape interventions dissuading consumers to buy by understanding how to reduce the self-relevance of these consumption behaviours; focusing on consumers who are found to be most open to environmentally-aware behaviours and raising awareness of these behaviours in society; and, counterintuitively, in this case, focusing on those with ambivalent views on intentions to buy by elevating the prominence of these campaigns. Added to this, given the attributes of the ‘values-driven protagonist’ identified in the research, the role of mobile technology and social media in reaching these consumers may also be tools in creating persuasive campaigns to foster environmental awareness with limited budgets given the relatively high internet and mobile penetration rates of Vietnam and China.

This research also raises interesting questions for future enquiry, including the possibility of establishing a baseline and trend data for attitudes and prevalence, and unearthing richer insights on the positioning of high-profile illegal wildlife products in consumers’ minds in relation to self-relevance.

2 Literature Review

2.1 Introduction

Past research suggests that unravelling insights around purchase behaviour for ivory and rhino horn products requires an understanding and synthesis of multiple disciplines given the complexity of drivers contributing to the issue (Hübschle, 2016; Bennett et al., 2017). The consumer marketing literature is a body of knowledge that has not previously been examined in depth for possible explanations. Yet disentangling the themes shaping values, attitudes and trade flows contextualised in a specific cultural setting reveals numerous nuances and avenues of enquiry (Hübschle, 2016). Could the observations found help us to better understand the dynamics driving consumers on the demand side of the trade?

Overall, the size, complexity and depth of the threat to biodiversity posed by the illegal wildlife trade is matched perhaps by the insignificance of its recognition in the literature outside conservation. This trade is estimated to be a \$23bn illegal operation (United Nations Office on Drugs and Crime, 2016), making it the largest in the world after drugs, arms and human trafficking. It is brutal, growing, and threatens our very existence because of its related consequences; these are as serious as funding of organised crime through the criminal networks it supports, and the impact of climate change on our world (Felbab-Brown, 2011).

In exploring applications of the consumer marketing literature in this context, the research aims to probe the motivations of the human consumers behind the issue, unravelling the knot of drivers raised by the conservation and grey literature. In doing this, this study answers the recurrent call for further insights into consumer behaviour in the context of the illegal wildlife trade which has not yet been fully answered,. More specifically, research synthesising multiple disciplines to address consumer demand in the conservation literature remains an underrepresented area (Milner-Gulland, 2012; Hinsley, Verissimo & Roberts,

2015), lacking in sensitivity around cultural context (Challender and MacMillan, 2014; Felbab-Brown, 2011) and an understanding of the myriad and overlapping values which are assigned to the specific wildlife objects in question (Challender and MacMillan, 2014; Gao et al., 2016; Dang Vu & Nielsen, 2018; Veríssimo & Wan, 2019; Gao & Clark, 2014).

Approaching this in the spirit of true enquiry (Fournier 1998), the central questions of the current mystery are used to structure avenues of analysis from a consumer marketing perspective in order to understand the drivers of consumption. Hence, the following questions are asked: by whom are these items bought; what do they mean to consumers; where and how are they purchased given the location of demand markets and the context of illegality for some items; and finally, how do these dimensions lead us to an understanding of the ultimate question of ‘why’ they are purchased?

To begin, a summary of what the literature reveals about current usage is given to provide context. The literature on the nature of consumer relationships with products is then considered in order to understand more about what characterises consumers of these items and the possible dimensions conferred on the objects of consumption from a psycho-sociological perspective. Subsequently, in understanding *who* the buyers are, the literature on consumer psychology, including self-based customer-brand relationships, consumer marketing and purchase decisions, is reviewed. Next, *what* is being bought is considered, using this question to guide a review of both sets of literature concerning the nature of products, relationships to items, brands and symbolism. The context of *where* and *when* these items are being bought is then reviewed in an exploration of the consumer marketing and conservation literature on the relevance of geographical, economic and cultural context. *How* these items are bought given the context of illegality in the majority of cases follows from this, given that it shapes the study question. Finally, we look to unearth reasons *why* these decisions to buy are made, and could

potentially be reversed, considered in the context of constructs found in the marketing literature.

2.1.1 Transdisciplinary approaches

Processes of human decision-making play a key role in understanding how humans use natural resources (Agrawal & Gibson, 1999), support policy (Treves 2009), and allocate research investments (Martín-López et al., 2009). Understanding the drivers and impacts of human behaviour is thus at the core of several disciplines and increasingly more attention has been given to their study in conservation (Nuno & St John, 2014).

A focus on the drivers of the illegal wildlife consumption remains a gap in the marketing literature and, like climate change, this trade continues to accelerate with little abatement (Veríssimo & Wan, 2019). Whilst the extant marketing and psychology literature contains no studies focused on specific high value wildlife products, it does deal with broader behaviours overlapping with biodiversity, ecology and conservation issues. Areas of overlap include the creation and exploration of green marketing strategies (Cronin et al., 2011), engendering ecological sustainability for businesses (Armstrong Soule and Reich, 2015), behaviour change (Goldstein, Cialdini & Griskevicius, 2008; Jansson, Marell & Nordlund, 2010) including the role of persuasive technologies (Fogg, Cuellar & Danielson, 2007; Ross & Tomlinson, 2011), and designing strategies to negate negative consumption trends (Csikszentmihalyi & Halton, 1981; Foxall et al., 2006). Enviropreneurialism (Menon & Menon, 1997) and green de-marketing (Kotler, 1999; Armstrong Soule & Reich, 2015) are examples of two constructs developed in this field.

On the other hand, the conservation literature provides a stream of studies which call on the integration of marketing constructs to shed light on the human dimension of this increasingly complex puzzle. Though Pooley, Mendelson & Milner-Gulland (2014) warn that

multiple disciplinary studies addressing environmental problems have not yet been proven to be more effective than single disciplinary approaches to achieving successful conservation outcomes, there is general agreement in recognition of the concept that the increasingly unsustainable burden placed on biodiversity comprises a significant human behaviour element. Extensive gaps remain in our knowledge about the dynamics of ecosystems that need addressing through transdisciplinary research if progress is to be made (Pfund, O'Connor and Koponen, 2006; St John, Edwards-Jones and Jones, 2011; Milner-Gulland, 2012; Pooley, Mendelsohn & Milner-Gulland, 2014). Because of this, repeated calls have been made in the conservation literature for incorporating other academic disciplines into its own (Saunders, 2003; Drury, 2011; Collins, Fraser & Snowball, 2013; Greenfield & Veríssimo, 2019; Veríssimo & Wan, 2019).

Research effort on the interactions between human behaviour and demand for illegal wildlife products has primarily been directed at applying behavioural psychology and social science frameworks to achieve a spectrum of different aims. Behavioural economics, social-ecological systems (SES) models, social science, game theory (Milner-Gulland, 2012; Nadal & Aguayo, 2014; Hinsley, Verissimo & Roberts, 2015; Olmedo, Sharif & Milner-Gulland, 2018), and behaviour change constructs are amongst the frameworks mentioned in the literature as offering the opportunity for generating useful insights into the human dimension of real-world conservation problems. The issue of predicting and modelling human behaviour is a further application relevant to conservation concerns (Burgess et al., 2003; St John, Edwards-Jones & Jones, 2011; Milner-Gulland, 2012; Wright et al., 2015); examples comprise bioeconomic models used to better understand hunting (Ling & Milner-Gulland, 2006), the Theory of Planned Behaviour applied to ocean turtle conservation (Eagle, Hamann & Low, 2016), and the framework of agent-based modelling (ABM) applied to better understand drivers of deforestation (Manson & Evans, 2007). Social marketing quality assurance

frameworks are also advocated by NGOs like Traffic, examples of which include the NSMC (2016) Social Marketing Benchmark Criteria which promote a mixed methods approach to influencing behavioural change (Olmedo, Sharif & Milner-Gulland, 2018).

In the context of illegal wildlife products, tackling demand is critical because supply-side measures are rarely effective alone (Felbab-Brown, 2011). Due to the lack of successful outcomes in tackling the trade, the conservation literature continues to assert that further insight into end consumers be undertaken (Challender & MacMillan, 2014; Nadal & Aguayo, 2014), with intergovernmental organisations backing these requests (World Bank, 2018). The previous period of major international work to take stock of activities researching and influencing demand for certain endangered species took place in the late 1980s and early 1990s, coinciding with the listing of the African elephant to the Convention on the International Trade in Endangered Species' (CITES) Appendix 1 list, and following substantial poaching pressure. The insights from work carried out at that time focused more on supply-side economics than demand reduction (Milner-Gulland & Leader-Williams, 1992, Leader-Williams et al., 1990, Gulland & Beddington 1993, Douglas-Hamilton 1987).

To address this shortfall, the recurring demand in the conservation literature for transdisciplinary enquiry on consumer behaviour has manifested in two nascent disciplines to which this study contributes alongside its contribution to the consumer marketing literature. These are the emerging fields of conservation psychology, defined as an applied field that uses psychological principles, theories, or methods to understand and solve issues related to human aspects of conservation (Saunders, 2003), and conservation marketing (Hinsley, Verissimo & Roberts, 2015; Wright et al., 2015). The creation of these two relatively new fields of research appears to be borne out of repeated recommendations that marketing could be usefully embraced as a fundamental part of the conservation 'toolbox' if consumer behaviour is to be effectively influenced (St John, Edwards-Jones & Jones, 2011; Wright et al., 2015). Examples

include the use of market research and social marketing to better inform the design of conservation interventions in understanding their target audience (Greenfield & Veríssimo, 2019), the application of appropriate messaging in marketing interventions (Venkataraman, 2007), and measurement and evaluation (Veríssimo, 2013; Olmedo, Sharif & Milner-Gulland, 2018) which has to date been limited in the demand reduction activities of NGOs and IGOs due to time and budget constraints. These new approaches support the view that, if conservation is to become truly transdisciplinary and lead to the implementation of effective conservation actions, conservation scientists must build strong, long-term collaborations with practitioners from other disciplines (Reyers et al., 2010; Pooley, Mendelsohn & Milner-Gulland, 2014).

2.1.2 Background: Rhino horn & ivory – a summary of usage

The history of the cultural use of rhino horn and ivory, the values conferred upon them, and their evolution in terms of use today provide context to this study; alongside this, the legality of these items from a purchasing perspective also provides useful background. Viewed through this lens, the rationale behind the application of the consumer marketing literature comes alive with possibility given its depth of insight into what drives consumer purchase decisions.

Notable in the conservation literature for their depth, sensitivity and nuanced insights are Gao and Clark's (2014) comprehensive explanation of the values with which ivory is imbued from a Chinese perspective alongside Hubschle's (2016) similarly detailed analysis of rhino horn's values from the cultural perspective of China and Vietnam. Their observations into the gravity and diversity of both items' cultural associations within society adds significant context to the motivations of consumers.

Ivory

Deeply rooted in traditional art and peaking in the Ming (1368– 1644 AD) and Qing (1644–1911 AD) dynasties (Kao, 1990), Gao et al. (2014) reveal that Chinese society attaches diverse values to ivory: these encompass economic, social, cultural, aesthetic, religious, and medical dimensions.

Recent surveys show that ivory is bought by diverse consumer groups (National Geographic, 2012; IFAW 2013; WCS & CIC, 2013). Characterised as ‘white gold’ and redolent of its history as a precious material used in ancient Chinese historical contexts (Laufer, 1914), at the high-end the growing appeal of ivory as a collector’s item is a growing interest in carved ivory products as an investment purchase, whilst at the lower end, a segment of fashionable young women are targeted in China and Vietnam by suppliers of ivory bracelets and trinkets, which are positioned as pretty, desirable purchases to make on holiday (WCS & CIC 2013). It is also used in powdered form in traditional Chinese medicine (Gao & Clark, 2014).

Modelling and analyses over the past decade cite China as having ‘the dominant role of any single country’ in the illegal ivory trade (Underwood, 2013). Looking to Vietnam, research by Vigne and Martin (2011) finds that raw tusks have passed through Vietnam to China for hundreds of years, with ivory artisanship mentioned in texts dating back to the 19th century. Under the French colonial government (1883–1954), the traditional arts and crafts of Vietnam were supported the exhibiting of carved ivory and there was a demand for religious ivory items (Stiles 2004); the last three decades have seen a steady increase in the growth of ivory handicraft production and in large seizures of ivory going to Vietnam (Vigne & Martin 2011).

Rhino horn

An ancient heritage of rhino horn usage in China is thought to have begun in around 2000 BCE with the use of ritual libation cups used for ancestral honouring ceremonies (Hübschle, 2016). During the Eastern Zhou dynasty (770 – 221 BCE), carvers created intricate bowls, libation cups and other decorations out of rhino horn; here the belief was that the curative elements of the rhino horn, purported to be an analgesic and have life-lengthening properties, would dissolve from the cups into the wine and in this way, rhino horn's two ancient uses, decorative and medicinal, were intertwined (Chapman, 1999; Parker, 2013; Hübschle, 2016). Whilst the origin of rhino horn's prophylactic value in traditional medicine is debated, it is accepted that the Chinese use of rhino horn for medicinal purposes began around the time of the mythical emperor Chen Nung, dating medicinal use of rhino horn back to approximately 2700 BCE and rendering it an ancient practise of almost 5000 years (Hübschle, 2016). Published around 100 BCE, the classic *Chen Nung Ben Cao Chien* or 'The Herbal Classic of the Divine Ploughman' classifies powdered rhino horn as a cold drug, which is suitable for cooling blood from hot diseases (Parker, 2013) and which was thought to cure myriad poisons (Bretschneider, 1910).

Rhino horn's historical use is associated both with royalty and political, economic and military elites, signifying that buyers were an elite cohort of those who could afford to pay high prices, and whose status was firmly established at the highest echelons of society (Hübschle, 2016). The product's elevated heritage saw its use in girdles of royal mandarins and the possessions of emperors, studded with pieces of rhino horn; official attires were ranked in the order of jade, gold, rhino horn and ivory during the Kin dynasty (1115–1234 CE) (Laufer, 1914). The implication is that this historical context has contributed to the high price of rhino horn and its status as a precious material, though scarcity has also played its part in driving high prices. Hübschle's (2016) research shows that historically, in times of limited supply, the

price of rhino horn would surge to new heights, never recovering to its more affordable previous price. Providing a similar example of price inflation context, in 2006, one rhino horn typically sold for about \$760, whilst in 2012 the same horn could fetch more than \$57,000 (Dahlberg & WWF 2012).

Gao et al. (2016) find that the art, antiques and collectibles market for carved rhino horn in Asia may be overlooked, and yet constitute a significant component of rising demand, and the flow of illegally acquired rhino horn into this market for laundering as antiques is cited in the literature as part of this dynamic (Hubschle, 2016). In an analysis of local Chinese language media, the economic value of rhino horn carvings is cited more frequently (75%) than any other attribute of these items, describing them as collectible and investable over and above mentioning their artistic value and the medicinal properties of rhino horn itself (Gao et al., 2016). Amman (2015) also identified Hanoi factories producing religious artefacts and symbols such as prayer bangles, bracelets and Buddha beads, targeted at visiting Chinese tourists.

With roots as an ingredient in traditional Chinese medicine, contemporary rhino horn usage in Vietnam now extends far beyond the treatment of basic ailments. NGO Traffic's (2012) extensive research reveals how urban myths not only cite rhino horn as a cure for life-threatening diseases such as cancer, but also as a treatment for symptoms that can accompany the lifestyles of the affluent, for example excessive food, drink and drugs. For example, local websites describe rhino horn with wine as "the alcoholic drink of millionaires" (Milliken & Shaw, 2012). In other modern usages, the substance is ground in specially manufactured bowls and mixed with water to create a wellness solution (Milliken, Shaw & Emslie, 2012); in another context, it is sprinkled on wine at a gathering of business professionals (Truong, Dang & Hall, 2016). Consumers tend to prefer wild horn over semi-wild or farmed products, which may reflect a more general tendency in traditional medicine that associates wild-sourced products with greater power and perhaps effectiveness (Hanley et al., 2018; Gratwicke et al., 2008).

Given Vietnam's substantial economic growth over the last decade (Vanham, 2018), not only has the market segment of potential rhino horn consumers grown exponentially in recent years alongside rhino horn consumption, but studies by NGO Traffic also show that a group of 'intenders' aspiring to become part of a perceived high-status user group, is waiting intently until they too can afford to become part of an exclusive group of users (Milliken, Shaw & Emslie, 2012).

Legal status for trade in ivory and rhino horn

In terms of ivory and rhino horn products' legal status in the two major demand markets, there are complexities in understanding this ever-evolving issue which provides a further dimension for exploration in the context of purchase behaviours. China and Vietnam are members of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), which banned international trade in ivory in 1989 and rhino horn in 1977. This means that buying and selling ivory across borders is illegal, as is the poaching of wild elephants for their tusks; the position is similar for rhinos (CITES, 2019).

Despite the ban on international trade for ivory, previously the substance could be sold legally on a domestic basis in some countries, usually sourced from stockpiles or from elephants killed before the ban, allowing antiques to be traded; China was one such country until a ban was implemented on domestic trade in 2017. Prior to this, in an analysis of legal supply growth, the literature suggests that the sale of ivory approved by CITES in 2008 is thought to have spurred production and trade of ivory products in China and stimulated the demand for ivory from a growing class of wealthy consumers purchasing ivory products as collectables and investment vehicles (IFAW, 2011). This influx of ivory generated a substantial increase in the number of factories and retail outlets licensed to trade ivory (IFAW, 2011).

Further stimulating demand, under the cover of “legality” the expanded legal market is thought to have given some ivory carving and retail enterprises the opportunity to violate the law given that IFAW (2011) revealed that a number of illegal ivory trade facilities sprang up to fill the demand gap left by the limited amount of legally imported ivory. The Chinese government continues to hold a stockpile of ivory that it had been releasing in set amounts to licensed ivory carving factories and retailers before the ban and by 2018 there had been no buy-back campaign to remove remaining ivory out of the storerooms of previously licensed ivory shops. Additionally access to the source of ivory has grown as Chinese presence in Africa has grown to unprecedented levels (Brookings Institute, 2018). This has led to active engagement in ivory sourcing and consumption (Traffic, 2013). Transactions are enacted by organised transnational criminal syndicates, which appear to be Asian-run but African-based operations, further driving the illegal ivory trade (Traffic, 2013).

Vietnam acceded in 1994 to CITES, which prohibits international trade in elephant ivory. Trade in wild elephant products was essentially banned in Vietnam, but one provision allowed internal trade in ivory obtained before the government’s legislation of 1992 that banned internal trade (Martin & Stiles 2002; Stiles 2008), meaning that ivory crafted before 1992 can be legally sold within the country (Vigne & Martin, 2011). At the 16th Meeting of the Conference of the Parties to CITES held in Bangkok in March 2013, the Parties, the Secretariat and the Elephant Trade Information System (ETIS) were concerned about Vietnam being a significant transit country for ivory. Overall from a demand perspective, CITES (2002) has raised concerns that unregulated domestic markets in China, Japan, Myanmar and Vietnam allowed freshly killed ivory to join legal stock on the shelves, fuelling the poaching crisis.

Looking to rhino horn, legal domestic trade was banned in China. A ban on its use in traditional Chinese medicine, implemented in 1993, was briefly loosened in 2018 when the Chinese Government effectively legalised their domestic trade in rhino horn (and tiger bone)

contingent on specific conditions. This involved the introduction of quotas for these body parts to be used in traditional Chinese medicine (The Guardian, 2018); however the implementation of this legislation was subsequently postponed (News.com.au 2018).

In Vietnam, whilst domestic trade is banned, CITES approves the legal export from South Africa and the import to Vietnam of horns from the southern white rhino, included in Appendix II following its delisting from Appendix 1 in 1993 (CITES, 1993; Child et al., 2016). This limits trade to hunting trophies and live rhinos to appropriate and acceptable destinations (Milliken, Shaw & Emslie, 2012). In South Africa (which lifted the domestic ban on trade in rhino horn trade in 2017), fewer than 100 experienced hunters can apply for a permit every year to shoot one rhino. Permits cost tens of thousands of dollars, and the harvested horn is legally required to stay intact as a ‘trophy’ (BBC 2014).

Vietnam is cited as the leading destination for illegal rhino horn over the last decade, though this view is based largely on anecdotal and observational accounts collected by NGOs exemplified by Traffic (2013). China is also cited as ‘stepping back into the trade’ based on data of seizures in China (Milliken, Shaw & Emslie, 2012). This view is also supported by the emergence of growing exports from Europe to China and Hong Kong of antique and sport-hunted rhino horns acquired at auction before EU regulation foreclosed on such trade, and growing awareness of Chinese involvement in the Vietnamese trade, for example regular cross-border tourist purchases of bracelets made from rhino horn (Traffic, 2013).

2.2 Who are the buyers: Consumer relationships to purchase decisions

Exploring the literature on customer-brand relationships and the quality of these bonds provides a new field of enquiry in the pursuit of understanding the human dimension of the trade in rhino horn and ivory.

Product or 'brand'? An exploration of definitions

Where should we place products made from rhino horn and ivory on the scale between product and brand? On one hand, they are symbolic of a rich cultural history and endowed with brand-like attributes, particularly when carved into aesthetically valuable objet d'art (Gao et al., 2016; Hübschle, 2016); on the other hand, they are valued commodities similar to gold or diamonds in terms of some consumer marketing attributes such as perceived rarity and preciousness. According to the literature, rhino horn and ivory as symbols, possession objects and attachment objects express attributes of brands, products and personal possessions; in being the object of brand attachment more than possession attachment, they may demonstrate the intersection of both.

In disentangling brand and product, the literature agrees that brands are collections of attributes, or multidimensional constructs (De Chernatony & Dall'Omo Riley, 1998), and that brand image is much more a matter of perceived meaning and cultural mythology (Holt, 2003) than an aggregation of verified evidence (Thompson, Rindfleisch & Arsel, 2006). De Chernatony & Dall'Omo Riley offer 12 definitions of a brand in their review, including four that fit the attributes for products made from rhino horn and ivory.

Kleine & Baker (2004) note that there is still ambiguity around whom or with what a brand relationship forms. Bonds form with anthropomorphised brands, the companies producing the brands, and the people associated with the brand (Schouten & McAlexander, 1995; Fournier, 1998; Hoeffler & Keller, 2003; Kleine & Baker, 2004). They go on to argue that brand bonds and possession bonds differ given the ability to characterise brand relationships as analogous to interpersonal bonds, and that they are qualitatively different. Yet they note that similar to stronger brand bonds, possession attachment is also used for a number of self-definitional purposes, to negotiate identity and life's issues, to relate autobiographical

stories, to define ‘me’ and ‘not me’, to connect with others, for contemplation and action, and to actualise possible selves (Aaker, 1997; Kleine & Baker, 2004).

Social psychology and persuasion

As students of human behaviour (Belk, 1975), and with the understanding that no set of principles fully explains what motivates people, causes them to adopt certain attitudes, and leads them to certain behaviours (Fogg, 2009), approaching the consumer marketing literature provides one lens on human decision-making to potentially enhance the existing body of knowledge on consumer purchasing behaviour for rhino horn and ivory (Saunders, 2003; Veríssimo, 2013).

The social context around consumers (Greenfield & Veríssimo, 2019) and the external forces operating on groups of individuals or social systems are acknowledged as important when understanding the causes and solutions of environmental problems (Saunders, 2003). In the specific case of these two products, evidence suggests that social contexts are one dimension of the decision to buy; for example, rhino horn markets are socially embedded (Hübschle, 2016); ivory carvings are imbued with shared cultural values (Gao & Clark, 2014); and friends and relatives are cited as important information sources on ornamental products made from wildlife (Venkataraman, 2007). It follows that insights related to social context in consumer behaviour may prove promising in furthering our understanding of consumption drivers.

There is general agreement that values, beliefs and personal norms exert an influence on consumer behaviour, and that these are contextualised within the social norms and situational influences described by the social psychology literature (Cialdini & Trost, 1985; Cialdini & Cialdini, 1993; Schultz et al., 2007; St John, Edwards-Jones & Jones, 2011). Given the social nature of the self (James, 1890), humans are characterised as social beings doing the

best they can in a given situation (Thaler, 1980) rather than ‘homo economicus’ (Persky, 1995); framed in the constructs of social psychology, since 95% of people are imitators and only five percent initiators, findings show that people are persuaded more by the actions of others than by any proof offered (Cialdini & Cialdini, 1993). Social situations can affect the outcomes of behaviour, and situational influences on behaviour appear to explain individual variations in consumer activity (Belk, 1975).

Extending these concepts, theoretical frameworks demonstrate that subcultures of consumption come into existence as people identify with certain objects or behaviours (Schouten & McAlexander, 1995). The systematic analysis of ‘cultures of consumption’, including brand tribes, consumption microcultures and brand communities has been asserted as essential to our understanding of what drives consumer behaviour (Cova, Kozinets & Shankar, 2007). In certain of these situations, product and brand meanings are collectively forged among a group of consumers (Schouten & McAlexander, 1995). Social identity theory describes how consumer choices construct identity; choices inform that identity (Cătălin & Andreea, 2014). Product and brands are selected to harmonise with, and act as a beacon of, lifestyle choices (Cătălin & Andreea, 2014). A wide variety of research shows that the behaviour of others shapes individuals interpretations of, and responses to, specific situations (Bearden & Etzel, 1982; Goldstein, Cialdini & Griskevicius, 2008). Socio-psychological characteristics of the decision-maker and the pressure they perceive to behave in a certain way has been shown to exert an influence on behaviour (St John, Edwards-Jones & Jones, 2011).

From the perspective of ‘green’ behaviours, research has shown that personal norms develop through the formation of a consistent value system that also incorporates social norms (Jansson, Marell & Nordlund, 2010). The development of ‘pro-environmental norms’ has been shown to emerge from an awareness by a consumer of the environmental consequences of their actions in some studies, but conversely so has the concept of an environmental egoistic

consumer, who will only act in a pro-environmental manner when the perceived benefits to themselves outweigh the perceived costs (Jansson, Marell & Nordlund, 2010).

Personal norms have a strong positive influence on willingness to adopt behaviours (Burgess et al., 2003; Jansson, Marell & Nordlund, 2010). Cohen et al.'s (2006) Multiple Pathway Anchoring and Adjustment model provides a framework for understanding how attitudes to social and self-identity shape behaviour (Cohen & American Reed, 2006), whilst also finding that readiness to act was significantly higher when people felt they had a coherent personal attitude underpinned by a consistent underlying value system. Goldstein et al. (2008) prove the utility of social science in underpinning consumer marketing theory, as demonstrated in their experiment to encourage conservation behaviours by having hotel guests reduce towel usage. Here, messages which made salient guests' identities as environmentalists and used normative messaging, harnessing the driver that leads us to conform in order to be liked and accepted by others in society, were more effective (Goldstein, Cialdini & Griskevicius, 2008). Fournier (1998) notes that self-identity is structured and sustained by themes of connectedness and relationality, whilst Dunning (2007) finds that people acknowledge that one of the reasons they act in a socially desirable way is to maintain a positive view of self (Dunning, 2007); the positive harmonisation of self-beliefs is a recurrent theme in the literature (Fournier, 1998).

Given the relevance of consumer behaviour in the context of an increasingly online world, in citing the outcomes of attitude change and behaviour change in relation to the persuasive capacity of technology Fogg et al. (2011) found that people respond socially to computers as though they were social entities who used the principles of motivation and influence. Expounded in the Functional Triad framework and Fogg Behaviour Model, Fogg et al. (2011) assert a new paradigm in their findings that computers act as persuasive tools in effecting attitude and behaviour change in a number of ways; these include increasing self-efficacy, providing information tailored to the individual's needs and wants, triggering

decision-making and simplifying or guiding people through a process. In doing so they provide a form of social support (Fogg, Cuellar & Danielson, 2007) and can elicit attitudinal responses consistent with the general patterns observed by the social psychology literature on other behaviours (Eckles et al., 2009) with promising applications for positive behaviour change (Fogg, Cuellar & Danielson, 2007, Fogg et al., 2011). These insights alongside other examples tailored to digital and online application, such as Hinsley et al.'s (2015) pioneering work in the area of online choice experiments to analyse the use of online and social media platforms in understanding both the trade and consumer markets for illegal wildlife, provide a basis for further enquiry.

Cross-cultural differences

The two primary end markets for rhino horn and ivory, China and Vietnam, offer the possibility of exploring specific cultural contexts informing the nature of consumer attitudes to purchasing these items. This is because, looking to the consumer marketing literature, McCracken (1986) provides a holistic framework in stating that culture functions like a blueprint for human activity, and a lens through which the world is seen, or how an individual views phenomena. The conservation literature agrees that the cultural context of environmental conservation matters (Craig Lefebvre & Kotler, no date; Saunders, 2003; Waylen et al., 2010; Pooley, Mendelsohn & Milner-Gulland, 2014), but that there are significant complexities involved in applying this precept (Waylen et al., 2010). Waylen et al. (2010) find that there is more evidence to support a better contextual understanding of culture than to support the argument that success depends on economic benefits (Waylen et al., 2010). Practically applied in the conservation sphere, recommendations are made for the inclusion of local participation in interventions; this is one means suggested in the literature of moving towards more successful interventions (Waylen et al., 2010).

Much like the example of the ecosystem services literature, developed primarily by western ecologists and economists focused on democratic capitalist values and systems (Pooley, Mendelsohn & Milner-Gulland, 2014), care is advised when approaching studies and interventions intended for different cultural contexts. Norenzayan et al. (2005) highlight the importance of placing any social interventions into the affairs of specific cultures on firm ground that is based on clear knowledge of universals and their boundary conditions, as well as the particular prerogatives and psychological preferences of those cultures that may differ considerably from one's own (Norenzayan & Heine, 2005). In the emergent quest for psychological universals, whilst some studies put forward the universal nature of the human mind, with cultural psychology extending social psychology (Fellmann, 2017), various investigations have compared social and consumer psychology between Eastern and Western cultures revealing differences.

Whilst it masks important regional differences, the communion imperative of 'Eastern' cultures, comprising attributes of personal integration, social connection, and the collectivism dimension, is contrasted in the literature with the agency imperative valued in the West (Sedikides, Gaertner & Vevea, 2005). The literature agrees that cultural divergence is found in values, beliefs, and affect (Cialdini & Trost, 1985; Kim & Markus, 1999; Eisingerich & Rubera, 2010; Ruby & Heine, 2012; Fellmann, 2017). Kim & Markus (1999) found that where western individuals such as Americans preferred uniqueness, East Asians preferred conformity, and these preferences were associated with divergent individual actions; in both American and East Asian cultural contexts, individual preferences are then acted out in accord with cultural norms. In one example, advertisements in Korean magazines emphasised themes of conformity and group harmony whereas American advertisements more commonly used themes of uniqueness and individuality (Kim & Markus, 1999); in another, Ruby and Heine (2012) found

that the social influence of close others emerged as a strong predictor of food choices in collectivist cultural contexts.

Self-enhancement has been shown to be universal, but with variations in terms of manifestation; building on Heine's belief that Eastern cultures did not self-enhance but that this desire was expressed in the concept of a need to maintain 'face' (Heine & Hamamura, 2007), Sedikides et al. (2005) find that different cultures self-enhance in different ways, with Eastern cultures doing so on attributes relevant to the cultural ideal of communion. As Kim & Markus (1999) state, 'Each culture has its own ideologies, institutions, and informal practices that are interconnected and mutually constituting and any given response, no matter how seemingly trivial or inconsequential, reflects engagement with some set of cultural ideas and practices and needs to be understood in this cultural framework.'

Like cultural categories, cultural principles are substantiated by consumer goods; in this relationship goods are both the creations and the creators of the culturally constituted world (McCracken, 1986). Cultural principles are expressed in every aspect of social life, including consumer behaviour (McCracken, 1986). Adaptation of the marketing mix and brand traits is recommended to suit different needs in different countries (Eisingerich & Rubera, 2010), given the trap of falling prey to the 'majority fallacy' referenced by Verhage et al. (1989), defined as trying to serve too large a market yet offering no real sustainable competitive advantage to any market. Eisingerich & Rubera (2010) find that resources may well be wasted when a brand invests in characteristics that have no influence on customer commitment in a given cultural context, highlighting that customer orientation and social responsibility increase brand commitment in countries which are collectivist, long-term oriented, and high on power-distance, and innovativeness is less valued. Set in the context of today's China, where a move already made by western societies in the direction of egalitarian individualism is said to be taking place (Fellmann, 2017), there is an unanswered question over how society will develop.

These insights could provide helpful evidence for those designing interventions in demand markets for illegal wildlife.

There is a gap in the literature on the psychological mechanism by which brand personality operates across cultures, but Aaker (1997) suggests that the symbolic use of brands differs. Consistent with the literature in consumer and social psychology, in collective cultures where interdependence, conformity and similarity are valued, consumers are more likely to use brands to express how their selves are similar to members of their in-group; so whilst the symbolic or self-expressive use of brands is universal across cultures, its nature differs (Aaker, 1997; Dunning, 2007).

The construct and role of 'face' in influencing product purchase decisions

Given the cultural context of this study, an exploration of the socio-psychological literature describing the concept of 'face' is relevant. This is because of references in the conservation literature describing that 'face' is deemed important in for maintaining interpersonal relationships (Zhou & Guang, 2007), and the endowing of prestige or 'face' in relation to the two products in question and the demand countries of China and Vietnam which are being considered (Gao, 2014).

The role of 'face' and its influence on consumption behaviours has been explored and advanced in the literature, building on the foundations of Veblen (1899), Hofstede (1980) and to some extent Goffman's (1967) concept of 'facework' (Oetzel et al., 2001), and extending into the impact of cultural differences in executive management on attitudes to change (Geletkanycz, 1997). In focusing on the concept of 'face' in China, Li et al. (2007), classify three categories of face consumption behaviours: conformity, distinction, and other-oriented face consumption (Li & Su, 2007). In the context of consumer decision-making for rhino horn and ivory, this dimension provides promising avenues for further enquiry.

Li and Su (2007) find that the concept of face differs from prestige, and that it influences consumer behaviour in China in a series of specific ways. They find that in relation to US consumers, there is a greater potential to be influenced by their reference groups; a greater focus is placed on the prestige value of goods; finally that their purchase of luxury goods serves to enhance, maintain or save face. This combination is used to explain the apparent paradox that sees Asian consumers exhibit strong demand for luxury goods, whilst having relatively lower income levels (Li & Su, 2007). That consumption is found to be more of a tool to serve higher order social needs than an activity in its own right is revealing (Li & Su, 2007). In an example cited by conservation NGO Traffic (2012), it was found that the perception amongst older Chinese millionaires that the exotic and exclusive nature of illegal tiger products made gifting these items a short-cut to gaining social currency; consistent with this is the finding that in a study of Chinese businessmen, ‘face’ was consistently noted as an important consideration in professional interactions alongside the fear of ‘losing face’ (Triandis 1998). Today, possessing an ivory carving, especially high-end ivory, gives owners a sense of prestige or “face” (Gao & Zheng, 2012).

Alongside the recommendation to managers that the consideration of ‘face’ is factored into marketing interventions by reference to the quality and status conferred by products, this construct may offer promising applications in the conservation marketing literature.

Self-based customer-brand relationships

As Fournier (1998) states, ‘put simply, consumers do not choose brands, they choose lives’. The centrality of identity issues in consumption is exemplified by Belk’s (1988) assertions not only that “we are what we have” (1988, p.139) (Ahuvia, 2005), but also that “we cannot hope to understand consumer behaviour without first gaining some understanding of the meanings that consumers attach to possessions.” (1988, p.139).

Belk's (1988) comprehensive review of the literature on possessions and their meanings notes that Sartre (1956) suggests three primary ways through which we learn to regard an object as a part of self; first, through appropriating or controlling an object for our own personal use; second, by creating an object and incorporating it into self by having it – positing, for example, that buying an object is merely another form of creating the object; finally, the third way in which objects become a part of self is by knowing them. Building on the critical role of self-relevance in the customer-brand relationship, those supporting the concept of the self-expansion model (Aron & Aron, 1986) in relation to consumer purchase choices may provide relevant foundations for explaining motivations for buying items made from illegal wildlife.

Although much research has examined attachment in interpersonal contexts, research in marketing suggests that consumers can also develop attachments to marketplace entities. Fournier's (1998) view of customer-brand relationships as a conceptual foundation for the form and dynamics of customer-brand interactions has spurred research in the marketing literature built on the concept of the similarity of brand perception and person perception (Park, Eisingerich & Park, 2013). This includes exploring relationships between consumers and products or brands (Schouten & McAlexander, 1995; Fournier, 1998; Hoeffler & Keller, 2003), celebrities (Thomson, 2006), and special possessions (Ball & Tasaki, 1992; Kleine & Baker, 2004), including the consumer culture theory (CCT) proposed by Arnould & Thompson (2005) which posits that consumers use brands to construct their sense of identity. Frameworks include those developed by Richins (1994a, 1994b), who identified six different dimensions a personal possession may hold in terms of meaning: (1) utilitarian value (functional usefulness), (2) enjoyment (a brand's capacity to provide pleasure), (3) representation of interpersonal ties (symbolic representations or reminders of interpersonal ties, such as gifts from loved ones), (4) identity and self-expression (expressing or reinforcing

a sense of self, for example expressing personal values), (5) financial aspects (representing investment value, financial security or an expensive items), and (6) appearance-related (enhancing appearance or self-feelings, or references to the appearances of the object). Given that some brands or products take on symbolic meaning, communicating to the self and others who one was, is, or wants to be (Belk, 1988), one's identity when represented by such brands or items can be both privately appreciated and enjoyed, or publicly expressed to the outside world (Richins, 1994b).

Moving to the Kleine & Baker (2004) defined nine characteristics of material attachment, defined as a multi-faceted property of the relationship between an individual or group and a specific material object that has been psychologically appropriated, de-commodified and singularised through person-object interaction. This concept has found some support in the conservation marketing literature, which discusses the positioning of species and landscapes as flagship brands which in turn can be the object of attachment (Wright et al., 2015).

Rooted in Bowlby's (1997) seminal theory of attachment, brand attachment, defined as the strength of the bond that connects the individual to the brand (Park, MacInnis & Priester, 2007) aims to understand how brands, or a collection of product attributes, relate to the customer's own self and highlight how it is both personally meaningful and beneficial. As brand self-connections deepen, some may take on a symbolic meaning by providing an individual with the means to communicate to the self and others who one was, is, or wants to be; others enable the self to achieve one's goals, for example, by aiding in the management of daily life (Park et al., 2010).

Two critical factors reflect the conceptual properties of brand attachment: i) brand self-connection - defined as the cognitive and emotional connection between the brand and the self, based on the idea that attachment involves a bond, with the brand included as a part of the self

and ii) brand prominence - the extent to which positive feelings and memories about the attachment object are at the forefront of one's thoughts, and a measure of the 'strength' of the bond connecting the brand with the consumer (Park et al, 2010).

Furthering theories developed on brand attachment (Park et al., 2010) and brand love (Ahuvia, 2005; Batra, Ahuvia & Bagozzi, 2012), which describe strong and positive emotions towards a brand, Park et al's (2013) conceptual model of customer-brand relationships, the attachment-aversion (AA) model, builds on previous iterations to provide a unique and important contribution in representing consumers' relationship valence with a brand entity and its salience. It follows that one will be attached and feel close to a brand when the brand is perceived as a means for self-expansion; this relationship is termed 'brand attachment', with its opposite termed as 'brand aversion' (Park, Eisingerich and Park, 2013). Brand attachment and aversion represent opposite ends of the relationship spectrum, with brand indifference positioned in the middle. An intriguing result found by Ball and Tasaki (1992) indicated that for young consumers, attachment sometimes preceded ownership.

Underpinning Park et al's (2013) AA model of brand attachment-aversion, which enables negatively valenced relationships to be measured, the three Es model detailed by Park et al (2006) in the consumer marketing literature proposes three different assets and also measures their opposites, liabilities, which a brand may possess as follows: (1) enticing (annoying)-the-self, (2) enabling (disabling)-the-self, and (3) enriching (impoverishing)-the-self, or the "3 Es," in short (Park, MacInnis, & Priester, 2006). These three assets (liabilities) closely resemble those articulated by Park et al. (1986): experiential (hedonic), functional, and symbolic benefits. Richins' (1994a) asset of utilitarian value corresponds to the "enabling-the-self" (functional) asset and her enjoyment asset fits the "enticing-the-self" asset. The last two of Richins' assets are included in the "enriching-the-self" asset. In contrast to Park, Jaworski and MacInnis (1986) and Richins (1994a), Park, MacInnes and Priester's (2008) 3Es are

explicitly concerned with how each brand's asset or liability relates to the customer's own self and is personally meaningful and beneficial; this is highlighted as an important distinction because a brand can offer functional or symbolic benefits that may not be understood as pertaining to one's self (Park, Eisingerich & Park, 2013).

The brand attachment-aversion (AA) model has relevant applications in this context because of its proven ability to predict the psychological consequences of consumers' feelings in relation to products, but also because of its ability to differentiate consumer ambivalence and indifference (Park, Eisingerich & Park, 2013) which could have implications for selecting the target audience for future interventions. Park, Eisingerich and Park (2013) also showed that AA relationships are also proven to predict mindshare better than an emotional valence measure alone, whilst measures of both AA and emotional valence predict heart share with similar efficacy. A brand's self-distance measure offers information about where it stands in relation to its consumers, capturing negative relationships over and above previously tested brand attachment measures.

The role of emotions in consumer behaviour

The literature highlights that emotions are ubiquitous throughout marketing (Mahajan, no date; Bagozzi, Gopinath & Nyer, 1999; Thompson, Rindfleisch & Arsel, 2006) and central to the actions of consumers and managers alike (Bagozzi, Gopinath & Nyer, 1999) in part because of their ability to influence and in some cases predict behaviour (Gaur, Herjanto & Makkar, 2014). Brands in the same types of categories are found to stand for similar kinds of emotions: telecoms brands either connect or empower people; most whisky brands tend to occupy the emotional territories of maturity or discernment; cleaning product brands have at their core the idea of the good carer, be it mother, father, spouse or self; several vodka brands play within the territory of transgression (Woods, 2004). Marketing campaigns are then

planned accordingly, in some cases aiming to successfully ‘own’ an area of emotional territory. Aaker et al.’s (1988) findings resulted in a list of 180 emotions covering the spectrum likely to be generated by advertising and brands.

Studies of emotions in the areas of brand affect, brand love and gift-giving have underpinned a stream of further research (Bagozzi, Gopinath & Nyer, 1999; Batra, Ahuvia & Bagozzi, 2012; Park, Eisingerich & Park, 2013; Gaur, Herjanto & Makkar, 2014). For example, studies on hope in the context of the marketing literature find that goal-congruence and possibility underpin the emotion in relation to product adoption given that products are often presented as instrumental to achieving goal-congruent outcomes; for example individuals who strongly hope to look beautiful may regard a product or service as a vehicle for achieving the goal of looking beautiful (MacInnis & de Mello, 2005; Lin, 2018). Hope is found to be a powerful motivator in the Fogg Behavioural Model catalysing behaviour change in the technological social persuasion literature (Fogg, 2009). Similarly, studies have shown the commercial success of moving customers from the emotion of satisfaction to delight through its efficacy in engendering customer loyalty (Oliver, Rust & Varki, 1997).

The complex emotional quality of various possession attachment types spans the gamut of cognitive-emotive attributes, from symbolic and autobiographical qualities to personalised meanings, and has been described as an area for further research (Kleine & Baker, 2004). The strategic objective of emotional branding has been defined as follows: to forge strong and meaningful affective bonds with consumers and in so doing, become part of their life stories, memories, and an important link in their social networks (Atkin, 2004; Thompson, Rindfleisch & Arsel, 2006). Thompson et al. (2006) observe that, in line with the tenets of emotional branding, brand meanings are co-created through ongoing interaction with their users, and that passionate consumers will act as missionaries in promoting the brand through their own personalised stories (Thompson, Rindfleisch & Arsel, 2006).

Emotional attachment is defined as a relationship-based construct with the emotional bond connecting an individual with a specific target (Thomson, no date; Park & MacInnis, 2006); the importance of this construct is recognised in relation to desirable marketing outcomes - namely trust, commitment and satisfaction (Jiménez & Voss, 2015). Emotional attachment is evidenced by psychological and behavioural outcomes not typically linked to attitudes: proximity-seeking behaviours, separation distress, a sense that the attachment object offers a safe haven and mourning of its loss - attributes found in the seminal Bowlby attachment construct (Park & MacInnis, 2006). Through the development of an emotional attachment (EA) construct, Thompson, MacInnes and Park (2005) found that EA was one predictor of brand loyalty and of consumers' willingness to pay a price premium, and that EA was higher with relatively more symbolic brands.

In this research, the construct of emotional territory mapping adapted from Woods (2005) and Aaker (1988) and brand attachment-aversion adapted from Park, Eisingerich and Park (2013) are used to explore consumers' relationship with rhino horn and ivory products. Strong emotional ties exist between people and living creatures (Saunders, 2003), but emotions have not been examined previously in the specific context tested here. Looking to brand attachment, Park, MacInnes and Priester (2007) found that attachment with brands form when brands (or their collections of attributes) satisfy key aspects of the self; specifically, a consumer perceives a brand as being personally significant and connects the brand to the self when it offers hedonic resources—when it gratifies the self by providing sensory, hedonic or aesthetic pleasure (Mikulincer et al., 2005). In combining an analysis of the emotions evoked by the products in question, and applying the construct of brand attachment to expand upon the relationships formed by consumers to these items, a deeper empirical insight of these relationships emerges.

Given research supporting the critical role of self-relevance in the customer-brand relationship, frameworks testing the concept of the self-expansion model (Aron & Aron, 1986) in relation to consumer purchase choices provide relevant foundations for explaining motivations for buying items made from illegal wildlife. Because of its ability to offer insight into negatively-valenced relationships as well as intention to purchase, studies 2 and 3 apply the AA construct to offer new insight into consumers' reasons for, and intentions towards buying illegal wildlife products. These studies also use this construct to compare consumers' psychological attitudes on illegal wildlife products with their attitudes on self-selected designer brands or consumer goods, aiming to understand if parallels may be found.

In the case of rhino horn and ivory, given the increase in consumption hand in hand with significant price inflation, I predict that these items are conferred with dimensions that are congruent with consumers' goals. Accordingly, I propose: H1: The overall characteristics of consumers' perceptions of these items include latent attributes which should support the positive achievement of consumers' goals. Yet, that consumption should rise even as it becomes harder to purchase these items due to significant price inflation suggests there is a further angle to explore - that of understanding whether these items share any latent dimensions of luxury goods. This will be explored in the next part of this review.

2.3 Products and brands, purpose and symbolism

Phelps, Biggs and Webb (2016) provide a framework with which to categorise consumers' multiple uses of illegal wildlife products, several of which can be applied to rhino horn and ivory according to the literature as follows: medicinal, associated with traditional and novel medicinal practices; ornamental; cultural, associated with long-standing traditional practices; gifts, often to gain or show social standing or respect; investment, usually of high value taxa; recreational, for example game hunting or trophy hunting (Leader-Williams, 1990).

Of these, the literature points to rhino horn fitting into all of these categories, and ivory all but the recreation category.

Because of the complexity and diversity of these applications, the exploration of several themes considered by the consumer marketing literature is relevant if we are to unearth insights about consumers relationships to these items.

Hedonic versus utilitarian usage

Research in the marketing literature has given extensive study to the attributes of product choices in terms of their utilitarian and hedonic properties for consumers (Guevarra & Howell, 2014; Hirschman & Holbrook, 1982; Batra & Ahtola, 1991). Other research in the marketing sphere explores the effects of consuming experiential products on well-being, with hedonic purchases that focus on enjoyment, fun and pleasure being shown to improve levels of happiness in contrast to utilitarian items bought for their practical uses (Guevarra & Howell, 2014). Alongside this is the ultimate question of how these items contribute to the psychological destination of accomplishing one's goals, and ultimately achieving 'life satisfaction' or 'happiness' (Kleine & Baker, 2004). In exploring this from the perspective of consumer attachment, the uses applied to these items and the values conferred upon them have implications for those wishing to understand the drivers of demand and behavior modification in the context of rhino horn and ivory products (Dang Vu & Nielsen, 2018).

In the case of rhino horn, the conservation literature points to a nuanced, intertwined range of functional & symbolic properties conferred on wildlife products like ivory & rhino horn (Milliken, Shaw & Emslie, 2012; Hübschle, 2016). In the only study of its kind in either fields of literature, Dang and Vu (2018) find that demand for rhino horn is driven by both utilitarian and hedonic value, but that these attributes are difficult to disentangle (Ahuvia, no

date; Dang Vu & Nielsen, 2018). On one hand, the application of rhino horn as a medicine, super-vitamin (Gwin, 2012) or detoxifying elixir can be viewed as utilitarian by an individual. On the other, when used in the context of a host throwing a party for business associates where rhino horn powder is sprinkled on guests' drinks served to confer and bestow status on all participants, the distinction between utilitarian and hedonic is harder to make. Hubschle (2016) notes that Equally, when ivory trinkets are bought by Chinese buyers in Thailand or Vietnam as souvenirs, how the experiential and symbolic dimensions of these items are linked remains a question in the consumer marketing literature (Kleine & Baker, 2004).

The motivations pursued by men consuming rhino horn in social contexts, for example within networks and clubs of high status wealthy individuals, also shows an element of hedonic usage, this time linked to the pleasure of consumption in a specific cultural context which confers and engenders value for all participants (Truong, Dang & Hall, 2016). Similarly, the conservation literature finds that carvers and collectors cherish ivory for its cultural and aesthetic value as historic fine art (Gao et al. 2012).

Park et al. (2010) found that brands can play a powerful role when they can be consistently relied upon to provide gratification through aesthetic or hedonic elements, and affirm the work of Mulinkulcer and Shaver (2005) in finding that such brands also impact on emotions such as hope, efficacy, optimism and the ability to cope with life's problems (Park et al., 2010).

Similarly, research shows that personal possessions may enhance mastery and control in the face of losses, act as mood modulators and assist in maintaining and preserving identities (Kleine & Baker, 2004). In examining the relationship between possessions and sense of self, possessions act as an objective manifestation of the self (Belk, 1988). As Solomon (1983) notes, most research has focused on the employment of products by consumers in a strategic, deliberate sense for the purpose of either need satisfaction (marketing) or impression

management (psychology); in both cases consumption is a response to a need or strategic goal (Solomon, 1983). Richins (1994a) states that ‘possessions often reveal characteristics of their owners’ (p.522), and describes two constructs in this exposition of the meanings of possessions; first, examined-characterisation, in which possessions embody aspects of their owner's values, and secondly communication, in which possessions serve to signal the owner's values to others.

Given what we know of the uses of rhino horn and ivory products, these insights contribute to our understanding of the relationship between consumers and the reasons driving their choices in buying.

Status and conspicuous consumption

The role of status in purchase decisions for illegal wildlife in China and Vietnam is widely cited (Drury, 2011). Anecdotal reports in the conservation literature cite rhino horn as ‘a status symbol like a Ferrari or a diamond ring’; in addition, the existence of bangles made from rhino horn, bought for prices in the region of \$15,000, links to the relevance of conspicuous consumption, with rhino horn and ivory products said to be categorised as symbols at play within the competition for social status in a similar way to the wearing of a Rolex watch or driving a Ferrari (Unattributed, n.d.). The conservation grey literature reveals that consumers of rhino horn are mainly older men with above average incomes (Hanley et al., 2018), professionals from Vietnam’s growing middle class (Gwin, 2012). The social value of ivory is described both as monetary wealth and a status symbol, given that historically only a privileged few people owned ivory (Gao & Zheng, 2012).

In the marketing literature, the role of status and conspicuous consumption is explored in multiple ways in terms of the degree to which material symbols are relied upon to convince others of belonging and credibility within a social context (Solomon, 1983), its importance in the growth of a consumer society (McCracken, 1986), self-signalling (Cătălin & Andreea, 2014), and the importance of these items to consumer self-worth within attachment contexts

(Ball & Tasaki, 1992). Examples such as the conspicuous consumption of diamonds provide an interesting precedent in persuading customers to value items more highly than their market value (Bergenstock & Maskulka, 2001). An additional avenue is the body of research on subcultures, where consumption behaviour is used as a conduit to forming meaningful relationships, and where the performance of associated activities and high-status members are found to function as opinion-leaders (Schouten & McAlexander, 1995).

Considering the role of opinion-leaders and authority in the literature, research shows that individuals frequently feel rewarded for behaving in accordance with the opinions, advice and directives of authority figures (French, Raven & Cartwright, 1959; Cialdini & Trost, 1985). In a cross-cultural context, and given the relatively high-power distance nature of Chinese and Vietnamese societies, this has further relevance when considered in relation to Hofstede's (2001) seminal study and subsequently in relation to purchase decisions for rhino horn and ivory. Concepts of conformity examine the interlinking goals of effective behaviour, building and maintaining relationships, and self-concept management (Cialdini & Trost, 1985). Extending this to the concept of influencers, in the context of attachment and the role of celebrity endorsers used to enhance the appeal of a brand, Thomson (2006) opines on human brands as endorsers, and suggests that although consumers may like many celebrities, attachment and subsequent investment is likely to occur with only a few. The relevance of taking care in using celebrities to front awareness campaigns for conservation purposes has been examined in the conservation marketing literature, where it was found that celebrity endorsement can produce both positive and negative effects; one example being a drop in efficacy of message recall where celebrity endorsers were used (Duthie *et al.*, 2017).

Symbols & brand personality

The consumer marketing literature has advanced the theory that modern goods are symbols of personal attributes and goals (McCracken, 1986; Levy, 1999), deemed appropriate

when they join with or reinforce the way a consumer thinks about themselves; it is also found that symbols of social participation are chosen in part to attest to social position (Levy, 1999). McCracken (1986) warns that this attempt to constitute lives in terms of the meanings of the goods they own can go wrong to the cost and detriment of society; in the example of broader environmental choices and more specifically ivory and rhino horn products, one could argue that we find a case in point.

Past studies have indicated the relevance of personal possessions to aspects of the self, with Veblen's (1899) seminal work on the role of products in signifying status providing a foundation for an extensive field of research. Building on classic concepts that our possessions are regarded as parts of ourselves (James, 1890; Veblen, 1899), subsequent research recognises that the cultural meaning carried by consumer goods goes beyond only the evocation of status and into the realm of symbols, acting as stimuli for reflexive self-definition, and the creation of brand personalities. Further supporting Belk (1988), explanations of the role of products as socially significant symbols (Solomon, 1983; Levy, 1999) and guides to behaviour suggest that objects can also act as social stimuli even a priori (Solomon, 1983). Therefore, whilst product symbolism is generated at the societal level, it may be consumed at the level of individual experience (Solomon, 1983).

Practically and symbolically, goods allow consumers to discriminate between cultural categories of class, status, gender, age, occupation and lifestyle (McCracken, 1986). Society (McCracken, 1986) and individuals (Belk, 1988; Kleine & Baker, 2004) endow goods with meaning through a fluid transference of culturally or personally constructed meanings on to the item in question, with consequences for self-definition, self-worth, and the relationships which consumers then form with the objects in question (Ferraro, Escalas & Bettman, 2011). For example, Aaker (1997) extends the understanding of the symbolic use of brands, establishing a theoretical framework of the brand personality construct (Aaker, 1997), whilst

Solomon asserts a theory of reflexive evaluation, based on the concept that the symbolism embedded in products is the primary reason for their use. Crucially, from the perspective of the importance of intention to purchase in this study, Solomon asserts that symbolic consumption can exert an a priori effect on role definition and interaction (Solomon, 1983). It follows that an individual's reflexive evaluation of the meaning assigned by others is influenced by the products with which the self is surrounded (Solomon, 1983).

Special possessions are afforded such a moniker in the literature due to the personal meanings conferred on them based on the singular experiences they represent (Kleine & Baker, 2004). It follows that material objects can be psychologically appropriated by consumers through 'self-meaning making', and that this process forms the basis of the attachment relationship in material possession attachment (Kleine & Baker, 2004). Thus, in characterising and understanding attachment relationships between consumers and marketplace entities, where marketplace entities or brands are conceptualised as relationship objects in a similar way to people, Fournier (1998) identifies sources of meaning in these relationships as the psychological, sociocultural, and the relational, each serving as the context that shapes the significance of the relationship for the person involved. Further to this, prior research demonstrates the relevance of self-brand connections in consumer brand choices (Eisingerich & Rubera, 2010).

In contrast to product attributes, which are described as serving a utilitarian function for consumers, brand personality is defined as the set of human characteristics associated with a brand and tend to serve a symbolic or self-expressive function (Aaker, 1997). It follows that brand personality constructs aim to conceptualise the personality of a brand, and subsequently to understand both the symbolic use of brands to consumers (Aaker, 1997) and the phenomenon that consumers can develop attachments to products or entities. Aaker's five attribute framework, Kleine, Kleine and Allen's (1995) Q-methodology which examines attachment

and the multi-faceted approach to brand relations in contrast to possession attachment recommended by Kleine et al. (2004) are examples of constructs in this area.

Gifts and the act of gifting

In purchasing and acquiring rhino horn and ivory goods, the conservation literature suggests that the items' complex symbolic nature has a value that is conferred both on the item and the buyer or recipient of the item in gifting situations. For example, the conservation literature reveals that rhino horn is used as status gift for government officials, dignitaries and senior executives in Vietnam (Hanley et al., 2018); described as 'an ideal present for bribes or big bosses who need to overcome symptoms of excessive consumption' (Ammann, 2011). The increasing rarity and price of rhino horn symbolically confers esteem on both the recipient and the giver (Shairp et al. 2016); this is contextualised in the normative beliefs of more collectivist cultures (Ajzen, 1985; Hofstede, 2001; Dang Vu and Nielsen, 2018). In line with this, Gao and Clark (2014) note that the socially constructed values added to the market value of ivory are flexible and subject to changes within Chinese society.

Research on gift-giving in the marketing literature concurs with this practical example, exploring the concept that consumer behaviour involving exchange should be seen from a broader perspective than simply product or service acquisition (Belk, Wallendorf & Sherry, 1989). Instead it can be described as a potent means of interpersonal influence, allowing individuals to insinuate symbolic quality into the life of the recipient, and to initiate meaning transfer (McCracken, 1986), with products and their symbolism taking a central role in the exchange process (Kotler 1976). The social psychology literature shows that the norm of reciprocation - the rule that obliges us to repay others for what we have received from them - is one of the strongest and most pervasive social forces in all human cultures; impression

management through ingratiation is another means by which individuals exert influence (Cialdini & Trost, 1985).

McCracken (1986) notes that the role of receiver in the exchange is viewed as equally important, because in accepting a particular kind of gift the receiver is also made the recipient of a particular concept of themselves; the gift item is viewed as containing this concept, along with an invitation from the giver to define him or herself in its terms (McCracken, 1986).

Gifts were found to acquire sacred status in Belk's ((Belk, Wallendorf & Sherry, 1989) concept of the sacred in relation to consumers, as expressions of deeply held cultural values, and the intention of the given in conferring these values is highlighted as an area for further research (Belk, Wallendorf & Sherry, 1989). This concept appears to support Zhou and Guang's (2007) local findings that in China, 'Above all, people buy ivory either for personal use (decorating, collecting, and speculating) or gift giving. Gift giving involves "guanxi, renqing" and face, which are deemed important by Chinese for maintaining interpersonal relationships' (p.81). Further to this, Gao and Clark's (2014) research of local Chinese news sources find that not only is ivory considered a precious present due to the diversity of its conferred attributes, but also that gift giving is also closely related to bribing, with upscale ivory artworks were reported in some official corruption cases.

Sacralised items & conferred power

Concepts in the marketing literature describing the conferring of attributes of the sacred onto objects are limited, but may also have relevance in the context of rhino horn and ivory products. Belk, Wallendorf & Sherry (1989) note that 'anything can become sacred, and that sacredness is part of the investment process; objects potentiate and catalyse experience of the sacred which may be ritualised at the level of ceremony or even habit.' The process of sacralisation can occur through objectification, or representation in an object within which the sacred is concretised and assigned value (Belk, Wallendorf & Sherry, 1989). Belk et al. (1989)

describes the sacred, and its opposite, the profane, as conceptual categories which animate certain behaviours, encompassing myth-making and mystery in the conferring of a dignity that raises an item or experience above the ordinary (Pickering 1984), and *communitas*, a social anti-construct that frees participants from their normal roles and engages them in a transcending camaraderie of status equality (Turner 1969). This body of research appears to provide constructs underpinning various reported attributes of both rhino horn and ivory products.

Deep seated beliefs, and the attributes of transcendence and the sacred are highlighted as drivers of the high price of rhino horn, in addition to the increasing rarity of the species (Courchamp *et al.*, 2006; Hall, Milner-Gulland & Courchamp, 2008; Hübschle, 2016). The sanctity of ancient beliefs and socially accepted norms appears to not only supersede rhino conservation initiatives, but also international trade bans and domestic rules (Hübschle, 2016). Parallels here with the ivory trade are apparent (Gao & Clark, 2014) ; these are summarised by Gao and Clark (2014) as follows:

'Religious and traditional beliefs are also an important motivation for consumers. Ivory is believed to be of "intelligence" ("Ling Xing," a complicated Buddhism concept). Ivory beads are used to make Buddhism prayer's bracelets. Ivory pendants with Buddha images and figurines of religious icons, such as "Guan Yin," are often seen in the offline and online markets. Additionally, it is believed by some that ivory exorcises evil spirits ("Bi Xie"). Some people also make the link between "xiang ya" (elephant ivory) and "ji xiang" (auspicious), and believe ivory can bring good fortune. Least importantly, some people buy ivory because of its medical value. Ivory powder is used in traditional Chinese medicine (Lin, 1998), and some people believe that ivory bangles can purge toxins from the body, thus keeping wearers healthy.' (p.27)

In the case of rhino horn, Hübschle (2016) traces the historical roots of its value as a sacred good with status-elevating qualities back through a centuries' long process of

sacralisation which holds to the present day, albeit in modified form. The deeply rooted cultural mythology of rhino horn is as nuanced as in the case of ivory, and this study found that while a minority of current consumers impute rhino horn with transcendental, supernatural or mythical properties, key consumer groups have accepted and assimilated the sacred value of the substance (Hübschle, 2016).

Supporting aspects of its religious qualities, ancient Chinese history cites imperial offerings of rhino horn to the gods (Parker, 2013; Hübschle, 2016). The manufacture of rhino horn prayer beads and bangles is currently observed (Ammann, 2011; Unattributed, n.d.; Shepherd, Gray & Nijman, 2018). In an analysis of Chinese media reports, for example, Gao et al. (2016) find that the religious aspects of rhino horn are mentioned; at the other end of the literary spectrum, rhino horn is also cited in philosophical Taoist texts, conferring celestial symbolism (Hübschle, 2016).

Hübschle (2016) correlates the sacralisation or mythical transformation of the rhino with the depletion of rhino numbers, as artistic representations emerged featuring images of mythic rhinoceros–unicorns and supernatural curative capabilities were conferred on the product (Parker, 2013); current descriptions include references to rhino horn as a form of super-vitamin (Gwin, 2012).

The concept and implications of rarity

What outcome could the attribute of rarity trigger for consumer demand, if conferred on an item? Cialdini's (1993) 'commodity theory' analysis of human perception found that a drop from abundance to scarcity encourages items to seem more valuable (Cialdini & Cialdini, 1993). In this context, the Anthropomorphic Allee effect described in the conservation literature makes sense (Courchamp *et al.*, 2006; Rivalan *et al.*, 2007). This effect states that the value attributed to rarity could precipitate the extinction of rare species by triggering a rush of

demand, especially in the gap between the announcement and implementation of plans to ban trade by CITES. In the conservation literature, rarity is a quality found to be highlighted by online traders on auction websites to stimulate interest and sales for orchids, legal and illegal, by Hinsley, Verissimo and Roberts (2015). Rarity, uniqueness or limited supply, real or perceived, is an attribute used to stimulate desire for luxury goods (Dubois & Paternault, 1995; Husic & Cicic, 2009); In the context of ivory and rhino horn products, the application of these constructs should be supportive of both continued demand, and accelerated trade for both items.

As populations dwindle closer to extinction, which at current rates could be as soon as 2025 for both species, demand and value would be likely to rise, rather than fall, under these conditions. It is also possible that under these circumstances, marketers using awareness raising messaging around the perceived rarity of these species could be counterproductive for reducing demand (Courchamp *et al.*, 2006; Rivalan *et al.*, 2007; Hall, Milner-Gulland & Courchamp, 2008; Hinsley, Verissimo & Roberts, 2015). Supporting this are Hanley *et al.*'s (2018) findings, which showed that consumers were willing to pay less for rhino horn under a scenario where international trade is legalised, compared with the current situation of illegality.

Luxury goods

In answering the question of whether rhino horn and ivory products can be considered luxury goods, we turn to the literature to understand what attributes constitute such a label. Given that culture-specific symbols of luxury are a result of social learning, it follows that it may also be possible to influence peoples' ideas of luxury using marketing measures (Jäkel & Kochhan, 2000; Husic & Cicic, 2009).

However, there are neither many conceptual scales in the literature for measuring the perceived luxury of a brand, nor clear definitions of what constitutes a luxury brand compared to a non-luxury brand though work by Kapferer (1998), Dubois *et al.* (2001), and Vigneron and

Johnson (2004) advance the development of such measurement scales (Kapferer, 1997; Vigneron & Johnson, 2004).

High value illegal wildlife products are described both as luxury goods in the conservation literature (Akella & Allan, 2012; Kennaugh, 2016), and as possessing the attributes of luxury goods or brands, most importantly associations with prestige and status, and high value (Milner-Gulland, 1993). Crookes and Blignaut (2015), applying their system dynamics model to the pricing of rhino horn, found that rhino horns were more of a luxury good, with consumption rising with increased income supporting similar findings conducted 20 years prior (Crookes & Blignaut, 2015).

The literature suggests that trinkets and low-end ivory products offer an entry-level route into owning ivory and buying into its conferred attributes for the average consumer and are often purchased because of their beauty and relative affordability compared to other more luxurious products (Gao & Clark, 2014). In the case of rhino horn, there is repeated support for the symbolic function of rhino horn as a medium to communicate prestige and status as well as to obtain social leverage, particularly as disposable income levels grow (Felbab-Brown, 2011; Milliken, Shaw & Emslie, 2012; Truong, Dang & Hall, 2016). This is consistent with the marketing literature which offer support for the concept that through the conspicuous consumption of luxury goods, consumers are obtaining symbolic and real benefits that allow them to express a desired social image and further their identity (Drury, 2011).

According to “The Advertising Century”, a special edition of Advertising Age (1999), the number one rated advertising slogan of the 20th century was De Beers’ memorable “A Diamond Is Forever” (Bergenstock & Maskulka, 2001), the culmination of a 60-year marketing strategy promoting a consistent message to the American consumer that diamonds are symbols of love and devotion, and that a diamond ring is an engagement necessity. Instead of using traditional messages of love and commitment, the aspirational dream constructed by this slogan

infers that the diamond, and the relationship that it symbolises, is akin to the eternal; the diamond is no longer only an expensive piece of jewellery (Luntz, 2007). The size and quality of the diamond presented signified the degree of love shared by a couple (Bergenstock & Maskulka, 2001). De Beers' promotional goal was to create a long-term sustainable impression in the public's mind that diamonds are rare, important and necessary (Bergenstock & Maskulka, 2001). Diamonds have long intrigued economists, with those as eminent as Adam Smith asking why diamonds, which have so little value in use, have such high value in exchange (Scott & Yelowitz, 2010). In reality, diamonds are neither rare nor have great intrinsic value (Bieri, 2016); largely by carefully restricting supply have prices stayed high, whilst carefully orchestrated marketing has kept demand robust. The market control exerted by De Beers has been documented; with its large market share De Beers is able to manipulate prices by adjusting diamond extraction and sales to market conditions (Bieri, 2016). It is the value, not the diamond itself, that counts (Ng, 1987).

Applying the concepts found in the literature to the illegal wildlife trade, a self-fuelling cycle could be perpetuated in the case of these products which serves to increase price, perceived prestige, and positive word-of-mouth. Word-of-mouth is a known attribute of brand love in relation to self-expressive products (Carroll & Ahuvia, 2006), encouraging consumption behaviour and increasing the economic success of an unregulated illegal supply chain. But, as Kapferer points out, the requirement that the dream of luxury has to be constantly regenerated (Kapferer, 1997) may go some way to explain the modern evolution of rhino horn usage, where usage as a cancer cure and aphrodisiac is explained as a market-making exercise by Hubschle (2016).

Whilst the literature states that whilst we tend to know what luxury is when we perceive it, consumers and researchers have recognised that luxury is particularly slippery to define

(Kapferer, 1997; Beverland, 2004), and can be described in abstract terms even by consumers (Kemp, 1998). The literature generally supports that key components include a strong element of human involvement, perceived (not necessarily real) limited supply (Dubois & Paternault, 1995; Husic & Cicic, 2009), the conferring of status and prestige (Thomson, no date), that they are hedonically special, emotionally relevant to the self, and that their value is recognised by others (Bauer, Heinrich & Martin, 2007). Further attributes include the more transcendent qualities of fascination, enlightenment, and an 'ability to make the consumer dream' as conceptualised in Dubois's 'dream formula' (Dubois & Paternault, 1995). Culture, history, marketing and endorsement feature in dimensions of Beverland's luxury brand model (Beverland, 2004). Price is also a factor in terms of its relationship to quality, where price has been found to be a trigger factor for quality in the persuasive psychology literature (Cialdini & Cialdini, 1993); in economic terms, luxury objects are found to be those whose price/quality relationship is the highest of the market (Kapferer, 1997). In their seminal economic analysis of the illegal wildlife trade, Nadal and Aguaya (2014) show that demand can expand for goods whose prices are growing, suggesting that some aspects of luxury goods are exhibited in the case of ivory and rhino horn products. It is also shown that the trouble or pain invested in acquiring an item is positively correlated with the value assigned to it (Cialdini & Cialdini, 1993), suggesting that the barriers of illegality and high price may have an impact on price inflation in the case of high value wildlife products.

The human involvement element in determining luxury is key, because what is, and what is not luxury may be dependent on the context and the people concerned (Kapferer, 1997; Kemp, 1998), with Kemp finding that goods such as water could be viewed by different observers as either a luxury and a necessity depending who wants the goods and why (Kemp, 1998). Similarly houses, furniture and the diffusion lines of brands are also categorised as 'luxury goods' in the literature (Dubois & Paternault, 1995). In the case of diffusion items

produced by a luxury brand, where these categories of product may represent up to two thirds of sales, demand for luxury goods consists of 'ordinary consumers who periodically transform their desire for a luxury item into reality (Dubois & Paternault, 1995); the low-end of the market for ivory seems to exhibit similarities given the reasons described for buying ivory trinkets (Martin & Vigne, 2011).

The equation of a luxury good with a status good, used as a symbol through which individuals communicate meaning about themselves to their reference groups, is conceptualised in the literature (Husic & Cicic, 2009) and relates directly back to Veblenian dynamics. In this schema, consumers buy luxury goods to satisfy an appetite for symbolic meaning; one class of symbols involves association with prestige, excellence or distinction, including aspiration to these elements (Husic & Cicic, 2009). It follows that according to the literature, if these items are being bought as symbols, this act relates to self-image, constituting a means of self-extension (Kleine & Baker, 2004), self-expression (Bauer, Heinrich & Martin, 2007), and can be self-reflexive (Solomon, 1983).

Approaching then from the perspective of cultural context, Phau and Prendergast (2000) found that Asian consumers hold different perceptions about ownership of luxury brands compared with those of Western consumers, revealing that the popularity of a brand may propel its dream value, and awareness yields high levels of brand popularity. Postmodern developments in a changing global order are found to be influencing the nature of conspicuous consumption. Fuelled by increasing purchasing power and widespread advertising campaigns, mass-produced imported products are obscuring class differences, pushing consumption patterns to be guided more by the non-functional symbolic properties of products or brands (Chaudhuri, 2006). An unprecedented rise in demand from Asian countries over the last two decades has prompted a field of enquiry which aims to contextualise the spread of luxury

brands in terms of cross-culture consumer marketing theory (Wong & Zaichkowsky, 1999; Dubois, Czellar & Laurent, 2005; Husic & Cicic, 2009). Husic et al. (2009) found that in Asian consumer contexts, the rarity of products indicated respect and prestige and defined two sub-categories of consumer, “old aristocracy” and “new money”, with the latter more ascendant in the case of a developing market. It also showed that luxury consumers behave similarly worldwide, regardless of economic or social surroundings.

Establishing a balance between personal and interpersonal oriented motives for luxury consumption, Vigneron and Johnson’s (1999) framework included personal effects such as hedonist and perfectionist motives inspired from the work of Dubois and Laurent (1994), as well as the more usual interpersonal effects (snob, conspicuousness and bandwagon motives) inherited from Leibenstein (1950) and Mason (1992). This model is also consistent with previous research on luxury that demonstrated that individuals' behaviour varies across persons depending on their susceptibility to interpersonal influence (e.g., Bourne 1957; Mason 1981; Bearden & Etzel 1982; Horiuchi 1984; Bushman 1993; Pantzalis 1995; (Vigneron & Johnson, 2004).

Building on the literature, Vigneron and Johnson’s (2004) conceptual framework for brand luxury defined five attributes of luxuriousness in creating the multi-dimensional Brand Luxury Index: three latent luxury dimensions reflecting nonpersonal oriented perceptions (1) perceived conspicuousness (where social status associated with a brand is an important factor in conspicuous consumption); (2) perceived uniqueness (for which scarcity or limited supply of products is a proxy) and (3) perceived quality (for which price is described as a proxy, for example ‘prestige-pricing’ strategies used when appealing to status-conscious consumers); and two personal oriented perceptions (4) perceived extended self (where consumption of luxury brands may be important to individuals in search of social status, or those open to interpersonal influence) and (5) perceived hedonism (rewards and fulfillment acquired through the purchase

and consumption of products evaluated for their subjective emotional benefits or gratification properties, and intrinsically pleasing properties, rather than functional (Vigneron & Johnson, 2004).

Tellingly, Vigneron and Johnson (1999) previously found that the perceived price of a product influences the perceived level of prestige positively, providing a further driver in the web of motivations driving the purchase of rhino horn and ivory. Husic & Cicic (2009) agree that demand is found to increase if products are perceived as unique, popular and expensive; (Armstrong, Soule & Reich, 2015) in their study of demarketing behaviours discuss the implications of scarcity being perceived as a signal of value, describing how modern brands, such as Apple, are thought to have orchestrated intentional stock-outages of newly released products to enhance consumer buzz and demand.

In examining rhino horn and ivory products, because the conservation literature shows evidence of conferred status and prestige alongside rarity and relatively high price as reported drivers of purchase, it is possible that attributes of luxury goods applied from the consumer marketing literature may be present. This theory leads me to predict the following: H2: The overall characteristics of consumers' perceptions of the attributes of these items are aligned with those of luxury goods from a perceived value, social and cultural perspective.

Investment value

Added to the concept of luxury is the notion supported by the conservation literature that the investment value of both rhino horn and ivory is linked to the art and antiques market, and a driver of their desirability (Douglas-Hamilton, 1987; Gao & Clark, 2014; Gao *et al.*, 2016; Truong, Dang & Hall, 2016; Shepherd, Gray & Nijman, 2018). Buyers have been found to be attracted to both commodities as a wealth store (with purchases made at a time of high

inflation) to the extent that studies suggest that the art and antiques market is a contributory and underappreciated factor in understanding the recent acceleration of interest and trade in both rhino horn and ivory (Milliken, Shaw & Emslie, 2012; Gao & Clark, 2014; Gao et al., 2016; Hübschle, 2016). Hübschle (2016) notes that art collectors and trophy hunters constitute important consumer groups, and that current uses of rhino horn as status symbols, objets d'art and gifting, lean on ancient practices and cultural history. Fuelled by the financial crisis of 2008, diversifying and inflation-proofing of investment portfolios was encouraged; the asset class of antiques and art came into sharper focus (Hübschle, 2016) and high net worth individuals were looking for alternatives to traditional investments (Forbes China, 2013; JP Morgan, 2013). Compounding this is the role of macroeconomic policy and its effect on purchasing power, cited as enhancing purchasing power for ivory sold in US dollars (Gabriel, 2012; Nadal & Aguayo, 2014).

Gao et al. (2016) find that an analysis of local Chinese language media highlights the economic value of rhino horn carvings substantially more frequently than any other attribute of these items, describing them as collectible and investable. Less mentioned is their artistic value and the medicinal properties of rhino horn itself.

With auctions taking place only in Asia, buyers are both legitimate art collectors and those driven by economic principles. Rhino horn is deemed a safe investment option in times of financial uncertainty: whereas share prices may drop, the value of rhino horn is believed to be safe from financial market crashes (Gao et al., 2016). Whilst some transactions occur in the legal realm at world-renowned auction houses with the correct paperwork and required CITES permits, others involve fraudulent activities such as the processing of freshly harvested rhino horn into “pre-Convention” libation cups using innovative aging techniques (Hübschle, 2016). The diversion of legal rhino hunting trophies into the illegal market sees legitimate owners, trophy hunters, channelling their legally acquired and certified rhino horns into illegal market

flows (Hübschle, 2016). ‘Laundered’ rhino horn trophies are transformed into investment tools of which the resale value is likely to exceed the cost of the original trophy hunt. In other instances, rhino horn remains unprocessed in bank vaults, strong rooms or safe locations, predominantly in Asia and range states (Hübschle, 2016). The complexity of this network of actors extends to rhino horn investors from different cultural and national backgrounds outside Asia, leading to the crossing of both legal and national boundaries. Diminishing rhino numbers and the possible extinction of the species form part of the economic valuation of rhino horn; these actors are speculating on the possible extinction of rhinos (Hübschle, 2016). As Hübschle (2016) states, an Asian intermediary explains the investment horizon as follows:

‘When you buy rhino horn, you put it in the safe. After ten years, you take out the same horn, you going to have a big investment. It is different from money. If you buy R 500 000 of rhino horn, then after ten years it is worth R1 million. You put the same money into the bank and maybe it’s going to be worth R600 000 after ten years.’ (p.161)

Looking to ivory, Gao et al. (2014) cite three factors as playing a significant role in influencing ivory values, and thus shaping the recent trends of ivory trade in China: first, the promotion of the state-subsidised intangible cultural heritage movement supported by the Chinese Government since 2002 encouraging trade through stimulating supply, demand and generating publicity, when ivory carving as a tradition and profession seized an opportunity for revitalisation from levels of near extinction; a boom in arts investment after 2009, and the 2011 ivory ‘auction ban’. Collectors, investors and speculators are said to be holding on to their collections, waiting for the 2011 ban on the trade of artworks made of rhino horns and ivory to be lifted (Gao et al., 2016). As found by Gao and Clark (2014), ‘The economic value of ivory products as an investment is widely advertised on the market. [In] almost every shop visited, ivory sellers talked of ivory as “bao jia” (inflation-proof) and “zeng zhi” (value appreciation)’

(p.27). Furthermore, investment is emphasised in articles by carvers and collectors (Gao & Zheng 2012; Gao & Clark, 2014).

Given the meanings found to be conferred on rhino horn and ivory products in the conservation literature, the presence of dimensions of utilitarianism, provision of enjoyment, representation of interpersonal ties and identity or self-expression features as identified in the consumer marketing literature points to these products having meanings which, in being consumed or owned, deliver positively on consumers' strategic goals, further testing H1. These qualities are positive drivers of consumption or ownership.

In addition, given a consideration of the literature in relation to attributes of 'luxury' goods and the conservation literature on drivers of purchase for rhino horn and ivory, I predict that the application of a scale of luxury, such as that devised by Vigneron and Johnson (2004) in measuring and comparing the luxury attributes of consumers' most desired goods and illegal wildlife products, will result in both categories of good possessing the dimensions of luxury as defined by such a scale. Accordingly, I propose: H2: The overall characteristics of consumers' perceptions of the attributes of these items are aligned with those of luxury goods from a perceived value, social and cultural perspective.

2.3 Geographical and economic context

The majority of Asian economies have undergone two decades of unprecedented social, economic and political transformation to the present day (OECD, 2018). The two primary end markets for rhino horn and ivory, China and Vietnam, are cases in point.

Currently, China is ranked as the largest end market for illegal wildlife including ivory (Felbab-Brown, 2011; Martin & Vigne, 2011). Vietnam is arguably the largest for horn

(Milliken, Shaw & Emslie, 2012), though this is disputed by government officials who assert that it is only a transit country en route to China (Winn, 2012). In an econometric case study of ivory and rhino horn demand set in Japan in the 1980s, demand was found to be primarily income-led (Milner-Gulland, 1993). Income growth and income distribution are found to be key variables affecting consumption patterns leading to the question of how consumer preferences are shaped (Nadal & Aguayo, 2014). Therefore, though demand markets have moved to China and Vietnam, one aspect of the explanation for demand may remain similar - is income leading demand?

To answer this question and contextualise the research question, an analysis of the attributes of the consumers in question should take into consideration their economic position and potential economic drivers; this is highlighted consistently in the conservation literature (UNDOC, 2008; MacMillan & Challender, 2014). Consumer preferences themselves are liable to change if structural changes in an economy occur, or if pressurised by market or government regulation (Nadal & Aguayo, 2014) amongst other factors. Thus, structural change in consumption patterns can change relatively quickly (Nadal & Aguayo, 2014).

Over the years 2018-2022, Emerging Asia as a whole is expected to grow by an average 6.3% per year on the assumption that trade momentum holds and domestic reforms continue (OECD, 2018). Notable trends for this research include the high growth rates in urban centres (Knight Frank, 2018); East Asia's rise to becoming the world's largest brand-name luxury goods market, led by Chinese consumers' €23 billion appetite for luxury remaining unrivalled in the world and growing 20% in the 12 months to end 2018; and technological change, centred on the emergence of the digital economy in particular as a major factor driving economic growth in the region (OECD, 2018).

Within a total population of almost 1.4bn in 2017 (OECD, 2018), the number of China's high net worth individuals with investable assets topping 10 million yuan (\$1.45 million) reached almost 2 million by the close of 2018 (Bain & Company, 2019). Guangzhou, China's third largest mainland city, topped the 2018 Knight Frank Wealth Report rankings in terms of global property price growth, rising by over 27% in 2017 (Knight Frank, 2018). Chinese shoppers are forecast to ramp up their purchasing of luxury goods, especially in China, meaning that by 2025, Chinese consumers will account for 46% of the global market, up from 33% in 2018, and they will make half of their purchases at home in China, up from 24% in 2017 (Bain & Company, 2018).

McKinsey (2019) notes that China continues to hold one of the highest economic growth rates in the world, adding the equivalent of 'another Australia' (p.1) to its economy each year. China continues to be the world's best consumer story, as buyers continue to trade up to more expensive premium goods (Leung, 2019). According to consensus forecasts, Chinese consumption is expected to grow by about \$6 trillion from today through to 2030 - equivalent to the combined consumption growth expected in the US and Western Europe over the same period, double that of India, and the ASEAN economies together (Leung, 2019).

Linked to China's growing role as a global power, the nation's footprint as an economic force on the African continent has been transformed over the last decades; as a powerful developer of infrastructure (Brookings Institute, 2018) in African range states for wildlife, access to wildlife, trade routes and transportation have become exponentially more accessible. Since 2005, Chinese investment in Sub-Saharan Africa has totalled \$300bn, with nearly a third invested in transport alone (American Enterprise Institute, 2019).

Looking to Vietnam, as phrased eloquently by the Financial Times (2019), 'When Donald Trump calls your country the single worst abuser of everybody, you know things are

going well' (p.14). Since 2010, the country's GDP growth has been at least 5% per year (World Economic Forum, 2018). GDP per capita has increased tenfold over the past 30 years, rising from \$230 in 1985 to \$2,343; corrected for purchasing power, it stands even higher, at over \$6,000 (Vanham, 2018). A World Economic Forum Report calls Vietnam an 'economic miracle' (Vanham, 2018). From its position 30 years ago as one of the world's poorest nations to becoming a middle-income country today with a population nearing 95 million in 2017 (OECD, 2018), it has a burgeoning middle class, cited as part of the engine that will fuel the next phase of its growth.

It is in this context of growing wealth that the conservation literature reveals a consensus of opinion that increasing affluence is a driver of demand, in part because of the evidence revealing the growing affluence of potential consumers (Felbab-Brown, 2011; Milliken, Shaw & Emslie, 2012; Challender & MacMillan, 2014; Gao & Clark, 2014; Gao et al., 2016).

2.4 Illegality in context

Contextualising purchase behaviour in the illegal status of the trade adds a further dimension of interest, raising the question first of whether illegality may be a driver of the trade, and second, how it obscures what is really known about the prevalence of usage. There are repeated calls in the literature for more surveys and better information which demand the use of specialist questioning techniques to overcome the issue of illegality, acknowledging that the delicate issues of social stigma and the admission of using illegal products has limited the flow of accurate data into informing demand reduction policies (St. John *et al.*, 2010; Nadal & Aguayo, 2014).

Illegal markets, as with any strongly demanded commodity, find ways of bypassing legal trade regulations (Hübschle, 2016), and there is a positive correlation in terms of raising prices between the scarcity of the plant or animal, the desirability of an item amongst certain buyers, and the cost of acquisition, including the perceived amount of effort taken to acquire it (Schneider, 2008). The unregulated nature of the trade, the complexity of actors involved (Wong, 2019), and the limitations of legal wildlife markets encourage it to thrive (Schneider, 2008; Nadal & Aguayo, 2014).

Clarification of the legal status of both rhino horn and ivory remains ambiguous for some consumers (Gabriel, 2012; Gao & Clark, 2014); this is somewhat unsurprising given that the changing legal status of both items blurs clarity on this issue. In both cases legal status has changed back and forth several times, and there have also been detailed caveats for products manufactured before a certain date (Gao & Clark, 2014; Hübschle, 2016).

At the time of writing, the international trade in ivory has been banned since 1990. A comprehensive ban on domestic trade in ivory has been in place in China since January 2018 following a period where a system of legalised domestic trade was in place. Hong Kong, though a major trading centre for ivory, is not covered by the legislation (BBC Online, 2018), but has separately pledged to phase out ivory sales by 2021 (BBC Online, 2018). China had already banned sales of ivory acquired after 1975, under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, n.d.). Gao & Clark (2014) and Gao et al. (2016) provide a detailed overview of the white, black, and grey ivory markets up to 2014, illustrating the complexity of the situation: the white market previously consisted of licensed ivory facilities approved by the government; the black market covers the illegal trade taking place through unauthorised physical locatable shops or online suppliers; the grey market, whose legality is ambiguous, refers specifically to the live auction of ivory artworks. In

Vietnam, trade in ivory is illegal, and yet the country is cited as one of the most important hubs of the illegal trade (Sustainability Times, 2019).

Looking to rhino horn markets, Vigne and Martin (2018) provide a comprehensive history of legality in China and Vietnam. From 1977 in accordance with CITES, almost all international trade in rhino horns has been illegal between member states. China acceded to CITES in 1981, and Vietnam in 1994 (Vigne & Martin 2018), and solutions to the problem of poaching and illegal trade have focused on trying to control international ivory movements through CITES. In terms of domestic trade, China banned the trade in rhino horn in 1993; however the prohibition of trade was relaxed in July 2003 when the State Administration of Cultural Heritage authorised the sale at domestic auction houses of rhino horn carvings dated prior to 1949 and their import and export (Vigne & Martin 1994). In 2018, China reintroduced the use of rhino parts from farmed or already dead rhinos by qualified doctors in qualifying hospitals, including the use of antiques (BBC Online, 2018) representing the reversal of a 25 year ban. In Vietnam, since its accession to CITES in 1994, the trade in rhino horn has been illegal (Vigne & Martin 2018). However, given a lack of enforcement, Vietnam is noted to have ‘flown under the radar’ in the early years of CITES until NGOs became aware of the country’s pivotal role in the trade (Hübschle, 2016). Under fresh laws issued in 2013, domestic trade in rhino horn was banned aside from some exceptions, including those used for diplomatic purposes, scientific use, and zoos. However, with specific permits, legal trade can take place in pre-CITES horns and the import of hunting trophies, and no CITES permits are required for the sale of ‘pre-Convention’ horn; similar to ivory in China, this has encouraged the establishment and fluidity of grey and black markets for rhino horn (Hübschle, 2017). Research finds that actors capitalise on ambiguities of the legal/illegality nexus by falsifying the provenance of a traded good as a formerly legal good (e.g. pre-CITES horn) or by converting

an illegally acquired good to a ‘legal’ good, for example if poached horn is converted into trophy hunted rhino horn (Hübschle, 2017).

As a comparator, it is notable that in the UK, the sale at auction of pre-1947 rhino horn is still permitted with exports requiring a CITES permit (Save the Rhino, 2018); only in late 2018 did two world renowned auction houses voluntarily remove auction lots of rhino horn artefacts after NGO pressure, following Christie’s declaration (Romo, 2018). Only in December 2018 were laws passed to ban the sale of antique ivory in the UK; previously items which pre-date 1947 had been legally traded at auction. The UK is the world’s largest exporter of legal ivory, with Hong Kong and China as end markets; the ban is being contested by antique dealers (Independent, 2019).

Illegally acquired material can be channelled into legal channels (Douglas-Hamilton, 1987), data on participants in the trade remains scarce and obscured (Ayling, 2013; Schneider, 2008; St. John et al., 2010), and questioning for illegal behaviours involves considerable limitations for data gathering (Schneider, 2008; Hanley et al., 2018).

The role of the internet in facilitating the illegal trade is a nascent area of enquiry, but early findings suggest that both legal and illegal traders use online means to facilitate and enhance communication with suppliers and customers, expand their networks and consumer bases (Hinsley et al., 2016). Whilst this has led to some global online e-commerce marketplaces banning trade in illegal wildlife, for example eBay’s ban on ivory sales in 2008, indications are that this has driven a move to sales via social media (Hinsley et al., 2016).

The importance of understanding the prevalence of demand is a further aspect to developing a fuller understanding of the consumer base and measuring trends in consumption over time, including the efficacy of interventions on consumption levels. Nadal and Aguayo (2014) note that there is a major gap in the literature that has implications on at least three

fronts: price elasticity of demand, size and trends in demand, and the question of endogenous preferences.

The international horn trade ban and domestic bans for rhino horn trade has been cited as driving the trade further underground, and pushing prices up, subsequently making the trade even more lucrative (Emslie & Brooks, 1999; MacMillan & Nguyen, 2014; Wittemyer et al., 2014). Rhino horn is an illegal product, and is regarded as illicit in Vietnam (Milliken and Shaw, 2012). Given that rhino horn consumption is an illegal activity, Truong, Dang and Hall (2016) found that social and professional clubs and networks are formed through which members exchange experiences about rhino horn and where to buy; it follows that these clubs and networks also serve as a platform for demonstrations of wealth and status, and a social space where the satisfaction of myriad desires can be accomplished. For wealthy men, the pleasures of consuming rhino horn in a social context such as this appear to be intensified when the experience is shared with others, which has been likened to Shilling and Mellor's (1998) construct of collective effervescence or Tiger's (2000) construct termed sociopleasure. Compounding this, there is little or no social stigma attached to consumption of traditional medicine products in Vietnam as consumers often have little to fear from laws to protect wildlife (Shairp et al., 2016) and there is a reluctance observed on the part of officials to focus on consumers of illegal goods who do not fit the stereotypical images of the criminal underworld (Schneider, 2008). Moreover, the finding that political elites, business people and the police may be complicit in the distribution and consumption of these products has been cited as undermining the credibility of the trade ban; this may be particularly problematic in collective societies where a ripple effect is caused by aspiration to behave in the same way as those perceived to be leaders (Hübschle, 2016).

Novel applications of frameworks for questioning on illegal behaviours have been drawn into conservation science in order to determine prevalence (St. John, Edwards-Jones &

Gibbons, 2010; Nuno et al., 2013), and their addition has been suggested as a necessary complement to the conservation toolbox (Nuno & St. John, 2015). Lessons learned from studies on other illegal activities such as drugs in the USA, for example, shows that establishing a credible method of measuring prevalence of consumption is crucial in monitoring trends in consumption over time and consumer attitudes towards continuing to perform these behaviours. From a consumer marketing perspective, this data is useful for measuring the impact of campaigns or informing the design of future interventions.

Large-scale quantitative analyses which produce an understanding of the prevalence of a sensitive behaviour, and how to combine them with a detailed understanding of the mechanisms underlying the behaviour, were therefore aspects of the current research. This aims to provide much needed insight into who the consumers of illegal wildlife products are, how many there are, and how to design interventions that may have an impact on the target consumer group.

The literature has explored ways of mitigating sensitivity around questioning where respondents may not be willing to discuss their participation in illegal behaviours, or may lie to provide a favourable image of themselves (St. John, Edwards-Jones & Gibbons, 2010; Penrod et al., 2003; Tourangeau & Yan, 2007; Coutts & Jann, 2011; Zigerell, 2011; Ulrich et al., 2012; Glynn, 2013). Techniques such as the item count or randomised-response technique (RRT) (Tourangeau & Yan, 2007; Chaudhuri & Christofides, 2007), and unmatched count technique (UCT) (Droitcour et al., 2002) have been developed to assess the prevalence of a sensitive attribute in a community of people through indirect questioning. These indirect questioning techniques aim to increase respondent willingness to answer and reduce bias by making it impossible to directly link incriminating data to an individual (Nuno et al., 2013). This is necessary to gain more truthful answers whilst ensuring protection of privacy (Chaudhuri & Christofides, 2007).

In conservation science, the RRT has been applied to estimate rule-breaking in fly-fishing (St. John, Edwards-Jones & Gibbons, 2010) and the Unmatched Count Technique (UCT) has been used to assess the prevalence and drivers of illegal bushmeat hunting in the Serengeti (Nuno et al., 2013) having been trialled in a range of locations subsequently, including the UK, Portugal, Russia, and online in a study to assess illegal orchid smuggling (Hinsley, 2017). Appropriate guidance is available for adapting the survey design for online administration (Glynn 2013; Coutts & Jann 2011), which was appropriate for this research given the high internet penetration rate of target respondents. Research has also been done on the drivers of consumer behaviour around contraband items (Albers-Miller, 1999).

Nuno and St John (2014) provide a comprehensive review of methods developed specifically for investigating sensitive topics, particularly for estimating the proportion of respondents involved in sensitive activities, along with recommendations for application for use in conservation. Seven methods were identified: randomised response techniques; nominative technique; un- matched-count technique; grouped answer method; crosswise, triangular, diagonal and hidden sensitivity models; surveys with negative questions; and the bean method. All of these methods ensure respondent anonymity, increase willingness to answer, and make it impossible to directly link in- criminating data to an individual.

In the case of this research, Unmatched Count Technique was used to calculate prevalence of behaviour for several reasons based on the extant literature. It was selected because of its successful previous use in conservation, its ability to be adapted to an online format reaching the desired number of respondents, and because of its ability to deliver data on both the proportion of sample population engaging in the sensitive behaviour and links to explanatory variables associated with these behaviours. Aside from the randomised response technique, which is extremely close in nature, and the crosswise method which has not been

previously tested in conservation, UCT is one of the seven methodologies that enables this data to be captured effectively.

This was then adapted for use in this research and adapted for online questioning (Hinsley, Verissimo and Roberts, 2015). This combination aimed to provide a new and fuller picture of the end consumer market for illegal wildlife products, currently a gap in the literature (Schneider, 2008). Whilst results have not been included in this study because the large sample sizes required for statistical analysis were not achieved, these methods show promise for future studies when combined with quantitative and qualitative questioning on attitudes and motivations towards buying illegal wildlife. Hinsley et al.'s (2016) large-scale survey of wildlife trade administered via a global social media site provides a promising precedent for future exploration.

The issue of illegality also led to chain referral, or snowball sampling techniques, being used in Study 4 because of their previous application in researching sensitive topics, accessing hard-to reach hidden populations, and for minimising bias while maintaining privacy and confidentiality in part because of the trust generated between interviewer and respondent (Newing, 2010; Penrod et al., 2003).

2.5 Summary

For this research, the research focus chosen was demand for illegal wildlife products in Vietnam and China, specifically rhino horn and ivory, because they represent robust examples of the research question in hand. Based on the logic developed in the literature review, I have developed three hypotheses that are tested in the studies that follow: H1: The overall characteristics of consumers' perceptions of these items include latent and self-based meanings that support the positive achievement of consumers' goals; H2: The overall characteristics of consumers' perceptions of the attributes of these items are aligned with those of conventional

luxury goods or brands from a perceived value, social and cultural perspective; H3a: The particular attitudes and perceptions of consumers regarding the material, social, and cultural attributes conferred on rhino horn and ivory products are aligned to positive self-identity (actualisation) through the conferring of status and affluence; H3b: A lack of self-relevance and increased brand-self distance in relation to these products should encourage averted relationships and discourage the propensity of intention to buy. Below, I report three studies designed to test my hypotheses.

Framed by Belk's (1988) foundational assertion that consumer behaviour is underpinned by an understanding of the meanings that consumers attach to possessions, and yet never applied to the research problem before, Study 1 tests H1 and H2 by analysing the findings of 137 demand reduction campaigns found to have been created by NGOs and other international actors such as conventions and inter-governmental organisations (IGOs), and uses these findings to test the meanings conferred on rhino horn and ivory by consumers through the lens of Belk's (1988) theoretical findings. Emanating from Belk's (1988) influential assertions, four dimensions of Richins' (1994a) framework were used to test latent product meaning, whilst Vigneron & Johnson's (2004) measurement scale tests whether the attributes of luxury items are present in the perceptions of consumers in relation to these goods. Contributing to a gap in the body of knowledge within the conservation literature this study is intended as an initial foundation for understanding the meanings conferred by consumers on these items, creating a context for the analysis of attachment relationships between consumers and these items explored in Studies 2 and 3.

To test H2 and H3, Study 2 uses a large-scale online survey (n=327) to measure and compare what basic psychological needs are being addressed by these products, as well as to measure relationship valence, motivations, attitudes, and the target audience for future campaigns. Respondents' AA relationships with rhino horn or ivory products and respondents'

were measured and compared with their relationship to most desired luxury or premium goods. In the context of this study and that which follows, the relationship object was the illegal wildlife product and consumers' attachment or aversion to it was examined and measured.

To further test H2 and H3, Study 3 took an intensive qualitative mixed methods approach to explore the drivers of brand attachment-aversion and attitudes to illegal wildlife consumption in the context of consumer lifestyles, alongside those of consumers' self-selected most desired brands. The core component involved thematic analysis of rich free text data gathered from the large-scale survey (n=460) and a series of one-to-one interviews with opinion-forming individuals (n=4). Here, the attachment-aversion framework (Park, Eisingerich & Park, 2013) was applied to test the valence of relationships, their strength, and the inherent self-relevance of these relationships as compared with respondents 'most desired' items, with the aim also of revealing reasons for negatively valenced relationships. For the supplementary component of Study 3, a phenomenological approach was taken in the series of one-to-one interviews with opinion-forming individuals (n=4), aiming to gain an understanding of complex issues that may not be immediately implicit in surface responses or that revealed by the conservation literature.

3 Study 1

3.1 Design & procedure

The notion that possessions are a major contributor to and reflection of our identities has fostered a stream of research seeking to identify the characteristics of these relationships (Fournier, 1998). Belk's formulation of the extended self stands as an influential model of the way objects are incorporated into identity and why (Belk 1988, 1989; Fournier 1998). Foundational to these approaches is Belk's (1988) assertion that "we cannot hope to understand consumer behaviour without first gaining some understanding of the meanings that consumers attach to possessions. That we are what we have (e.g. Van Esterick 1986; Feirstein 1986; Rosenbaum 1972) is perhaps the most basic and powerful fact of consumer behaviour." (1988, p.139). One of many subsets of research to which this concept has been applied is the phenomenon of consumers' purchase decisions for luxury goods, which examines the meanings conferred on these items by buyers.

In the specific context of the relatively high-value market for rhino horn and ivory items, previous research has identified a lack of empirical research in the marketing and conservation literature on the drivers of consumers' purchase decisions for these goods and, crucially, the meanings these items hold for consumers, despite the initiation of several interventions which seek to influence this (St John, Edwards-Jones & Jones, 2011; Challender & MacMillan, 2014; Nadal & Aguayo, 2014). The application of models issuing from Belk's (1988) theories of self-extension has received little to no attention in this context, despite playing a foundational role in analysing consumers' relationships to purchases.

In light of this, the present study aims to provide a foundation for those which follow by using Belk's (1988) overarching principles of self-extension through possessions as a framework for understanding the meanings conferred by consumers on these items.

Using the aggregated findings of 137 in-country interventions found to have been seeking to influence demand for these items, bringing together and analysing this data for the first time in the literature, Study 1 tests H1 and H2 by unearthing the dimensions conferred on rhino horn and ivory by consumers through the lens of two frameworks drawn from the consumer marketing literature emanating from Belk's (1988) theoretical findings. Four dimensions of Richins' (1994a) framework were used to test latent product meaning, whilst Vigneron & Johnson's (2004) measurement scale tests whether the attributes of luxury items are present in the perceptions of consumers in relation to these goods.

The study was carried out in two phases. First, desktop research and semi-structured in-country interviews were carried out with NGOs, IGOs and others involved in activities carried out to reduce demand for elephant ivory, rhino horn, pangolin and tiger parts in China and Vietnam between 2004-2014. For the first time in the literature, this knowledge was brought together to gain an understanding of initiatives taking place to address demand for illegal wildlife and to analyse their findings. Secondly, a mixture of deductive and inductive content analysis of survey data and reports from the resultant findings was undertaken, testing H1 and H2 through the lens of Richins' (1994a) framework to test latent product meaning, and Vigneron & Johnson's (2004) framework to test whether the attributes of luxury items are present in the meanings conferred by consumers on these goods. The study design combined quantitative and qualitative approaches to analyse the data collected with the purpose of gaining a better understanding of the research problem, in this case the meanings conferred on these items by consumers, and their possible motivations for buying (Ivankova, Creswell & Stick, 2006; Guest, 2013).

Data collection

Collection of the quantitative data was initiated by generating an initial list of the international member organisations of United for Wildlife and other major international actors as a starting point. The ‘demand reduction’ activities towards which the search was directed in this study were defined as initiatives enacted with the purpose of understanding or initiating changes in consumer behaviour directly or through the medium of other actors, for example policy or legislation.

Following this, the institutional websites of the identified organisations and snowball sampling were used to find other institutions working in this area (Biernacki & Waldorf, 1981), with the ultimate goal of locating information on additional demand reduction initiatives, including those executed by key local players. Online searches and a review of the grey literature were used to understand any further information about the interventions. A restricted set of general keywords related to wildlife trade and demand reduction was used alongside visiting websites of NGOs, professional groups and funding organisations with a track record of funding or implementing demand reduction campaigns, or those who had been commissioned to map the demand market for these products. This established the number of organisations undertaking initiatives to either understand the market for these products, potential or current consumers, or to influence consumer behaviour in reducing demand. Survey results data or reports produced by organisations interviewed were requested where possible and this was collated into a comprehensive database.

Data analysis

A mixed-methods sequential explanatory design was applied for this study, collecting and analysing first quantitative and then qualitative data in two consecutive phases within one study (Tashakkori & Teddlie 1998; Creswell 2003, 2005; Creswell et al. 2003). This design, which has found application in both social & behavioural sciences research (Kinnick &

Kempner 1988; Ceci 1991; Klassen & Burnaby 1993; Janz et al. 1996; Ivankova, Creswell & Stick, 2006), was applied in order to better understand both the trends and details of the research problem through combining both forms of analysis (Guest, 2013; Rossman & Wilson 1985; Tashakkori & Teddlie 1998; Creswell 2003). Equal priority was given to the qualitative data analysis despite its being the second phase of the research process. This decision was influenced by the purpose of the study, which was to identify and explain the perceptions of consumers towards the four illegal wildlife products in question, and better understand factors that may affect their purchase decisions.

For the first phase of analysis, the dataset was coded according to the societal and geographic scope of these initiatives as follows: by the country in which the initiative was carried out, the type of organisation enacting the initiative, delivery mechanism, intended target audience, objective, and whether it was intended to limit supply or reduce consumer demand. Objectives were coded in sub-categories as follows: law enforcement, pledges or commitments, policy creation, mapping the market, education, or awareness-raising. Any empirical information on the size, location, and demand drivers of the consumer market were noted, including demographics and numbers of consumers, and consumers' reasons to buy in each market. Part of this analysis involved identifying overlaps or synergies between bodies of work, and understanding where gaps in activity and knowledge exist.

The quantitative and qualitative phases were then connected during the intermediate stage in the research process (Guest, 2013), where the relevant surveys found in the dataset and reports on the characteristics of consumers and their purchase reasons were identified. The second connecting point included developing the interview questions for a series of brief interviews designed to verify, deepen or clarify knowledge of interventions based on the results of the analysis of the quantitative database coding phase. Relevant participants for the qualitative interviews were selected from those creating or implementing initiatives.

The qualitative phase then comprised of two parts running concurrently; an analysis of the relevant surveys found in the dataset and reports on the characteristics of consumers and their purchase reasons, and a series of brief interviews. Given that the purpose of the interviews was limited to clarification or elaboration of specific initiatives enacted by the interviewees and the emergent themes contained within these, data gathering was limited to field notes, and the conversations were principally used to verify the data in the quantitative study and not included in the qualitative analysis aspect of the study. First a pilot series of face-to-face interviews focused on rhino horn initiatives was conducted in Vietnam. Following this, a series of semi-structured face-to-face interviews with individuals in Vietnam and China representing a selection of organisations took place, and where a face-to-face meeting was not possible, an interview was conducted by video conference or telephone call and detailed field notes captured (Tessier, 2012; Seale & Silverman, 1997; Silverman, 1993; van Teijlingen & Ireland, 2003) which were intended for verification purposes and not used in the next phase of the analysis.

Rich data on consumers afforded by survey findings reports and demand-mapping reports was found through the quantitative analysis of interventions; therefore in this case the text data analysed comprised print or online reports and articles on survey findings and mapping demand (Kondracki & Wellman, 2002; Cho & Lee, 2014). A qualitative content analysis approach was used given its fruitful applications in classifying a broad range of communication materials (Moretti et al., 2011; Hsieh & Shannon, 2005; Abrahamson 1983; (Cho & Lee, 2014; Budd, Thorp, & Donohew, 1967; Lindkvist, 1981; McTavish & Pirro, 1990; Tesch, 1990; Heikkilä & Ekman, 2003).

A mixture of deductive and inductive content analysis was then undertaken to test H1 and H2. In all cases, units of analysis were selected as a starting point, which included any print

or online reports and articles on survey findings and mapping demand, field notes, and findings from the quantitative study. A thematic analysis was performed on two levels, individual cases (where a case is taken as one species) and across cases, comparing the themes and categories and used a number of cross-case analysis techniques, including text units (sentences) counts for each theme across the four cases. Nvivo qualitative software (Version 12) was used for data storage, coding, and theme development.

A deductive approach to qualitative content analysis was undertaken to test the research question H1. Four main categories were determined and defined to begin with — provision of enjoyment, utilitarian, representation of interpersonal ties and identity or self-expression features — derived from Richins' (1994a) model of possession dimensions, designed to evaluate the meanings ascribed to possessions and subsequent understanding of consumption. Richins (1994a) identified six different dimensions a personal possession may hold in terms of meaning: (1) utilitarian value (functional usefulness), (2) enjoyment (a brand's capacity to provide pleasure), (3) representation of interpersonal ties (symbolic representations or reminders of interpersonal ties, such as gifts from loved ones), (4) identity and self-expression (expressing or reinforcing a sense of self, for example expressing personal values), (5) Financial aspects (representing investment value, financial security or an expensive items), (6) Appearance-related (enhancing appearance or self-feelings, or references to the appearances of the object.) In the present study, the first four dimensions were applied given that these were found to be most applicable to the attributes of wildlife products revealed in the first stage of the research. For example, given that some brands take on symbolic meaning, communicating to the self and others who one was, is, or wants to be (Belk, 1988), one's identity when represented by brands can be privately appreciated and enjoyed or publicly expressed to the outside world (Richins, 1994b).

The four categories were divided into subcategories derived from Richins (1994a); these were: under utilitarian, investment was added (derived from Richins' original 'financial aspects'); and traditional Chinese medicine for its use as a utilitarian product; under 'represents interpersonal ties', gifts was added; under 'identity and self-expression', status (from Richins' original) and projection of self was added, cultural and religious were added (derived from Richins' original 'spiritual').

All text that appeared to describe the provision of enjoyment, utilitarian, representation of interpersonal ties and identity or self-expression features according to the predetermined categories was coded. Finally, the contents of the categories were compared across all species.

A similar approach was used to test H2, this time based on Vigneron and Johnson's (2004) conceptual model detailing five attributes of luxuriousness; three latent luxury dimensions reflecting nonpersonal oriented perceptions: (1) perceived conspicuousness (where social status associated with a brand is an important factor in conspicuous consumption); (2) perceived uniqueness (for which scarcity or limited supply of products is a proxy) and (3) perceived quality (for which price is described as a proxy, for example 'prestige-pricing' strategies used when appealing to status-conscious consumers); and two personal oriented perceptions (4) perceived extended self (where consumption of luxury brands may be important to individuals in search of social status, or those open to interpersonal influence) and (5) perceived hedonism (rewards and fulfilment acquired through the purchase and consumption of products evaluated for their subjective emotional benefits or gratification properties, and intrinsically pleasing properties, rather than functional).

To test H1 and H2 an inductive approach was then applied to the qualitative content analysis. Text was extracted from the data to identify attitudes and perceptions. Open coding was started by reading each report word by word and line by line. After completion of the open

coding, the preliminary codes that emerged from the text were determined and then the remaining data was coded with those codes. When data was encountered that did not fit an existing code, a new code was added. The next steps were to group similar codes and place them into categories. Categories were organised into broader, higher order categories, then grouped, revised, and refined, and finally checked to determine whether the categories were mutually exclusive. At that point final categories could be formed. Subthemes were identified both within and across the categories; subthemes were then organised into main themes.

The quantitative and qualitative approaches were mixed at the study design stage by integrating the results from the quantitative and qualitative phases during the interpretation of the outcomes of the entire study (Plano Clark, Garrett, & Leslie-Pelecky, 2010).

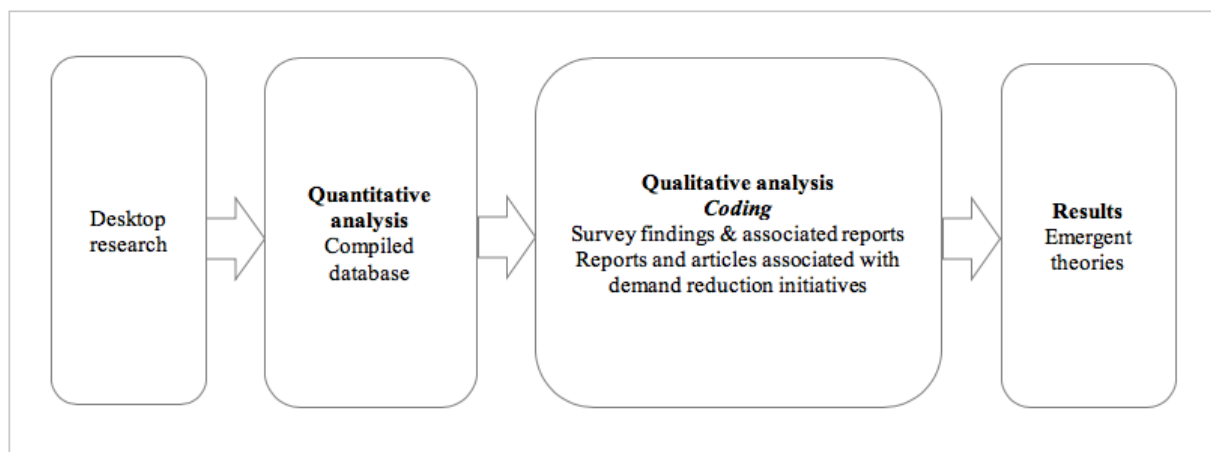


Figure 1 Analysis model: Sequential explanatory mixed-methods approach

3.2 Results

Quantitative analysis

The study found 137 initiatives with a consumer demand focus across the four species in question. Over the decade, all were conducted by international actors who represented conservation organisations, aside from two deployed by local actors (ENV and ASEAN). Of

the single species initiatives, those focused on ivory consumption numbered highest compared with those focused on pangolin numbering the fewest, as shown in Figure 2.

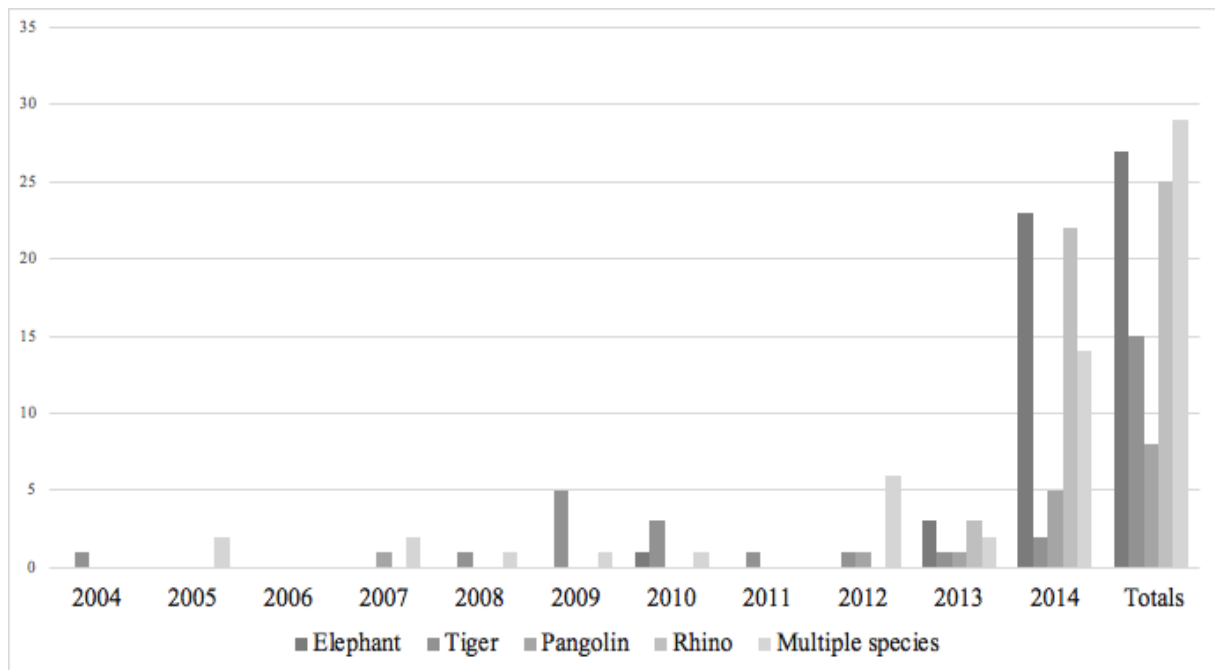


Figure 2 Number of initiatives launched for ivory and rhino horn compared with those of two other illegally traded taxa, 2004-2014

As illustrated by Figure 3, surveys focused on ivory have proliferated over the last 10 years and represented 67% of those found; this may to some extent reflect the difficulties associated with gaining the permits necessary to conduct surveys into the use of other products, for which there was no legal market (for example, the National Statistics Bureau in China will not issue permits for consumer research into anything that is illegal, such as rhino horn consumption).

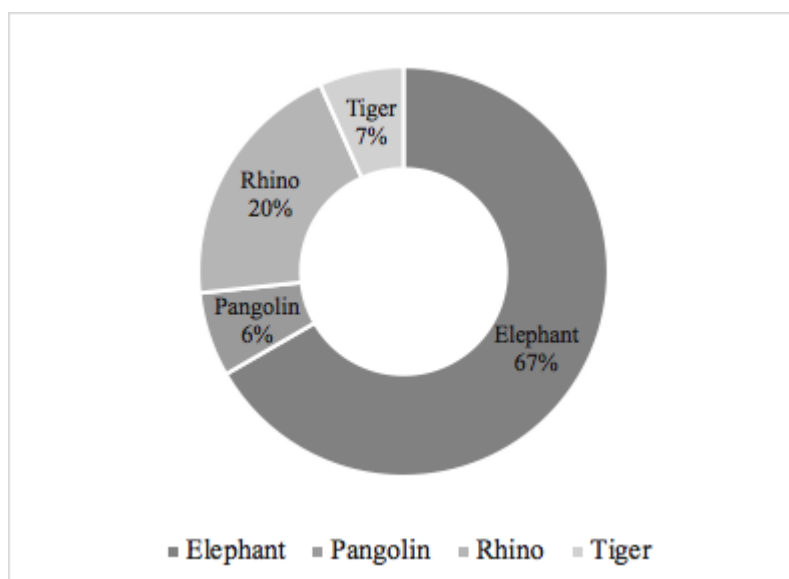


Figure 3 Number of surveys per species conducted on consumer attitudes to consumption

Towards the end of the period 2004-2014, a number of organisations carried out consumer awareness surveys in Vietnam to better understand consumer demand for rhino horn. Data on rhino horn, tigers and pangolin have in some cases been extrapolated from broad surveys where attitudes to wildlife consumption more generally have been surveyed. Whilst still a rich source of data, in general surveys to date appear to have been constructed and conducted on an irregular basis, by different international organisations acting independently of one another, and with differing methodology, or with confidential findings. For example, over the course of 2012-13, four surveys by four different organisations were carried out in China focused on gathering consumer opinions on ivory consumption. In 2013, two major consumer opinion surveys were carried out in Vietnam by two different organisations on consumer attitudes towards rhino horn consumption.

The target audience for initiatives has been the general public in almost all cases, but with some focus on corporates, the government and law-makers for ivory, and on young people for rhinos (Figure 4). Initiatives focused on raising awareness were the most prolific (70), outnumbering the next most numerous activity, mapping the market (23), by around three times

(Figure 5). Currently, few initiatives make reference to strategic approaches to behavioural change outside Traffic’s five-step process, which includes a theory of change for consumer focused behavioural change initiatives, used in their work in China and Vietnam (Zain, 2012). Models of multi-year, nationally-surveyed awareness raising campaigns and behavioural change initiatives were not found.

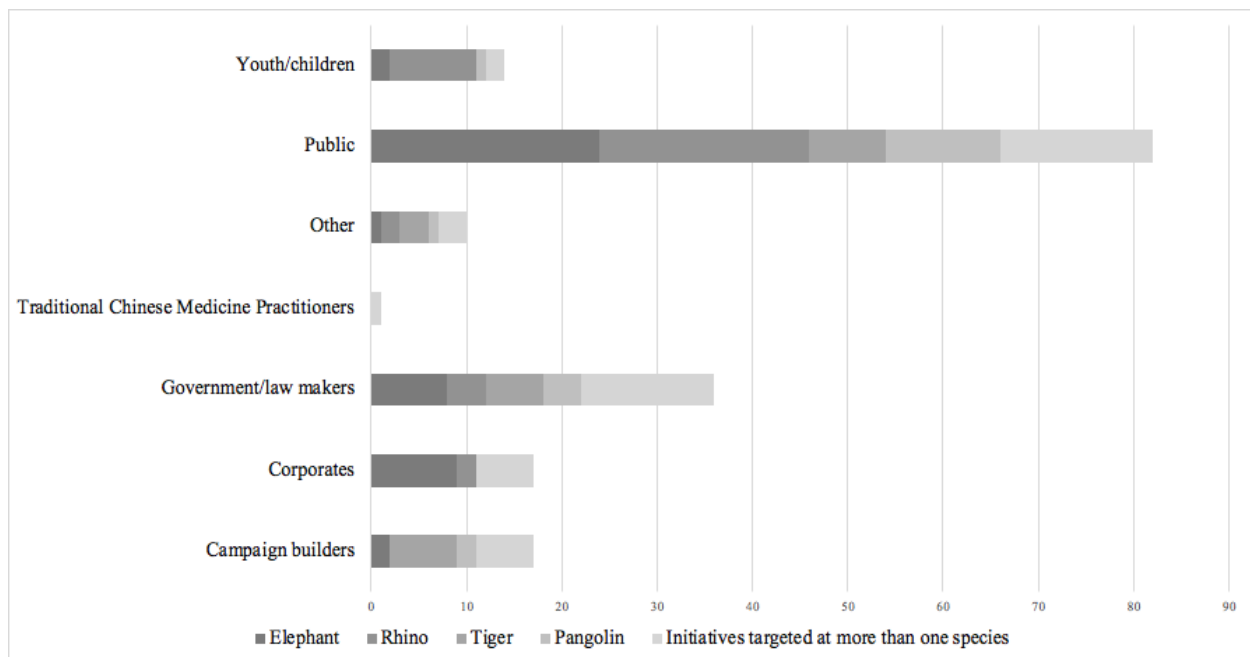


Figure 4 Audiences targeted by interventions

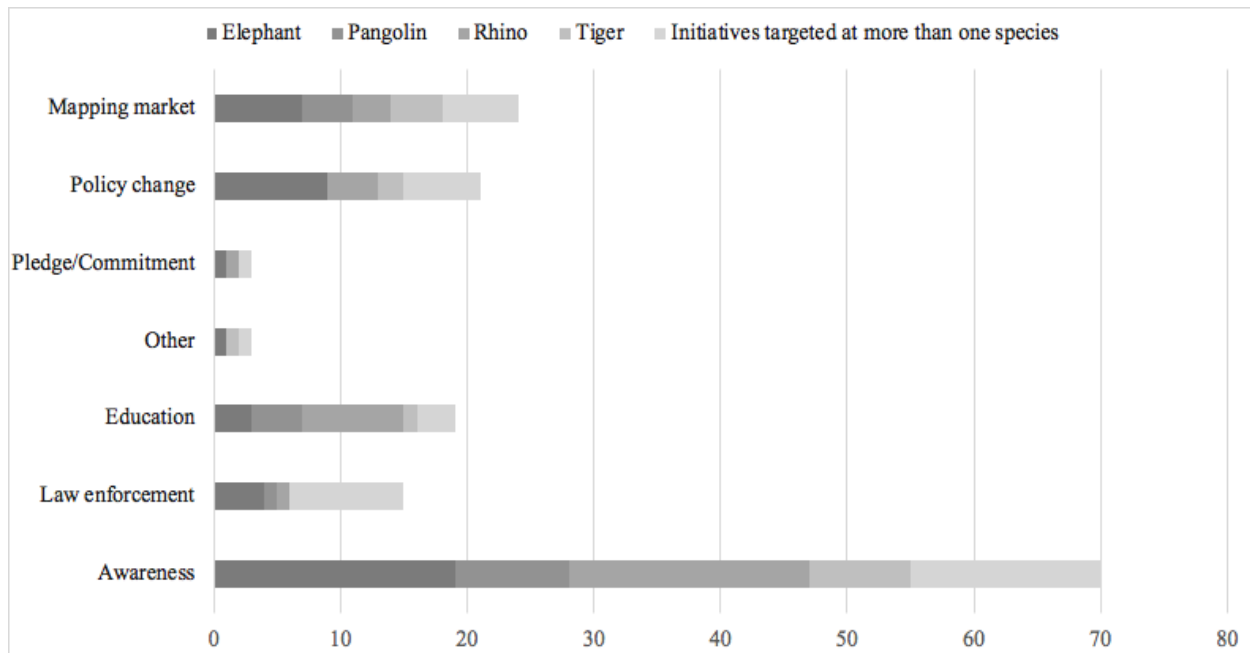


Figure 5 Types of initiative by objective

Gaps were identified in the ages and location of those surveyed. Within the scope of this research, some examples are as follows. The only survey in those analysed which addresses a specific ‘youth’ demographic is the WCS 2013 online survey, which does so by virtue of being a survey specifically designed to address the demographic of the Chinese social media user, described by WCS (2013) as the following based on Weibo demographics: 52% female, 42% are between the ages of 25-34, 54% bachelor degree, and most (32%) live in 2nd tier cities). Of these users, WCS was able to determine that of those who are both Weibo users and consumers of ivory, 2/3 buyers are female, and c. 50% from Beijing, Guangdong, the Shanghai area (WCS, 2013). No surveys on attitudes to rhino horn use in China were found to have been conducted, nor were any found to have been conducted based on alternate empirical frameworks, such as behavioural economic approaches.

Overall, trend data and measurement and evaluation of campaign effectiveness was found to be limited. Further notable omissions across the four products in scope included recent consumer opinion data on tiger parts and pangolin purchases in both China and Vietnam. Gaps

relating to rhino horn consumption in China were found, with one survey including attitudes towards rhino horn use. For rhino horn, there was relatively good knowledge of consumers and baseline information in Vietnam, and limited knowledge in China. For ivory there was found to be good baseline knowledge about consumers in China, but none for Vietnam.

Qualitative analysis

The goal of the qualitative phase was to explore and interpret the data sourced in the first, quantitative, phase to unearth findings on the dimensions conferred by consumers on the items in question, using frameworks underpinned by Belk's (1988) overarching theory of self-extension to better understand the meanings assigned to these items. The main themes resulting from this analysis are as follows.

Taking a deductive approach, the first analysis took a deductive approach to unearthing the meanings conferred on the wildlife products in question by consumers as conceptualised by Richins (1994a). Perceptions of the four themes related to consumers' attitudes emerged across all cases: utilitarian, provision of enjoyment, representation of interpersonal ties and identity or self-expression features as shown in Table 1.

Table 1 Categories and subcategories using a deductive approach to a quantitative content analysis on the meaning of wildlife products to consumers

Category	Enjoyment (capacity to provide pleasure)	Utilitarian value (functional usefulness)	Representation of interpersonal ties (symbolic representations or reminders of interpersonal ties, such as gifts from loved ones)	Identity and self-expression (expressing or reinforcing a sense of self, e.g., expressing personal values)
Subcategories	Aesthetic	TCM (medical)	Gifts	Confers status
	Enhances celebrations	Investment	Bribes	Culturally appropriate
	High value	Financial asset	Helps in relating with family/business associates	Prestige / face

Despite being common for all consumers in all cases, those themes differed in the number and similarity of sub-themes and categories comprising them. Analysis of the number of sentences per each theme across the four cases showed the priority of the themes discussed by the data (Figure 6).

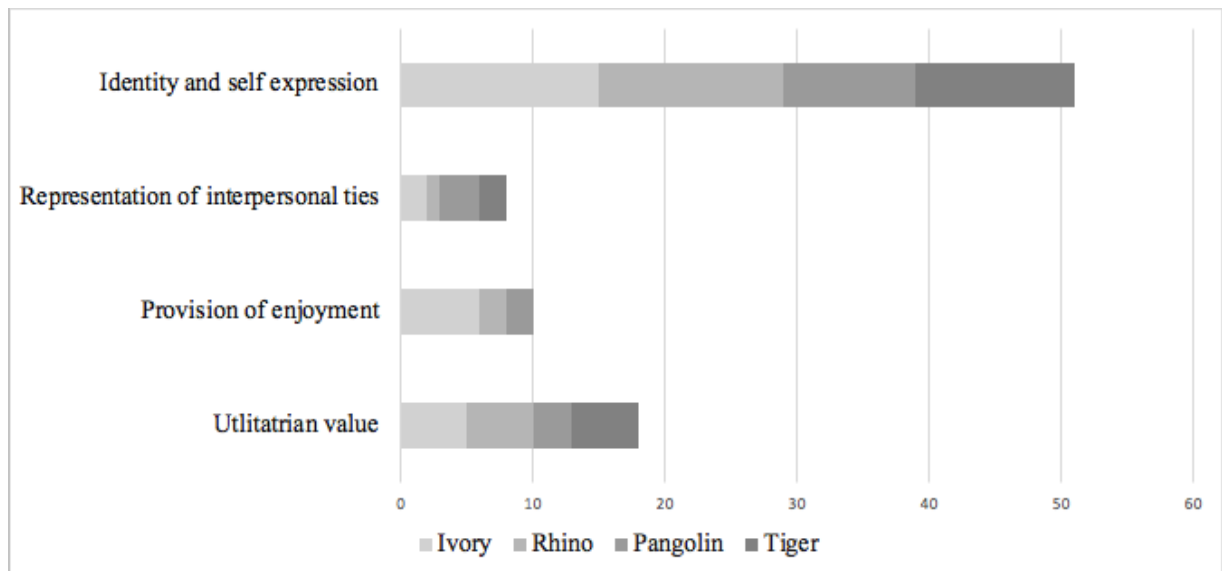


Figure 6 Meanings assigned to four illegal wildlife products based on Richins' (1994a) framework

Overall, the findings revealed that identity and self-expression were integral components of consumers' perceptions of these products, prioritised most frequently, more than twice as important as any other element and representing 49% of all comments. Utilitarian purposes, comprising investment value and the medical attributes of traditional Chinese medicinal uses, were the second most prevalent theme, though ivory was the only item mentioned in the data as a financial investment asset, and was not associated with TCM. The data showed less focus on the pleasurable qualities of these goods and their perceived function as symbols of interpersonal ties.

The second analysis focused on understanding whether dimensions of luxury goods, as found by Vigneron and Johnson (2004) were conferred by consumers on these items. Consumers were found to confer all five dimensions of luxuriousness on to the items in question; these emerged in the analysis of each case and across cases as illustrated in Table 2.

As demonstrated in Figure 7, most prevalent was the personal-oriented perception of perceived extended self, associated with the consumption of luxury goods seen as important to individuals in search of social status or those open to interpersonal influence. The non-personal perception of perceived quality, where high price is described as a proxy, and where this attribute is found to appeal to status-conscious consumers, was the second most common attribute. The perceived non-personal conspicuousness of these products, where the brand itself confers status, was mentioned with similar frequency to perceived uniqueness, for which scarcity or limited supply of products is a proxy. Least prevalent was the consumers' personal perception of perceived hedonism, where rewards and fulfilment are acquired through the purchase and consumption of products evaluated for their subjective emotional benefits or gratification properties, or their being intrinsically pleasing, as opposed to functional properties.

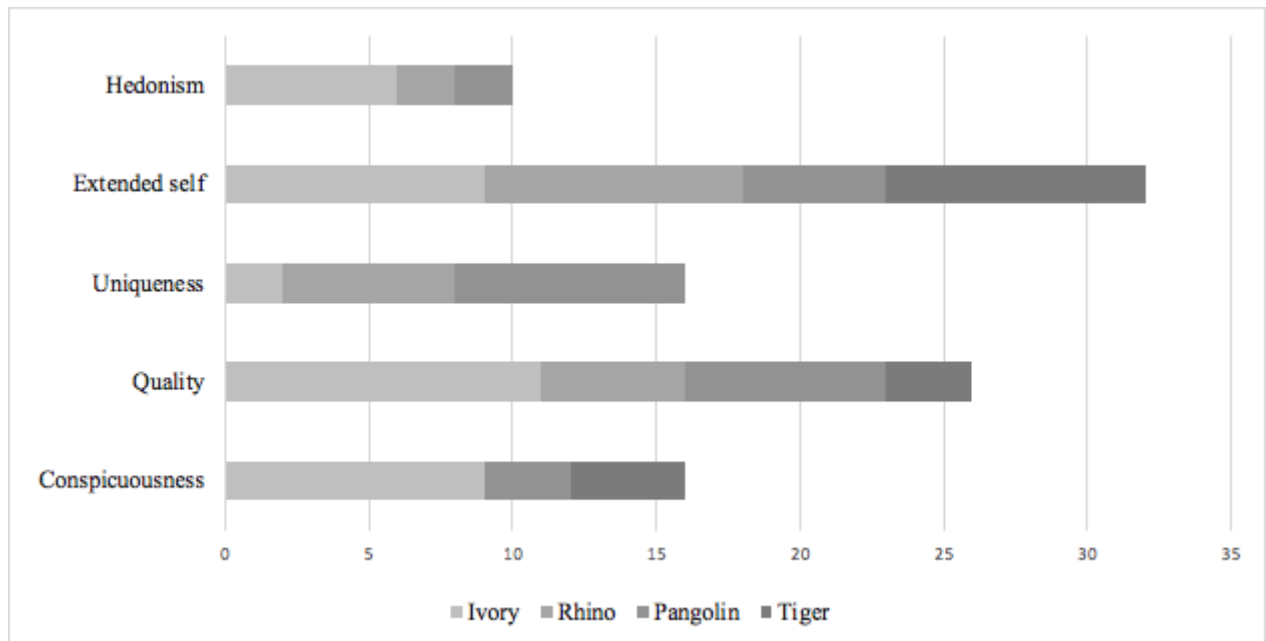


Figure 7 Dimensions of luxuriousness based on Vigneron and Thompson (2004) found in stated attitudes towards four wildlife products in Study 1

The outcome of the final analysis took the form of categories and themes identified through qualitative content analysis. Through taking an inductive approach to the data, two main themes emerged, one self-based and the other non-personal, regarding the particular attitudes, functions and symbols expressed.

Table 2 Categories and subcategories analysed using a deductive approach to quantitative content analysis using Vigneron and Johnson's (2004) framework of luxury dimensions applied to rhino horn, ivory, tiger and pangolin products from consumers' perceptions

Category (Latent dimensions perceived)	Conspicuousness Non-personal	Uniqueness Non-personal	Quality Non-personal	Extended self Personal	Hedonism Personal
Subcategories	Brand or item confers prestige	Rarity	High price	Social referencing	Sensory gratification
	Conspicuous consumption	Limited supply	Superior	Pressure/demands of one's own membership group and attracted by standard dictated by another reference group	Pleasure
	Brand associated with social status	Exclusivity and rarity enhance desirability	Valuable	Desire to conform to affluent lifestyles	Aesthetics
				Part of identity	

As illustrated in Table 3, they are a) Buying these items confers affluence and therefore status (self-based) and b) My society values these items highly (non-personal).

Table 3 Themes and subthemes using an inductive approach to quantitative content analysis on whether attitudes and perceptions of consumers regarding the material, social, and cultural attributes of these items are aligned to positive self-actualisation

Main theme	Buying these items confers affluence and therefore status (self-based)	My society values these items highly (non-personal)
Sub-theme	Projects a favourable image of self	High prices
	Being able to afford high prices indicates affluence	Desirable
	Rarity drives high prices, perception of quality	TCM tradition
	Rapid increase in affluence	Aesthetics
	Retains traditional legacy of being available only to the very wealthy	Investment/financial asset
	Giving as gifts enhances interpersonal relationships	

3.3 Discussion

Summary of findings

The findings of this study contribute to the extant body of knowledge through revealing the meanings found to be conferred by consumers on four illegal wildlife products. For the first time in the literature, the application of models issuing from Belk's (1988) theories of self-extension are applied in this context given their foundational role in analysing consumers' relationships to purchases. These findings fill a gap in the marketing and conservation literature on the meanings conferred by consumers on these items and how this may influence purchase decisions, given that in the specific context of the relatively high-value market for rhino horn and ivory items the literature identifies a lack of empirical research in this area despite the initiation of several interventions which seek to influence this (St John, Edwards-Jones & Jones, 2011; Challender & MacMillan, 2014; Nadal & Aguayo, 2014).

The study captured information about, and resulting from, all interventions found and implemented under a broad demand reduction mandate in Vietnam and China between 2004-2014 for rhino horn, ivory, pangolin and tiger. Although some were deployed by local NGOs and to targeted demographics, the vast majority were implemented by international actors to a mass audience, leaving gaps in coverage and having a largely general focus in terms of target audience. Specifically, in the case of H1, results were positive, revealing that identity and self-expression dimensions were best served by these products, over and above their functional and pleasure-providing attributes. Looking to H2, results were also found to be positive. Whilst the specific dimensions of luxury remain in question in the literature (Dubois & Laurent, 1994; Kemp, 1998; Hansen & Wänke, 2011), it was found that these items satisfied both the personal and non-personal dimensions of luxury according to the framework described by Vigneron and Johnson (2004). It was also observed that the findings described positively valenced

relationships between consumers and these illegal wildlife products overall, from both a personal and a non-personal perspective (Vigneron & Johnson, 2004). The two main themes emerging, one self-based and the other non-personal, were that ‘buying these items confers affluence and therefore status’ (self-based) and ‘my society values these items highly (non-personal)’.

Strengths and weaknesses of the study

The inclusion of as many interventions as could be found through the desktop research and quantitative phase alongside the analysis of the resultant multiple surveys, reports and published findings suggest that the results represent a reasonable reflection of the findings relating to consumer attitudes in the period in question. Nonetheless, this study has limitations. The evidence base is limited to reports and survey data produced by conservation organisations rather than peer-reviewed evidence. Gaps were consistent with those found in the quantitative data, for example given the relatively high proportion of data on elephants in relation to other species, the results should be considered in this context. Intensive, long-term involvement, thick and rich description of phenomena, presentation of negative or discrepant information, and use of peer debriefing are all noted by Maxwell (1996) as methods for validity testing. Hence, confidence in the results of Study 1 was limited because of the lack of long-term initiatives gathering multi-year trend data; also, the overlap of resulting views may reflect the lack of diversity of actors implementing surveys and mapping the market. The sample group used in the underlying surveys and included in the qualitative analysis may have been incomplete and respondents may represent a biased subgroup.

Given that all initiatives except one was enacted by a conservation organisation or international governmental organisation, and all but two were enacted by international actors, to some extent the output may have limitations and display bias. This is addressed to some

extent in Study 2, where the target audience was accessed through a local luxury-lifestyle publication's database rather than executed by a conservation organisation, and where questioning was not limited to wildlife.

A significant gap remains the lack of reference to theoretical foundation for conservation initiatives targeting the trade in illegal wildlife. The majority of interventions were found to lack empirical frameworks in their planning or execution, confirming and building on the rhino horn campaign findings conducted by Olmedo et al. (Olmedo, Sharif & Milner-Gulland, 2018) and extending its findings across a broader data set. Social marketing quality assurance frameworks are advocated by Traffic, examples of which include the NSMC Social Marketing Benchmark Criteria (NSMC, 2019), which promotes a mixed methods approach to influencing behavioural change. Very few campaigns included either consumer research to identify the target audience at whom interventions should be aimed, or used consumer marketing or behaviour change models; this raises the question of how the main user group - the affluent - should be targeted. Almost all of the initiatives being delivered under a 'demand reduction' heading employed large-scale mass media communications, largely aimed at raising awareness around elephant or rhino protection issues and broader aspects of associated conservation concern. This is important because it sets a tone around what is and is not socially acceptable behaviour, but may not necessarily change consumer behaviour. While awareness-raising centres on promoting the visibility or credibility of a message or product within a community or society, providing a potentially catalytic force for change, the goal of behaviour change programmes centres on the design and implementation of interventions that specifically produce desired behavioural changes among a known target group (Ble, 2008). A core principle is to focus on how best to make a measurable change in consumer behaviour, rather than reaching a number of people with the message. However, the research also revealed the view that one approach to changing behaviour is to change what is socially acceptable, with

society subsequently changing consumers (Cialdini & Trost, 1985; Cialdini, Reno & Kallgren, 1990; St John, Edwards-Jones & Jones, 2011).

In the event that policies to increase punishment or reduce supply may perversely increase the appeal or value of items given the dimensions conferred by the attribute of rarity (Phau & Prendergast, 2000; Vigneron & Johnson, 2004; Courchamp et al., 2006), campaigns that position items as conferring attributes on the consumer that are undesirable, in opposition to self-identity, or not self-relevant (Park, Eisingerich & Park, 2013; Novik, Pinto & Guerreiro, 2017) may instead be effective in shaping consumer values. Ultimately the goal may be to turn ownership into a strong negative and extremely undesirable, though understanding what exactly this may be ('unsophisticated' or 'outdated' for instance) requires careful analysis in the context of cultural setting (Fournier & Alvarez, 2013; Novik, Pinto & Guerreiro, 2017).

Comparison with other studies

There is limited published data in the literature on the motivations of consumers for the illegal wildlife products considered in this study analysed using consumer marketing frameworks (Veríssimo, 2013; Challender & MacMillan, 2014; Wright et al., 2015) and the primary aims of previous studies differed from this research (Duthie et al., 2017; Dang Vu & Nielsen, 2018; Greenfield & Veríssimo, 2019). Interpretation of previous studies is also limited by their scope, such as analysis of information from one country only (Olmedo, Sharif & Milner-Gulland, 2018).

Though no studies have been completed in the context of ivory and rhino horn, applying the findings in the marketing literature on the role of status and conspicuous consumption to these products suggests that these material symbols are relied upon to confer status, and to convince others of belonging and credibility within a social context (Solomon, 1983; Richins, 1994b; Han, Nunes & Drèze, 2010). Whether consumption behaviour is used as a conduit to forming meaningful relationships requires more investigation (Schouten & McAlexander,

1995) given the illegal nature of rhino horn, the ambiguity around the legal status of both rhino horn and ivory, and the lack of empirical data on usage.

Looking first to the quantitative analysis of conservation initiatives, the study showed a gap in empirical and evidence-based approaches. Similarly, applying the framework of social marketing benchmarks defined by the UK's National Social Marketing Centre (Hopwood & Merritt, 2011; Greenfield & Veríssimo, 2019) found that of seven organisations identified as having been involved in ivory and rhino demand reduction campaigns in China and Vietnam between 2005 and 2015, 7% of the benchmarks analysed had a robust body of evidence to support them. Nonetheless, all campaigns demonstrated evidence of partially fulfilling at least one of the eight benchmarks, with the majority demonstrating evidence toward three or more. Customer orientation and segmentation were the two most comprehensively integrated social marketing benchmarks, but the evidence base on which these were implemented were often dominated by conventional wisdom and personal experience (Greenfield & Veríssimo, 2019).

As in this study, Greenfield and Verissimo (2019) also noted the tendency for practitioners to focus on undefined groups, often described as the “general public”, largely due to the perceived urgency to change society as a whole and not waste time focusing only on one group, something that is a broader trend across biodiversity conservation (Kanagavel, Raghavan & Veríssimo, 2014). Olmedo, Sharif and Milner-Gulland (2017) found that conservation NGOs are increasingly using market research companies to better understand their target audiences.

Looking to motivations for buying behaviour, this study found that both positive personal and non-personal benefits were dimensions of the wildlife products in question. With regard to positive self-relevant attitudes, Greenfield and Verissimo's (2019) findings included perceptions by demand reduction campaign planners that items conferred status and were indicators of affluence. In changing these dimensions for consumers, non-use was positioned

in terms of creating negative message frames; examples include embarrassment to consume in front of others, personal reputation protection where the item's legality is questioned, and in terms of positioning use as negative in the context of community or societal norms. As noted in this study, previous findings have noted that a key challenge with consumer research was its ability to effectively measure behaviour, thus suggesting that researchers should be neutral due to possible sensitivity for respondents in answering questions posed by conservation NGOs (Greenfield & Veríssimo, 2019).

With regard to uses served by the products, comparative research in the academic literature is extremely limited. Overall, this study found that identity and self-expression were integral components of consumers' perceptions of these products, prioritised most frequently, more than twice as important as any other element and representing 49% of all comments. One study by Dang Vu & Nielsen (2018) which focused solely on rhino horn found that respondents across all categories of use mentioned hedonic values associated with their use of rhino horn, with its status-conferring function (Ayling, 2013; Drury, 2011; Traffic, 2013). Pride or joy experienced due to the rarity and preciousness of rhino horn was also mentioned across all categories of users in Dang Vu and Nielsen's (2018) findings. However given the focus on rhino horn only, Dang Vu and Nielsen (2018) found that utilitarian values were the most prevalent single explanation given for rhino horn use linked to alleged physical, health-related benefits (Traffic, 2013) associated with the use of rhino horn in traditional medicine (Milliken & Shaw, 2012). The most prevalent combined category of rhino horn use was for treatment of diseases and life-threatening medical conditions like cancer; however it was also found that beliefs in its efficacy were fading. Whilst a comparison with this study is limited given the greater number of species considered here, utilitarian purposes, comprising investment value and the medical attributes of traditional Chinese medicinal uses, were the second most prevalent theme found to arise, though ivory was the only item mentioned in the data as a

financial investment asset, and was not associated with TCM. The data showed less focus on the pleasurable qualities of these goods and their perceived function as symbols of interpersonal ties.

The findings of this study on the dimensions conferred on the illegal wildlife products in question support possible explanations for a growth in demand, if viewed in the context of the consumer marketing literature. A stream of research has posited that in modern life, goods are symbols of personal attributes and goals (McCracken, 1986; Levy, 1999), deemed appropriate when they join with or reinforce the way a consumer thinks about themselves; it is also found that symbols of social participation are chosen in part to attest to social position (Levy, 1999). This study also mapped the attributes of luxury goods on to the wildlife items in general, finding that these dimensions were positively conferred. Whilst previous studies in the consumer marketing literature remain undecided on the exact attributes of ‘luxury’, previous studies have gone some way to developing measurement tools and frameworks (Dubois & Laurent, 1994; Kemp, 1998; Phau & Prendergast, 2000). This study’s finding that the latent dimensions of luxury items are conferred by consumers on to illegal wildlife products suggests a further driver in the web of motivations driving the purchase of these items; for example Vigneron et al. (1999) find that the perceived price of a product influences the perceived level of prestige positively (Vigneron & Johnson, 2004), and further studies agree that demand is found to increase if products are perceived as unique, popular and expensive (Phau & Prendergast, 2000; Husic & Cicic, 2009).

Unanswered questions and future directions

Self-relevance and the importance of these items to consumer self-worth within attachment contexts (Ball & Tasaki, 1992) requires further study, given the relevance of the attachment construct in forming consumer-brand relationships and the implications for

consumer behaviour (Park, MacInnis & Priester, 2007; Park et al., 2010). With further enquiry, a model such as Park et al's (2006) 3 Es model could be applied, overlaid as in Table 4, which is explicitly concerned with how each brand's asset or liability relates to the customer's own self and is personally meaningful and beneficial.

Study 2 bears this in mind in its study design, and involves identifying the self-relevant motivations, drivers and socio and psycho-demographics of consumers identified by the data in Study 1 as consumers - the relatively affluent. Further to this, whilst dimensions of luxury were found to be conferred on illegal wildlife items, drawing conclusions or similarities between illegal wildlife products and luxury goods presents a further angle for development, as expressed in Study 2.

Table 4 Alternative frameworks for brand dimension enquiry

Richins (1994a)	Enjoyment (capacity to provide pleasure)	Utilitarian value (functional usefulness)	Representation of interpersonal ties (symbolic representations or reminders of interpersonal ties, such as gifts from loved ones) Identity and self-expression (expressing or reinforcing a sense of self, e.g., expressing personal values)
Park & MacInnes (2006)	Enticing the self	Enabling the self	Enriching the self
Park, Jaworski & MacInnes (1986)	Experiential (hedonic) benefits	Functional benefits	Symbolic benefits

Given that many issues around funding and methodology exist, implementation of surveys varies, making like-for-like comparison difficult. There are no clear guidelines on

measurement and reporting, and consequently minimal acceptable standards that accord with informed design and frameworks may be beneficial if established (Olmedo, Sharif & Milner-Gulland, 2018). Discrepancies between researchers' existing and perceived ideal arrangements may reflect resource constraints, and provide impetus for cost-effective strategies for bridging the gap between current and best practice (Booth et al., 2012). Discussion of best practice for handling the design of interventions is therefore needed, and will require representation from both conservation and non-conservation researchers (Booth et al., 2012; Pooley, Mendelsohn & Milner-Gulland, 2014). This will allow consensual establishment of practical, effective and defensible guidelines that can inform future interventions, and perhaps set a precedent for other campaigns aiming to reduce ecologically unsustainable behaviours.

Finally, whilst Belk's (1988) formulation of the extended self is an influential conceptualisation of the relation between people and possessions, it has been updated (Belk 2013) to include digitally mediated ways of constructing, co-constructing, and expressing self (Belk, 2014). Here Belk (2013) notes that in the digital world, the self is now extended into avatars, broadly construed, with which we identify strongly and which can affect our offline behaviour and sense of self. The shift to the online persona has promising avenues for future enquiry in the context of shaping the meanings conferred on items such as illegal wildlife products and the act of consuming these, given the impact of this profound and relatively recent development on communications, identity-creation, and the extension of social domains, in order to offer actionable guidance and implications in digital marketing (Lin, 2018).

The implications inferred by online representations of self, used to represent ourselves to others, may have promising applications in the pursuit of more environmentally sustainable behaviours such as the reduction in demand for illegal wildlife. Belk (2013) notes that "by including lists of interests, friends, favourite music, and trails of online posts and feeds, every time we check our social media sites we are effectively checking to see who we are, who we

were, and who we seem to be becoming” (p.484). The exploration of the power of virtual brand communities, which constitute co-constructed shared aggregate selves in the digital world, show that aggregate levels of self in such communities are much larger and more geographically diverse than the family, neighbourhood, and national levels of aggregate self envisioned by Belk. Consumers can also join virtual anti-brand communities, using blogs and forums to disassociate themselves from brands – or behaviours – that are regarded as antithetical to their sense of self (Belk, 2014). A further avenue of enquiry thus examines how the power of online identity may influence offline behaviours – for example, should the distance between an activity or purchase behaviour and a carefully curated online identity become too great or self-relevance become too tenuous, the question of how offline behaviours may be affected is raised. Therefore future enquiry into brand self-distance self-relevance, and the application of these findings to the design of demand reduction interventions is relevant. As put by Belk (2014), “The dissolution of boundaries in a digital age is an important observation – one of those key insights that unlocks a host of further implications” (p.133).

4 Study 2

4.1 Design & procedure

Building on the previous study, which for the first time applied frameworks derived from Belk's (1988) influential assertion that understanding the meanings assigned to objects provides crucial insight into consumer behaviour and posits the theory of self-extension, Study 2 aimed to further apply self-based consumer marketing frameworks, in this case brand attachment and emotional territory mapping, to the problem of understanding meanings assigned by consumers to two illegal wildlife products and the basic psychological needs fulfilled by their purchase. This represents a similar evolution in enquiry to Belk's (2013) updated conceptualisation of the extended self, which adds the concept of brand attachment to explore the original specification of possession and person attachments as the foundation for self-extension (2014). In testing H2 and H3, the application of these frameworks aimed to test whether the overall characteristics of consumers' perceptions of the attributes of these items are aligned with those of conventional luxury goods or brands, and whether attitudes and perceptions of consumers regarding the material, social, and cultural attributes conferred on rhino horn and ivory products were aligned to positive self-identity (actualisation) through the conferring of status and affluence, and the self-relevance of these items.

The study targeted relatively affluent individuals in Vietnam with a known interest in luxury brands and lifestyle purchases for an online survey. The respondents were readers of a prominent publisher of Vietnamese luxury lifestyle titles for both men and women, which targets relatively affluent individuals and features both celebrities and luxury goods advertising and editorial. This study population was chosen for two main reasons. Firstly, our study was a more in-depth examination of a segment of consumers previously identified as rhino horn users (Traffic & HSI 2013). Secondly, based on Hofstede's (2001) frameworks of underlying values that drive attitudes, and the marketing research literature consequently built on this, in high-

power distance cultures such as China and Vietnam purchase decisions are strongly influenced by opinion leaders; it follows that the less powerful are likely to emulate the purchases of people with greater authority (Eisingerich & Rubera, 2010). Ivory was added to the study because there has been no research on the demographic profiles and attitudes of luxury goods consumers towards ivory to date.

Data were collected via an online survey pushed to over 100,000 individuals between 15 August and 30 September 2015. To recruit participants, we targeted readers of a prominent publisher of Vietnamese luxury lifestyle titles. Typically, these publications target affluent men and women, and feature both celebrity editorial and luxury goods advertising. Targeting this demographic enabled us to conduct an in-depth examination of a segment of consumers previously identified as rhino horn users (Traffic & HSI 2013). Secondly, based on Hofstede's (2001) frameworks of underlying values that drive attitudes, in high-power distance cultures such as China and Vietnam, purchase decisions are strongly influenced by opinion leaders; whereby the less powerful are likely to emulate the purchases of people with greater authority (Eisingerich & Rubera, 2010). These publications fulfil the role of leading opinion for certain segments of the Vietnamese population. It was conducted anonymously, with no personally identifiable information gathered, and in the local language.

Based on advice from the publisher about the best way to ensure high completion rates, and in order not to bias the sample towards those willing to fill in online surveys without reward, an incentive to complete the survey was given. This was in the form of the chance to win one of five Ipad minis, a gender-neutral prize the publisher deemed appropriate to their readership. The survey was presented in isolation from any conservation-related material to prevent bias of participants towards conservation-aware individuals. The survey was piloted by gaining initial insights from 10-20 in-depth engagements with respondents. Amendments

were made to fine-tune the application based on this information. Ethics approval for the research was granted by the Imperial College Research Ethics committee.

Questions examining the types of relationships consumers form with luxury products and the basis on which these relationships are formed were drawn from brand attitude and attachment frameworks (Aaker, 1997; Woods, 2004); Park et al. 2010; Park, Eisingerich & Park, 2013). The attachment-aversion (AA) model was also used because of its proven ability to unearth a number of as yet unexplored insights, including prediction of the psychological consequences of consumers' feelings in relation to products, the valence of relationships, and its ability to differentiate consumer ambivalence and indifference. The relationship object in this case was the person's most desirable good (self-chosen), along with either ivory or rhino horn. We explored consumers' intention to buy illegal wildlife products rather than actual purchase behaviour, because to be effective in the long run, demand reduction campaigns need to influence not just current consumers, but also those who aspire to purchase products but are not currently in a position to do so, or those who may influence others' purchasing behaviour.

Two critical factors reflect the conceptual properties of brand attachment: i) brand self-connection: this is defined as the cognitive and emotional connection between the brand and the self, based on the idea that attachment involves a bond, with the brand included as a part of the self, and ii) brand prominence: this is defined as the extent to which positive feelings and memories about the attachment object are perceived as top of mind, and a measure of the 'strength' of the bond connecting the brand with the consumer. These two questions, which reflect myriad brand-relevant thoughts and feelings and the lack of control over their activation, capture the retrieval ease and frequency characteristic of brand prominence. Notable is the fact that one of the two prominence measures explicitly captures the frequency of brand-related thoughts and feelings. These two items are phrased to describe multiple thoughts and feelings, thus capturing the frequency aspect of brand prominence. The brand prominence measure does

not distinguish the valence of thoughts and feelings about a brand, because the distribution of positive versus negative feelings linked to the brand are reflected in the degree of brand–self connection.

The AA model’s two key conceptual components measure degrees of brand-self distance, or the valence of a consumer’s relationship, and brand prominence, defined as the perceived memory accessibility of a brand to an individual (Park, Eisingerich and Park, 2013).

Because the brand attachment, attachment-aversion and emotional territories sections were relatively time-intensive for the respondent, each respondent was randomly assigned to answer questions on one or other of the rhino horn or ivory survey. First, the respondent's demographic characteristics was ascertained. Each respondent was then asked what their ‘most desirable’ good was from a selection of different product types such as antiques, designer leather and fashions, imported cars and electronic goods and either rhino horn or ivory (see questionnaire; Appendix B.1). A stream of literature has explored the role of emotions in consumer behaviour (Thompson, 1998; Bagozzi, Gopinath and Nyer, 1999; Huang, 2001; Woods, 2004). Using emotional territory mapping approaches, respondents were asked ‘which words first come to mind’ when they thought about the type of person who owned the good they found most desirable, and either rhino horn or ivory (Woods, 2004). They were then asked to choose from a series of adjectives those which were closest to their feelings about the products under study (either ivory or rhino horn and their most desirable good). Using referral questioning techniques, attitudes towards rhino horn or ivory as well as respondents’ most desirable good were investigated.

To then measure brand attachment the methodology of Park et al. (2010) was adapted, employing a two-part questioning technique. To measure the AA Relationships, the present study used the frameworks provided in Park, Eisingerich and Park (2013) which added items developed from Park et al. (2010) in mapping the conceptual definition of the brand–self

distance of the AA Relationships construct. Most notably, Park et al.'s (2010) uni-polar attachment scale was changed to a bi-polar scale, and in this evolution of brand attachment and components that explain it, the concept of brand-self connection was changed to the concept of brand-self distance (Park, Eisingerich & Park, 2013; Novik, Pinto & Guerreiro, 2017) where brand-self distance assesses the subjective perception of the distance between the self of the consumer and a brand (Park, Eisingerich & Park, 2013).

Firstly, respondents' perceived brand-self distance (the cognitive and emotional connection between a brand and an individual) was captured (Park et al., 2010) by asking (1) "To what extent is [product] part of you and who you are?" and (2) "To what extent do you feel that you are personally connected to [product]?". Respondents selected their level of agreement from a 9 point Likert scale. Brand prominence, defined as the salience of the cognitive and affective bond that connects the brand to the self (Park et al., 2010) was captured by asking (1) "To what extent are your thoughts and feelings toward [product] often automatic, coming to mind seemingly on their own?" and (2) "To what extent do your thoughts and feelings toward [product] come to you naturally and instantly?". Again, respondents were asked to identify their level of agreement using a 9 point Likert scale.

Respondents' attitudes were also tested to measure the strength of their feelings towards or against a statement such as "[Product name] connects to me emotionally" (Park et al., 2010), "[Product name] helps to express my identity", and "Buying [Product name] improves my quality of life with its performance" (Park, Eisingerich & Park, 2013).

The present study then measured the 3 Es with bi-polar scales as in Park, Eisingerich and Park (2013). Specifically, enriching (impoverishing)-the-self brand asset (liability) was measured, as follows: "To what extent does [product name] mis-characterise or characterise (adapted from speaks (misspeaks) who you are as a person?" (-4) = "" to (4) = "expresses;" "To what extent does [product name] misrepresent or represent who you want to be?" (-4)

=“misrepresents” to (4) =“represents;” “To what extent does [product name] undermine or reinforce your deepest values?” (-4) = “undermines” to (4) = “reinforces” ($\alpha = .91$). Enticing (annoying)-the-self brand asset (liability) was measured, as follows: “To what extent is [product name] unappealing or appealing to you?” (-4) = “unappealing” to (4) = “appealing;” “To what extent is [product name] unattractive or attractive to you?” (-4) = “unattractive” to (4) = “attractive” ($\alpha = .90$). Finally, enabling (disabling)-the-self brand asset (liability) was measured, as follows: “To what extent does [product name] lower or enhance the quality of your life with its functional performance?” (-4) = “lower” to (4) = “enhance;” “To what extent does [brand name] hinder or help make daily life easier?” (-4) = “hinders” to (4) = “helps” .

Finally, respondents were asked, “Which, if any, of the following groups, organisations or sources influence your opinion?” about the most desirable good and either ivory or rhino horn. The respondent was then asked for information on their socio-economic status.

Data Analysis

Brand Attachment-Aversion scores were calculated by multiplying respondents’ mean brand-self distance score with their mean brand prominence score. Based on this question set, Brand Attachment-Aversion scores were measured on a scale of 40 to -40, whereby 40 represented a strong emotional attachment to a brand, with the brand generating positive feelings such as love. At the other end of the spectrum, -40 represented complete aversion to a brand, whereby the brand aroused strong negative feelings such as hate within an individual. In the centre of the spectrum, 0 could represent either brand indifference (respondent has no interest/does not care) or brand ambivalence (respondent is undecided). For each respondent a Brand Attachment-Aversion Score was calculated for both the 'most desirable' item and either rhino horn or ivory. Respondents were then categorised as "attached", "averted", "ambivalent" or "indifferent". In the case of classification between indifference and ambivalence,

respondents with a score of less than zero but more than -20 were classified as indifferent, whilst respondents with a score greater than zero but less than 20 were categorised as ambivalent.

To assess respondents' attitudes towards their most desirable product and either rhino horn or ivory, an Exploratory Factor Analysis (EFA) was performed in R (Version 3.1.2). EFA simplifies the interpretation of complex datasets by identifying correlations and underlying themes that link multiple variables (Yong & Pearce, 2013). First, EFA was performed for the most desirable item followed by separate analyses for each of the illegal wildlife products. Once conducted, variables were categorised into factors, with factors labelled according to the statements that loaded most heavily onto the factor. Only variables with loadings of 0.60 or higher were attributed to a factor, in line with common practice (Kibeom & Lee, 2007). Welch's Two Sampled T-Tests were used to identify how mean factor loadings differed between each brand attachment category and to assess differences in attitudes towards illegal wildlife products between different attachment groups. Due to the small sample size secured for rhino horn, the latter stage of analysis was only conducted for ivory.

For data collected through the emotional territory mapping exercises all responses were first translated to English using Google Translate. Any translations that were unclear were either verified by a native Vietnamese speaker or removed from the analysis. A frequency table was created for the number of times each word was mentioned when respondents thought about either rhino horn or ivory, with words categorised to group those strongly associated in their meanings. A summary table was then analysed to determine whether there were any common themes within the data.

Finally, respondents were asked about different sources of information which influenced their opinion of ivory and rhino horn products. Using a General Linear Model, tests were applied to understand whether there was any association between different sources of

influence and the responses provided in the word listing part of the emotional territory mapping exercise, based on the assumption that sources of influence were highly likely to influence a respondent's thoughts, emotions and attitudes towards a specific product. Each source of influence was tested against the two main categories which emerged from the emotional territory mapping ('wealth' and 'negative') to see whether specific messages were associated with particular sources of influence.

Unmatched Count Technique (Nuno et al, 2013; Hinsley 2017) was used to estimate prevalence of purchase. In order to reduce the length of the survey, respondents were indirectly questioned on their purchases of either rhino horn or ivory products. Within the rhino horn and ivory survey groups respondents were exposed to a 'control' or 'treatment' questionnaire. Analysis was conducted to determine whether there was a significant difference between the mean values of the responses to the 'control' and 'treatment' questions. From a marketing and managerial perspective, estimations of prevalence were tested because results would help in shaping the overall design of interventions; for example, if relatively few consumers are found, potentially interventions should be targeted towards a narrow group of consumers. The Unmatched Count Technique was used to calculate prevalence estimates on individuals' engagement in three sensitive activities (ivory and rhino horn purchase, rhino horn use). Respondents were asked how many items they had bought/activities they had performed over a given period of time, 12 months. A period of 12 months was chosen because this was considered to be wide enough to detect behaviours and short enough to reduce recall bias and be reflective of current trends. The questions about sensitive behaviours were preceded by a non-sensitive warm-up question (for example, which magazines were read by the respondent). The UCT questions were arranged in an order of increasing sensitivity to reduce design effects inherent in sensitive list experiments (Anderson et al., 2007). Question sets were shown to all respondents in the same order. To minimise the risk of design effects and dishonest responses,

control items were selected to be non-sensitive and in ‘theme’ with the sensitive item (e.g. masking its sensitivity). In order to minimise ceiling and floor effects, non-sensitive items were chosen so that each section included one item of extremely low prevalence and one item of extremely high prevalence (Zigerell, 2011). For example a ceiling effect occurs if the respondent is affirmative for all control items and so admission to the sensitive item removes all confidentiality, thereby undermining the purpose of the UCT. A floor effect occurs when no control items are affirmative because respondents may fear that admission to the sensitive item will be too revealing. Respondents were randomly re-assigned to either the control or the treatment group for each question.

Items were chosen to be independent of each other, for example there should be no correlations between the likelihood of performing one activity and any other activity on the list. The position of sensitive behaviours on the treatment group's list was randomised. This is because of the potential for arousing suspicion if it is obvious to respondents which item in the list is the sensitive behaviour under investigation, leading to biased results if respondents react to the sensitive behaviour.

Ulrich et al. (2012) provides graphs where sample sizes for a given power and prevalence can be obtained. If there are four neutral questions, then a sample size <1000 is sufficient where the prevalence in the target group is at least around 14% and as long as a power of 0.8 is sufficient - i.e. an 80% chance of detecting a difference between the groups if one exists. Whilst indirect questioning techniques such as UCT are considered effective at measuring sensitive behaviours, a key limitation is that the method requires large sample sizes. Even with large sample sizes, Nuno et al. (2013) note that UCT may be ineffective at identifying illegal resource use at very low levels.

4.2 Results

460 people responded to the online survey over six weeks, each assigned to either the ivory or horn questionnaire, of whom 327 fully completed it. 23% of respondents were male, and 77% female. Over two thirds of respondents were in the 26-45 age bracket. Nearly 80% of respondents were educated to a higher level, and dominant occupations included office-based roles (55%), education roles (16%), and government service (8%). 35% of respondents fell within the <\$30K annual household income bracket, 23% of respondents earned over \$50K. 57% lived in Ho Chi Minh City and 43% of respondents were from other Vietnamese cities. 80% of respondents identified themselves as Vietnamese nationals. 87% of respondents answered the ivory questionnaire and 13% answered the rhino horn questionnaire; this was a smaller sample due to technical issues with the randomisation algorithm assigning respondents to the two surveys. Survey completion rates (n=460) were lower than the threshold required to extract an estimation of the prevalence of purchases of ivory and rhino horn products and therefore these results are not included here, but provide an interesting avenue for future study.

Brand attachment-aversion

The most popular ‘most desirable’ good was found to be leading electronics products, and the ‘second most desirable’ good was designer fashion. One respondent identified each of rhino horn or ivory as their most desirable good.

Table 5 Percentage of survey respondents' selections of most desirable and second most desirable items in Study 2 (n= 327)

Product	Most Desirable		Second most desirable	
	N	%	N	%
Antiques	5	2	11	3
Designer Fashion	88	27	94	29
Designer Leather	33	10	93	28
Horn products	1	0.3	0	0
Import cars	31	9	42	13
Ivory products	1	0	0	0
Leading electronics	168	51	87	27
Totals	327		327	

The mean brand Attachment-Aversion scores for the most desirable item was 10.22 (+/- Standard Error) from a range of -40 to 40, showing that people were in general attached to these items. The mean Brand Attachment-Aversion scores for ivory and horn were -3.29 (SE) and -2.79 (SE) respectively. There were comparatively high levels of 'neutral' responses for both ivory and horn products, suggesting a large proportion of respondents were either indifferent or ambivalent towards these products. Results also show few respondents were strongly averted or strongly attached to the illegal wildlife products. When considering their Most Desirable product, the majority of respondents were more attached than averted, although results also show a clustering of responses around the 'neutral' zone. No significant relationships were found between respondent demographic characteristics and their Brand Attachment-Aversion category. For horn and ivory products the majority (>70%) of respondents were in the "indifferent" category, around 10% of respondents were ambivalent, 7% were attached to ivory products, and 0.3% were attached to rhino horn products (Figure 8).

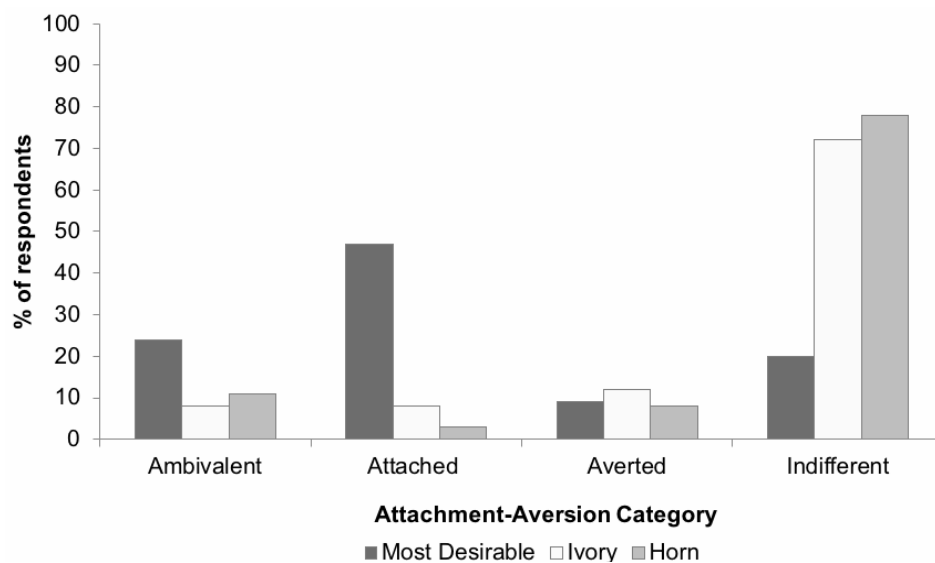


Figure 8 Percentage of respondents in each Attachment-Aversion category

Relationships between brand attachment and brand attitudes

Factor analysis using the psychological needs responses revealed three dominant factors for both rhino horn and ivory products (Table 6). First, identity was found to be the dominant psychological need; products helped individuals to form a sense of identity and appreciate their heritage by feeling connected and part of a group. This was the strongest factor, accounting for approximately 40% of the variation in the data. Pleasure was the next most prominent need fulfilled; products were felt to be physically and emotionally appealing (19-22% of the variation). ‘Opinion’ was the third strongest response, with products seen as prestigious and good to own in both business and community circles (18-20% of the variation).

Analysing the relationships between the factors and attachment-aversion categories demonstrated that for ivory, there was a significant difference between the psychological needs of ambivalent and indifferent respondents for the first factor ‘identity’ ($T=8.735$, $DoF=27.588$, $p<0.001$).

Table 6 Results of the Exploratory Factor Analysis conducted for rhino horn (n=36) and ivory (n=291) products to show which statements were most influential in determining the relationship of the product to people's psychological needs. Proportional variable represents the amount of variance in the data described by each factor

Statement:	Uniqueness:		Factor					
	Horn	Ivory	Identity		Pleasure		Opinion	
			Horn	Ivory	Horn	Ivory	Horn	Ivory
Appealing & attractive to me	0.12	0.311	0.45	0.408	0.723	0.627	0.394	0.359
Give me sensory pleasure	0.033	0.005	0.488	0.413	0.805	0.865	0.285	0.278
Make me feel safe and secure	0.144	0.189	0.764	0.741	0.426	0.45	0.302	0.244
Help me feel part of a connected group	0.048	0.219	0.852	0.786	0.418	0.352	0.227	0.198
Help enhance my relationship with those I am close to	0.083	0.129	0.84	0.858	0.398	0.269	0.233	0.252
Help express my identity		0.25		0.711		0.34		0.36
Helps me appreciate my heritage and where I am from	0.082	0.216	0.825	0.724	0.375	0.364	0.311	0.357
Improves the quality of my life with their performance	0.124	0.216	0.738	0.718	0.327	0.309	0.474	0.416
Helps make my daily life easier	0.111	0.151	0.811	0.822	0.324	0.282	0.355	0.306
Majority of those in my business circle think this is a prestigious gift	0.114	0.19	0.203	0.215	0.402	0.243	0.826	0.84
Most people in my community believe buying this is a good thing	0.055	0.255	0.636	0.49	0.125	0.258	0.724	0.662
SS loadings			4.783	4.745	2.215	2.088	2.088	2.035
Proportion Variable			0.478	0.431	0.222	0.19	0.209	0.185
Cumulative Variable			0.478	0.431	0.7	0.621	0.909	0.806

For ivory products, for all three factors there was no significant difference between the opinions of ambivalent and attached respondents, suggesting similar psychological needs were met for both groups.

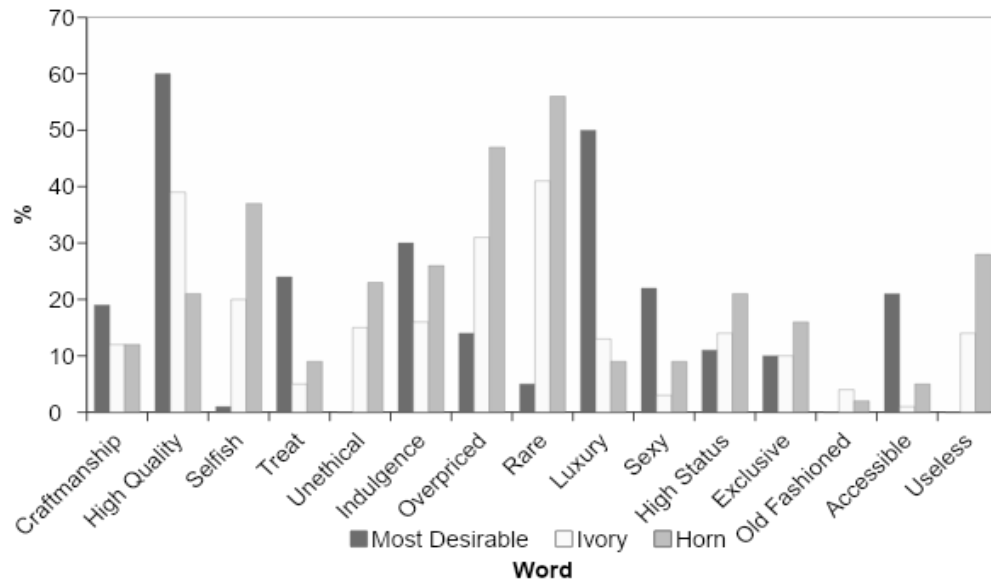
For the most desirable items named by respondents, six factors influenced individual purchase decisions. These were as follows: (1) pleasure, where the product appealed physically to the individual and made them feel safe and secure; (2) identity, where the product helped to build relationships with those to whom they were close, and helped to build a sense of identity and appreciate their heritage; (3) enabling, where the product improved performance in life or helped to make life easier; (4) connection, where the product made them feel part of a connected group; (5) community, where owning the product was seen as a good thing within their community; and (6) gifts, where giving this item as a gift was seen as very prestigious in business circles. Results showed that there was a low level of significance between each of the Attachment-Aversion categories for the majority of the factors.

Emotional territory mapping

Before embarking on the brand attachment-aversion questions (in order to minimise bias), each respondent was asked to free-list words which first came to mind when they thought about the type of person who owned the good they found most desirable, and the type of person who owned ivory or rhino horn products. For the most desirable luxury goods, respondents most frequently mentioned positive words associated with success and lifestyle trends, for example, the word trendy, modern, sophisticated, wealthy, and stylish were selected. For electronic goods and car imports several brand names were mentioned such as Audi and BMW. Very different results were found for ivory and rhino horn, where strong associations were made with 'wealth', 'men', and words with negative connotations such as 'non-animal lovers', 'cruel', and 'people that do not care for the environment'.

Next, respondents were asked to state which of a series of words they strongly associated with their most desirable item and also ivory or rhino horn products. As shown in Figure 9, for the most desirable goods, the most frequently associated words were high quality (60%), luxury (50%) and indulgence (30%); results also showed that respondents most frequently mentioned words associated with success and trends, for example, trendy, modern, sophisticated, wealthy, and stylish. For electronic goods and car imports several brand names such as Apple, Samsung, LG, were mentioned. The most frequently associated words for horn were rare (56%), over-priced (47%) and selfish (37%). For ivory, words mentioned most often were rare (41%), high quality (39%) and overpriced (31%). Two of the strongest themes that came from the illegal wildlife product data were connotations of wealth, for example associations with high income, money and rich men; rarity; and negative connotations, for example, non-animal lovers, cruelty, and ‘people that do not care for the environment’.

As shown in Figure 10, for horn, ‘rare’ was the most frequently associated word for all attachment-aversion categories. Those who were attached to horn or ivory did not associate the product with the word ‘useless’, whereas 20% of ambivalent & indifferent rhino respondents did associate horn with ‘useless’. The more attached respondents were to ivory, the more they associated it with ‘luxury’ (40% of attached respondents, 30% of those who were ambivalent and 20% of averted respondents). ‘Unethical’ was associated by 50% and 65% of ambivalent and averted respondents, but only 20% of indifferent respondents and no attached respondents. ‘Overpriced’ was associated with all three products across all four attachment-aversion categories.



*Figure 9 Percentage of respondents associating selected words with three different products
(most desirable, rhino horn, ivory)*

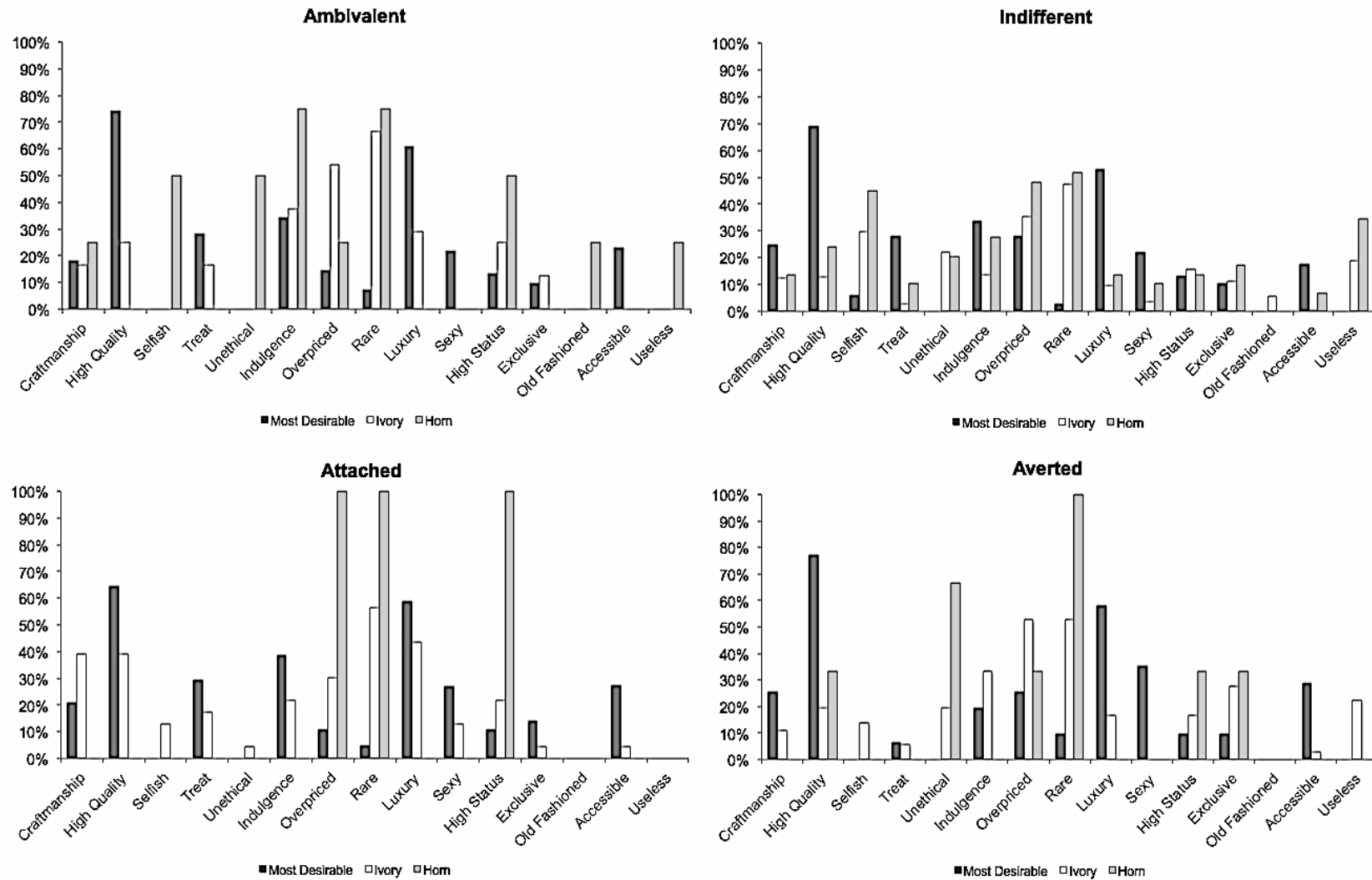


Figure 10 Percentage of respondents associating words with three different products

Who influences consumers?

As part of the survey, respondents were asked about different sources which influenced their opinion of ivory and rhino horn products. Different sources of influence were tested in a GLM to see whether there was any association between ‘rich’ and ‘negative’ connotations (Table 7). Results show that campaigning organisations, family & friends and various media sources significantly influenced respondents that associated ‘wealth’ with owners of horn or ivory, suggesting these messages play a role in their communications campaigns.

Table 7 GLM showing association between source of influence and categories of association developed from the emotional territory mapping

<i>Independent variable:</i> <i>Source of Influence</i>	<i>Dependent variable:</i> <i>1=Yes, 0=No</i>	
	<i>Wealth</i>	<i>Negative</i>
Campaigning Orgs	0.756**	0.813***
Family & Friends	0.544*	0.144
Work	0.039	-0.974**
Vietnamese Government	-0.302	0.622
Media	0.912***	0.544
Marketing	-0.485	-0.308
Observations	422	422
Significance values: * ‘0.1’, ** ‘0.05’, *** ‘0.01’		

As shown in Table 8, respondents who associated ‘negative’ words or phrases with owners of ivory or rhino horn were significantly influenced by campaigning organisations. However, the results also

showed that work influences, such as business contacts or colleagues, had the opposite effect on respondents' associations.

Table 8 Binomial GLM testing whether 'rich' & 'negative' words mentioned by respondents were influenced by specific sources

<i>Independent variable: Source of Influence</i>	<i>Dependent variable: 1=Yes, 0=No</i>	
	Wealth	Negative
Campaigning Orgs	0.756** (0.297)	0.813*** (0.300)
Family & Friends	0.544* (0.316)	0.144 (0.350)
Work	0.039 (0.366)	-0.974** (0.492)
Vietnamese Government	-0.302 (0.420)	0.622 (0.422)
Media	0.912*** (0.325)	0.544 (0.367)
Marketing	-0.485 (0.420)	-0.308 (0.447)
Constant	-1.667*** (0.233)	-1.657*** (0.238)
Observations	422	422
Akaike Inf. Crit.	477.878	448.184
Significance values: * '0.1', ** '0.05', *** '0.01'		

4.3 Discussion

Summary of findings

This study aimed to elucidate the relationships of a particular demographic group, in this case wealthy, aspirational Vietnamese consumers, to two illegal wildlife products which previous studies have suggested are conferred with attributes of luxury goods in Asian consumer countries (Truong, Dang, and Hall 2016; Sosnowski et al. 2019). The results showed that, in contrast to the findings revealed by an analysis of the non-peer reviewed outputs in Study 1 conducted largely by conservation NGOs, the general idea that the overall characteristics of consumers' perceptions of the attributes of the two wildlife products in question are aligned with those of conventional luxury goods or brands from a perceived value, social and cultural perspective (H2) was not supported. Study 2 revealed differences in the majority of the dimensions conferred on these items and both their degree of self-brand distance and brand prominence, suggesting that H3a is true only in a small minority of cases. Specifically, the study demonstrated that only a minority of respondents expressed either aversion or attachment towards ivory or rhino horn, with the majority of wildlife product respondents expressing indifference in terms of their relationship to the illegal wildlife product on which they were questioned, again generally disproving H2 and H3. The small number of those attached to either wildlife product suggests the lack of self-relevance of these items, and neutral or negatively valenced relationships. This result suggests that the majority of the sample were not interested in consumption of illegal wildlife products questioned in the survey, or saw them as items consumed by someone other than themselves, pointing to support for H3b.

The prevalence of indifference could result in the majority of people being unlikely to challenge consumption as social norms because they do not care strongly enough. Therefore, turning indifference into aversion may be key for developing and changing social norms in a

manner that is likely to influence other people's behaviour. If consumers are found to be ambivalent, the suggestion follows that this group is more actively thinking about the illegal wildlife product in question. If approaches to changing attitudes are to involve changing social norms, the ambivalent group could be a key audience to engage and target. This observation should also be considered in the context of the gender bias of the sample which was predominantly female.

Illegal wildlife products have been noted in other studies to bring enjoyment to consumers' lives, to make them feel secure, and enhance their perceived self-worth in a social context (Dang Vu & Nielsen, 2018). However this particular sample expressed predominantly negative emotions with respect to these goods, and associated them negatively with rich people and men. It is important to highlight that the results showed an awareness amongst Vietnamese consumers of the negative impact of the consumption of rhino horn and ivory; for example, emotional territory mapping revealed a relatively high number of words such as rare, unethical and selfish. However respondents also associated products with luxury, as well as high quality and high price, suggesting that some of the themes picked up in previous studies resonate with this group.

The role of media and family in emphasising connotations of wealth was highlighted, though it was unclear whether the media reinforcing wealth was positive or negative in terms of influencing attitudes. Given the effect of rarity in supporting perceptions of high quality and high prices, campaigns stating how much rhino horn is worth may encourage greater participation from criminals in the trade or support purchase for investment purposes.

The significance of different sources of influence was also revealed. For example, for this demographic group, negative words were associated with campaigns and the workplace or professional connections, perhaps suggesting that the pressure from business and professional connections to consume illegal wildlife products is limited. These results may show that the

consumer group of illegal wildlife products is a small subset of individuals, but that there is a risk that this segment could grow in the absence of effective interventions.

Strengths and weaknesses

The survey was the first of its kind to use consumer marketing frameworks to capture and compare responses on both premium or luxury goods and wildlife products in tandem. The sample was small and biased towards younger females, and did not result in having sufficient power to analyse the rhino horn component of the survey. An indirect questioning technique to assess the prevalence of actual purchase of these goods was applied, but unfortunately these techniques require very large sample sizes to produce valid prevalence estimates (St John & Nuno 2015). Moreover, although the questionnaire was designed with care, responses may reflect varying interpretation of the questions and the nuances of the translation process (Booth et al., 2012). Bearing in mind that the sample consisted primarily of relatively affluent younger women, it may be that this particular demographic group is less engaged with wildlife product use than other demographics, such as older men. As such a broader sample could address this question through questioning other demographic groups. The database used for recruitment may inevitably have been incomplete, and respondents may represent a biased subgroup, even though it was not characterised as a survey related to conservation issues.

The effect of social desirability bias when considering results may also need to be considered, given that respondents may have felt they needed to tone down their preference to horn or ivory because of current behaviour change campaigns. It is possible that high profile campaigns could have been occurring at the time of the survey which might have been particularly influential on results.

Study relevance and comparison to other studies

There is limited published peer-reviewed evidence on perceptions towards the purchase of the wildlife items considered in this study in the markets under consideration, and the primary aims of previous studies differed from those of this survey. Given its differing primary aim, Dang Vu and Nielsen (2018) found that both utilitarian and hedonic values were motivations for rhino horn use in Vietnam, but the strength of these relationships were not tested, questioning was limited to rhino horn alone and did not consider other non-wildlife purchases, and the small sample size was also limited to ‘self-confessed users’. Truong, Dang and Hall (2016) examined the consumption of illegally traded rhino horn using a survey of 608 male respondents in Vietnam, finding that the most common purchase motivation was found to be ‘health benefits’, including body detoxification and hangover treatment.

Truong, Dang and Hall’s (2016) findings showed that rhino horn was used by consumers to display economic wealth, acquire social status, and initiate business and political relationships; the shift in the perceived place of rhino horn from functional to symbolic is also described through its circulation within social and professional networks, where it was found to be considered part of the consumers’ search for a sense of “self,” a sense of “us,” and the delineation of the “other.” In a further approach to consumer motivations, (Offord-Woolley, 2017) examines the ‘Chi’ behaviour change campaign, implemented by conservation NGO Traffic, explaining its methodology and construction. Here, implementation was assisted by market research firm IPSOS for Traffic, and led to the construction of a rhino horn consumer archetype described as an affluent male between 35-55 years old to whom rhino horn is simply a luxury consumer product used to impress peers and superiors in his networks, showing his status and wealth; the supposed health benefits are less important to him (Traffic & WWF 2013). Following a stream of literature focused on economic drivers of demand for ivory in the second half of the 1990s (Milner-Gulland, 1993; Khanna & Harford, 1996), recent research on

consumer demand motivations for ivory and rhino horn includes studies by Gao (2014), Gao & Clark (2014), and Gao et al. (2016) which focus on the utilitarian aspects of usage, for example exploring the market for antique and carved items as investment purchases, and local motivations for purchase.

Looking to the consumer marketing literature, past research reveals that customers can attach meanings to brands that create strong connections between the brand and the self, and that when they do, and when the brand is prominent in their minds, they become psychologically attached to the brand, displaying strong brand loyalty and advocacy behaviours (Gill-Simmen et al. 2018). Following an established series of studies developing self-based models for consumer behaviours, Park, Eisingerich and Park (2013) find that each of the 3Es significantly influences Attachment-Aversion relationships, and among the 3Es, enriching (impoverishing) the self has the strongest impact. The lessons from these previous studies suggest that to shift ambivalent or eventually indifferent consumer attitudes towards those that are more strongly negative, there is a need to make consumers feel more self-impoverished in considering a purchase behaviour and to increase the perceived distance between the self and the brand. Using the factors identified as important for rhino horn and ivory (identity, pleasure and opinion) would tap into the strongest influences on consumers' existing relationships to these products; of these, pleasure may be the least tractable as it relates to the feel of the product rather than the social context within purchases are considered.

The cross-cultural consumer marketing literature finds that price premia derived from the dimensions of quality, name-brand, and word-of-mouth referral are components of a successful marketing strategy in specific cultures where with specific conceptualisations of 'face' occur, for example China (Wong & Zaichkowsky, 1999; Li & Su, 2007). The findings of the present study show that the high price associations made by respondents with wildlife products may be a driver of consumption given this contextual dimension; the context of

illegality which may drive word-of-mouth marketing should also be considered in light of these cross-cultural considerations. If consumption is to be reversed, consideration of these elements will need to be addressed in interventions.

Unanswered questions and future directions

Given that the consumers' relationships to ivory and rhino horn were relatively indifferent or negative, it would be useful to explore how negative consumer relationships are created and the nature of anti-brand behaviours (Johnson et al. 2010; Yuan and Lei 2017; Fournier and Alvarez 2013; Eisingerich et al. 2019). Johnson et al. (2010) indicates that the more self-relevant a consumer-brand relationship, the more likely it is that they will engage in anti-brand retaliatory behaviours after the relationship ends, and that self-conscious emotion motivates consumer hostility and retaliation. Yuan and Lei (2017) review a number of differing theories and show that anti-brand behaviours comprise both self-based and non-self-based factors. They illustrate two kinds of incentive for anti-brand behaviour, first, the loss of functional benefit and secondly the violation of self-concept. Japutra et al. (2014) studied a conceptual framework of brand attachment's detrimental outcomes, which finds that an incongruity of values between consumer and brand will lead to anti-brand behaviour. Supporting this, a body of research considers the elements of consumer resistance (Roux 2007; Lee 2011), finding that besides stopping buying, negative word-of-mouth and turning to other competitor items, a change in consumers' emotion and attitude is also required. Although consumers have access to a particular brand and are able to afford it from an economic perspective, retaliation against a brand can still occur deliberately because of other motivations, which may be functional, symbolic or ethical (Roux 2007). In the case of ivory and rhino horn, the choice of the adjectives "over-priced", "unethical" and "useless" may be worth leveraging, along with the free-listed associations to "wealth" and "man".

Further nascent studies have examined ‘green demarketing strategies’, finding that brands may be able to induce switching behaviours by engaging in such a strategy (Ross & Tomlinson, 2011). Findings suggest that environmental reputation significantly impacts not only motive attributions in response to these efforts but also consumer judgments about the green demarketing brand and product (Armstrong, Soule & Reich, 2015). More widely researched is the exploration of consumer behaviour change in the context of anti-consumption of resources and tobacco, and using economic and policy drivers (Foxall et al., 2006; Shiu, Hassan & Walsh, 2009; St John, Edwards-Jones & Jones, 2011).

The present study should also be seen, and further study conducted, in the context of the research on cross-cultural consumer marketing, where the aspects of ‘face’ and application to a relatively more collectivist cultural setting are explored (Oetzel et al., 2001; Dwyer, Mesak & Hsu, 2005; Eisingerich & Rubera, 2010). For example, in their study of the influence of culture on the impact of four key brand management elements (brand innovativeness, brand customer orientation, brand self-relevance, and social responsibility) on customer commitment to brands, Eisingerich and Rubera (2010) demonstrate that brand innovativeness and brand self-relevance have a greater effect on brand commitment in cultures that are individualist, short-term oriented, and low on power distance, for example the United Kingdom, while brand customer orientation and social responsibility have a greater impact on brand commitment in cultures that are relatively more collectivist, long-term oriented, and high on power distance, for example China. Furthermore, the findings reveal that in collectivist, long-term-oriented, and high-power-distance cultures, the four brand management activities equally contribute to brand commitment. Self-relevance therefore appears in this context as a lower priority for change than social responsibility, suggesting that green demarketing may be a further potential avenue of exploration in the design of intervention design for those wanting to optimise negative brand positioning and weaken customers’ brand commitment, in this case reliance on

wildlife products, across the cultures in question. Further research would contribute to the need to better understand the role of social norms, for example family pressure, in influencing individuals' consumption behaviours.

The use of social media in this context should be taken into consideration when planning future interventions (Li & Su, 2007). Given the rise of tech-based behaviour change research (Fogg, 2009; Eckles et al., 2009) and the increased internet penetration and future adoption rates of technology in China and Vietnam, standing at over a 1.5 billion users combined and 98% of Chinese users via mobile (Capstone, 2018) examining how this channel could contribute to the effectiveness of demand reduction campaigns would be worthwhile. In the case of the present study, those who got their information from the media were more likely to mention "wealth" with respect to ivory and horn, though it was unclear whether this was positive or negative in terms of influencing attitudes. Given the effect of rarity in supporting perceptions of high quality and high prices, campaigns stating how much rhino horn is worth may encourage greater participation from criminals in the trade or support purchase for investment purposes (Vigneron and Johnson 2004; Courchamp et al. 2006; Phau and Prendergast 2000).

Overall, campaigns need to position items such as horn and ivory as conferring attributes on the consumer that are socially undesirable, in opposition to self-identity, or not self-relevant (Novik, Pinto, and Guerreiro 2017; Park, Eisingerich, and Park 2013). Ultimately the goal may be to make ownership of these products extremely undesirable, though understanding what exactly this may be ('unsophisticated' or 'outdated' for instance) requires careful analysis in the context of cultural setting (Novik, Pinto, and Guerreiro 2017; Fournier and Alvarez 2013). However it is promising that those who used negative words in their freelisting were more likely to have been influenced by campaigning organisations; this suggests that some of the many campaigns to discourage rhino horn consumption in Vietnam

(Olmedo et al. 2018) may have hit their mark to some extent. This analysis provides the first indications of potential avenues which could require further detailed work to form the basis for an intervention design.

This study was a preliminary test of the usefulness of concepts and models from consumer research for understanding relationships with wildlife trade among consumers in Vietnam. As well as demonstrating these techniques to a conservation audience, it provided interesting insights into the relationships this demographic has with these products, contextualised within their relationship to desired luxury goods. It also provided the first insights into consumer relationships to ivory in Vietnam, and broadened understanding of the range of relationships consumers have with rhino horn. Further research will require a much larger and more representative sample, and would also ideally include questions exploring: broad environmental awareness; personal activity around these issues on social media; and any online groups with whom respondents identify. Further information in these areas would broaden understanding of consumers' relationships, and potentially enable predictors of purchase behaviours to be developed as a foundation for future behavioural change interventions.

5 Study 3

5.1 Design & procedure

Study 3 took a mixed methods approach to examining the valence and strength of relationships between consumers and two wildlife products, rhino horn and ivory, comparing and contrasting these with findings on luxury or premium consumer brands self-selected as ‘most desired’ by respondents. The attachment-aversion (AA) model was adapted for use in the study because in addition to inherent implications for measuring relationship valence, the framework also has “inherent self-implications” (Fournier & Alvarez, 2013). The relationship object in this case was the person's most desirable good (self-chosen), along with either ivory or rhino horn. In this study, the ‘brand’ was identified as the object of attachment, either the wildlife object in question or consumers’ most desired brand, given that the term ‘brand’ can reflect the meaning or image of the constellation of products or services a brand produces (Gill-Simmen et al., 2018).

Previous research has shown that by categorising the brand as part of the self, a consumer develops a sense of oneness with the brand, establishing cognitive links that connect the brand with the self (Park et al., 2010). Though cognitive in its representation, this brand–self linkage is inherently emotional (Park et al., 2010; Thomson, MacInnis & Park, 2005; Mikulincer & Shaver 2007). Acknowledging the wealth of knowledge accumulated about strong, positive brand relationships and how to make them stronger, Park, Eisingerich and Park (2013) extended theories of attachment into the “negative” pole (Fournier & Alvarez, 2013); thus, building from Aron and Aron's (1986) theory of self-expansion in close personal relationships, in the context of the AA Relationships, self-expansion motives create positive emotions and attachment while the threat of self-contraction creates negative emotions and aversive relationships (Fournier & Alvarez 2013).

The Attachment–Aversion relationship model considers brand–self distance and brand prominence together such that attachment and aversion are opposite ends of a spectrum defining consumers' relationships with brands (Park, Eisingerich and Park, 2013). Given their role as determinants of the AA Relationships, brand-self distance and brand prominence, two critical indicators of brand attachment-aversion, and the ‘3 Es’, which consist of (1) enticing (annoying)-the-self, (2) enabling (disabling)-the-self, and (3) enriching (impoverishing)-the-self (Park, MacInnis, & Priester, 2006), found to be the most salient of the three Es, were explored in the context of this study.

Park, Eisingerich and Park (2013) found that in contrast to brand–self overlap, which focuses on the development of strong and positive relationships with a brand, the brand–self distance concept differs conceptually and from a measurement perspective because it includes strong and negative relationships with a brand, the implications of which have an impact on consumption behaviours (White, Breazeale & Webster, 2012; Fournier & Alvarez, 2013; Rindell, 2014; Yuan & Lei, 2017). Consumers' brand relationships are negative for various reasons; these include a brand's failure to meet individual needs (for example, making poor quality products), its association with a particular undesirable group (White & Dahl, 2007), and the inconsistency of the brand from a symbolic perspective (Hogg, Banister & Stephenson, 2009), where brand image, values, or morals are in conflict with those of consumers even when the items in question are affordable (Lee, Motion & Conroy, 2009)). Further to this, perceived brand-self distance is not as psychologically salient when memories are not as readily accessible as when they are (Park, Eisingerich & Park, 2013).

The second component of the AA construct centres on brand prominence, operationally defined as the perceived memory accessibility of a brand to an individual (Park, Eisingerich & Park, 2013). For example, a brand which is highly self-relevant for one reason, for example, making one's life functionally convenient, may not be as accessible in memory as another brand

which is equally self-relevant but highly accessible in memory for a different and more salient reason, for example self-identity-related. Thus, how easily and frequently brand thoughts are brought to mind influences the salience of the brand–self relationship (Park, Eisingerich & Park, 2013). Thus, in addition to perceived distance, the salience of that distance— termed brand prominence—facilitates the full representation of one's AA Relationships with the brand (Park, Eisingerich & Park, 2013).

Data collection

For the core component, the data collection process involved a large scale online survey which included gathering free text responses provided by 460 respondents (conducted for Study 2). Respondents were asked to detail their own thoughts on why self-selected categories of ‘most desired’ and ‘second most desired’ items were chosen as most desirable in the form of free text responses. The choice of item categories from which respondents were given to select was as follows: Designer leather goods e.g. handbags, wallets; designer fashions; imported car brands; leading electronic brands (e.g. ipad, iphone) or antiques; and then one of either rhino horn or ivory. If the sensitive product was not selected as ‘most desired’ or ‘second most desired’, an extra question was generated to the respondent asking them to detail what words came to mind when thinking of those who owned rhino horn or ivory products. Participants were aged between 18 and 45.

This qualitative data was combined with additional supplementary data gathered in a series of in-depth interviews designed to gather insights from key opinion-forming informants from across a variety of industries, representing business, celebrity and the brand and communications industry. At the outset of the investigation, a list of potential participants was developed through personal referrals made to the researcher (Thompson, 1996). Purposive sampling criteria were that each participant be an opinion former in their professional or

personal capacity in the demand market regions of interest; therefore participants were selected because of their status as ‘opinion-forming’ individuals in relation to key demand markets for illegal wildlife, given that in high-power distance cultures such as China and Vietnam, purchase decisions are strongly influenced by opinion leaders (Hofstede, 2001; Eisingerich & Rubera, 2010). These criteria provided a specific set of social circumstances in which to situate the study's findings and, hence, responds to calls for more in-depth and localised accounts of consumption phenomena (Sherry, 1991). Given the highly sensitive nature of the study topics, respondents who displayed an openness and willingness to share knowledge were asked if they could recommend anyone who would be willing to be a key informant, based on chain referral techniques for accessing hard-to-reach populations (Penrod et al., 2003). Individuals were contacted by phone or email and asked if they would be willing to participate in a research project seeking to gain a better understanding of the consumer experiences of opinion formers in relation to illegal wildlife products, more specifically rhino horn and ivory, and luxury brands. All those contacted stated that the topic was personally relevant and expressed enthusiasm in regard to participating in the study. A demographic profile of the four participants is presented in Table 9. Participants ranged from 34 to 52 years of age, and this sample was used to uncover common themes in meanings behind consumers’ relationships to items, rather than those specific to a particular industry sector (Gill-Simmen et al., 2018). The interviews lasted between 30 and 70 minutes.

Table 9 Supplementary component: Demographic profile of research participants for interpretive phenomenological analysis

	Age	Occupation
Jason	42	Journalist & author
Patrick	34	Advertising Executive
David	52	Businessman
Amy	40	Opinion former, musician

Alongside the core component, the supplementary component took an interpretive phenomenological approach to analysing the in-depth interviews generated from key opinion-forming participants. Given the limited research on the meaning and nature of consumers' attachments in relation to purchases of ivory and rhino horn, an interpretive phenomenological approach was chosen because, given its participant orientation, interviewees are allowed to express themselves and their 'lived experience' stories the way they experience the world (Neubauer, Witkop & Varpio, 2019) allowing an experience to be examined as it is subjectively lived (Alase, 2017; Neubauer, Witkop & Varpio, 2019), and offering an understanding of complex issues that may not be immediately implicit in surface responses (Goulding, 2005). Secondly, this contextualised approach has been advocated as a strategy for deriving theoretical constructs and relationships that are grounded in the social dynamics of everyday life (Strauss & Corbin, 1990). As first suggested by Reid, Flowers and Larkin, (2005), fewer participants were chosen for examination in greater depth, in contrast to a broader description of many individuals, with a range of four to ten interviews considered appropriate for this level of study (Alase, 2017; Eatough & Smith, 2008; Creswell, 1998; Levy, 1981; Mick & Buhl, 1992; Thompson, Locander & Pollio, 1990).

Phenomenological studies describe the essence of individuals' lived experiences of a phenomenon (Fetters, Curry & Creswell, 2013; Greene & Caracelli, 1997; Robinson & Reed, 2019). The literature has employed phenomenological approaches in studying consumer behaviour from the disciplinary angle of consumer and marketing research, though its application to the sustainable and conservation marketing literature adds to a nascent field (Bhar, 2019). Thompson (1998), whose work within the field of marketing has served to highlight both the underlying principles of phenomenology (Thompson, 1997, 1998; Thompson, Locander & Pollio, 1989) and its application to various research situations (Goulding, 2005), suggests that the relevant implication of the life-world is that the consumer as text metaphor needs to be reflectively adapted and enriched both through a dynamic combination of consumers who interpret their experiences, and via consumer researchers who interpret consumers' narratives; thus, by examining an experience as it is subjectively lived, new meanings and appreciations can be developed to inform, or even re-orient, how that experience is understood (Neubauer, Witkop & Varpio, 2019).

A rich literature exemplifying the application of phenomenology in the consumer marketing literature includes Thompson's (1996) exploration of gendered consumption and lifestyle, Thomson et al.'s (1990) study of the everyday consumption practices of married women, and Thompson and Haytko's (1997) deconstruction of the meaning of fashion discourses and the link to identity and self-conceptions (Goulding, 2005). Other consumer studies which have adopted a phenomenological position include Mick and Demoss's (1990) exploration of self-gift-giving, Woodruffe-Burton et al.'s (2002) research into gender and addictive consumption, and Seebaransingh et al.'s (2002) account of the relationship between cosmetic surgery and the construction of identity (Goulding, 2005). McCracken (1988) expresses the logic of this sampling strategy by stating:

‘The purpose of the qualitative interview is not to discover how many, and what kinds of people, share a certain characteristic. It is to gain access to the cultural categories and assumptions according to which one construes the world . . . qualitative research does not survey the terrain, it mines it. It is, in other words, much more intensive than extensive in objectives.’ (p.17)

Verbatim transcripts from audiotaped in-depth interviews served as the primary texts on which an interpretive account was based. Each participant was assured of full anonymity, given the purpose and intended use of the investigation and was provided with an opportunity to give consent. The interview dialogues ranged from 30 minutes to one hour. Where possible, interviews occurred at the participants' homes, some were held at their places of professional work and others by Skype video conference to their places of work or homes. All interviews were conducted by the researcher and followed the conventions of phenomenological interviewing (Thompson 1989; Thompson, Locander and Pollio, 1990). Interview questions were formulated as each participant described their experiences. As such, the course of the dialogue was largely set by each participant, with follow-up questions directed at clarifying or elaborating on the experiences being described (Thompson, Locander & Pollio, 1990). In each interview, questions were intended to inspire a far-ranging dialogue that encompassed all aspects of the participants' daily lives and in which experiences of product acquisition and consumption, lifestyle choices and personal ethical values were fundamentally interwoven (Thompson, 1996).

Data analysis

Morse (2010) defines a mixed method design as follows: a complete core component method plus one supplementary component to provide explanation or insight within the context

of the core component. The definition of ‘mixed methods’ design in the literature includes combinations of two qualitative or two quantitative methods (Morse, 2010), and the combination of qualitative and quantitative methods (Bryman, 2006; Creswell 1999; Morse and Cheek, 2014; Ivankova, Creswell and Stick, 2006). In cases where a supplementary qualitative component elicits additional information or data that would have been inaccessible if a single method had been used, the literature posits that a QUAL + qual mixed method design can be used to support the answering of the research question (Morse, 2010).

In this study, following the most commonly used procedure in the case of simultaneous QUAL + qual mixed methods design, two data sets and two groups of participants were used (Morse 2010), with both groups from the same broad population. Given the exploratory and descriptive nature of the research, both the core component and the supplementary component had an inductive theoretical drive and were conducted simultaneously (Morse, 2010; Morse & Cheek, 2014). For each of the core and supplementary components, because the approach taken to the data differed from one to the other, data were analysed separately with the point of interface for the results of each analysis occurring at the ‘Results’ stage. The results of the core component therefore form the theoretical base of the results narrative, and the results from the supplementary component are added to the theoretical base to illustrate the theoretical narrative or to add description at strategic positions in the narrative (Morse, 2010; Morse & Cheek, 2014). In this way, significant areas of the current research are expanded, strengthened, and deepened by the supplemental research (Morse & Cheek, 2014). This strategy of using mixed-method design thereby enhances the research project as a whole. The methodologies developed by Park, Eisingerich and Park (2013) were adapted in mapping the conceptual properties of the attachment-aversion construct to understand motivations and attitudes towards use, buying, and intended use or buying. The study design is summarised in Figure 11.

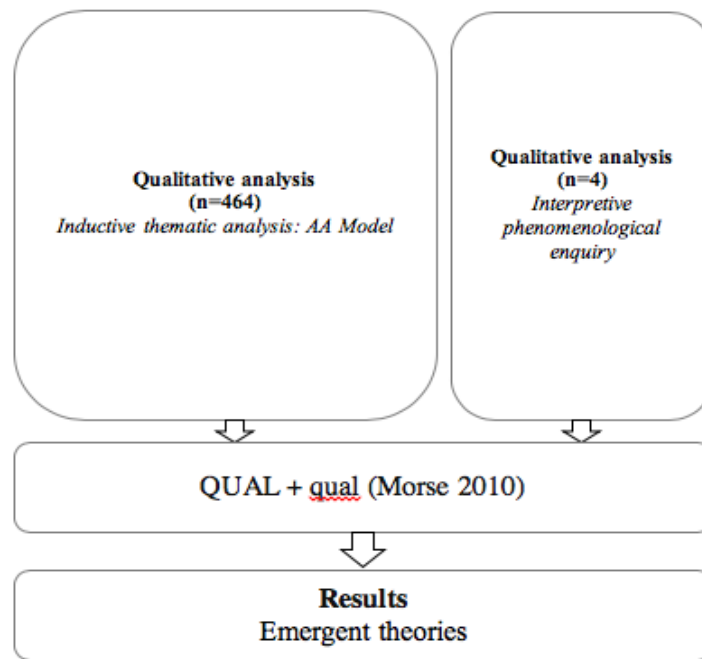


Figure 11 Analysis model: Simultaneous convergent QUAL + qual approach

Core data analysis

For the core component, thematic analysis was used given its ability to identify, analyse and report patterns, otherwise known as themes, within data (Braun & Clarke, 2006). Thematic analysis is a form of pattern recognition within the data, where emerging themes important to the description of the phenomenon become the categories for analysis (Daly, Kellehear, & Gliksman, 1997). The process involves the identification of themes through repeated reading of the data (Rice & Ezzy, 1999). Inductive thematic analysis is used in cases where there are no previous studies dealing with the phenomenon, and therefore the coded categories are derived directly from the text data (Vaismoradi, Turunen & Bondas, 2013); Hsieh & Shannon, 2005); it is noted in the literature to be appropriately robust for conducting an introductory study on a novel phenomenon (Vaismoradi, Turunen & Bondas, 2013). The process of data analysis began with the data familiarisation phase; this involved obtaining the sense of the whole data set through reading the text several times, and considering both latent and manifest

content before proceeding to the next stage of analysis (Braun & Clarke, 2006). Initial codes were generated, themes were then defined, named, and reviewed. This approach complemented the core component by allowing for themes to emerge direct from the data using inductive coding.

The supplementary component involved a hermeneutic phenomenological enquiry (Creswell et al., 2006; Smith & Shinebourne, 2012; Alase, 2017). This approach was chosen given that, in contrast to descriptive phenomenology, an interpretive approach may feature the use of a theoretical orientation or conceptual framework as a component of inquiry (Lopez & Willis, 2004). In this way, a theoretical approach can be used to focus the inquiry where research is needed and is used to make decisions about sample, subjects, and research questions to be addressed (Lopez & Willis, 2004). Use of an orienting framework by the researcher also allows for study assumptions to be made explicit, and provides the researcher's frame of reference, in addition to providing an interpretation of the findings. Further to this, the concept of co-constitutionality in this process indicates that the meanings at which the researcher arrives in interpretive research are a blend of the meanings articulated by both participant and researcher within the focus of the study (Koch, 1995; Lopez & Willis, 2004). Gadamer (1975) uses the metaphor "fusion of horizons" (p.390) to explain this act of intersubjectivity, understanding, and interpretation. Following the research stream exemplified by Thomson (1996), the present study presents a usage that concerns a specific research tradition that has arisen from the cross-fertilisation between contemporary hermeneutic philosophy exemplified in the works of Heidegger (1920, 1930), Gadamer (1975) and Ricoeur (1981) and phenomenological psychology (Giorgi 1970; Valle and Halling 1989; Van Kaam 1966).

Analysis of participant accounts was undertaken by proceeding through an interactive process (Thompson 1997). This involved reading interview transcripts in full, in order to first gain a sense of the whole picture presented. After several readings of the text, the interpretation

proceeded by means of a hermeneutic logic (Arnold & Fischer 1994; Thompson, Locander & Pollio, 1990; Thompson, 1996) whereby patterns and differences are sought across transcripts through an iterative process of reading, documenting, and systematising the interview transcripts (Goulding, 2005).

The next step involved extracting significant statements, where key words and sentences relating to the phenomenon under study were identified, and meanings formulated for each of these significant statements. This process was repeated across participants' stories and recurrent meaningful themes were clustered. Following this, the resulting themes were integrated into a rich description of the phenomenon under study, and clarified into an essential structure offering an explanation of the behaviour (Colaizzi 1978; Thompson 1997; Goulding, 2005).

As the iterative process progressed, a larger pattern of thematic relationships was derived that attempted to capture essential dimensions common to all the participants' interviews. Throughout the interpretive process, the developing thematic structure is continuously challenged and modified by returning to the concrete experiences described in each interview (Thompson, 1996). The final explanation represents a melding of the interpreter's frame of reference and the texts being interpreted (Thompson, 1997; Lopez and Willis, 2004).

The participants' reflections, conveyed in their own words, strengthen the face validity and credibility of the research (Patton, 2002). This understanding enables light to be shed on how far consumers author their life narratives, or as noted by Shankar et al. (2001), life narratives are overwhelmingly authored for consumers by various sociocultural and political-economic discourses.

The final stage of data analysis involved integrating the results of the previous stages, highlighted as the final opportunity of data analysis in thematic analysis (Braun & Clarke, 2006).

5.2 Results

Core component

Five key categories emerged from the data: (1) the extent of brand-self distance; (2) brand prominence; (3) meanings related to how the brand enables (disables) the consumer; (4) entices (annoys) the consumer; and (5) enriches (impoverishes) the consumer. These meanings were further differentiated into subcategories.

Evidence of brand-self distance and brand prominence

Brand-self distance

From the data, there was repeated evidence that the perceived distance between wildlife products and the self was large, indicating a negative relationship and low levels of self-relevant brand memory. The quotes below illustrate these ideas.

‘We all know people who buy these things, but we have never bought. They are not aware.’ A further respondent commented, *‘I couldn’t believe it when an educated scientist who should have known better pulled out a piece of rhino horn.’* In the case of ivory, responses characterised consumers of products as both wealthy and with negative views on the environment, in opposition to their own. One respondent commented that consumers of rhino horn were, *‘indifferent to nature and the environment’*; another described consumers as

'grotesque, snobbish, and bad'. Ivory consumers we described as having a 'lack of awareness and knowledge', revealing the respondent's values.

Further evidence of the perceived large distance between wildlife products and the self comes from quotes that reflect the informants' sense that they are separate from consumers of these products in terms of cultural and ethical meanings. The inconsistency of the product's image, values, and morals with those of the brand was found to be marked. Thus, not only is the brand far from them, also, they are actively not part of the brand, embracing instead values that centre on their own cultural values, and ecological or ethical brands and celebrities.

From the perspective of self-relevant values, for example 'caring' about the issue of rhino horn consumption, the distance gap was consistently perceived to be large, *'This is my experience and this is fairly terrible, but a further complication would be [that] people just don't care – you know, this is something to be coveted, you know it's a symbol of my wealth or it's something I can just buy. You know it's a bit like going to a restaurant in London that's selling caviar or whatever – how many people are actually really going to care where the caviar came from if they're going to buy it?'*

For example, one respondent expressed the brand-self gap in terms of cultural identity, commenting that, *'My perception is that it's a Chinese commodity. The Chinese people are the biggest market in the world for the rhinoceros horn. It's definitely not Vietnam. I am Vietnamese. I cannot accept it that the Vietnamese is the most cruel people in the world, killing the rhinoceros like this, unbelievable, disgusting! I can't accept that fact and then I tried to figure [out] the evidence for that. So that is my first perception.'*

The distance gap is expressed in terms of attribution and assimilation of the consumption behaviour to a different culture, and viewed as completely different from that of the informant's own: *The Vietnamese is a small (indistinct) a thousand years affected by China*

and I think that is a very [prevailing] belief and rhinoceros horn sometimes used as a medicine in the Chinese herb, not in Vietnamese herb. In Vietnam, we have popular two different herbs.'

Further examples of the distance perceived between the product in question and respondents' selves was expressed in terms of a gap between the brand and the individual's ethical values. For example, *'We're peaceful, harmonious and then I cannot imagine the Vietnamese can do the very cruel thing like cutting the horn and then leaving the rhino bloody, living in the field if they don't have a very big motivation. It can be the US\$100,000 per horn but who can do that, probably I cannot imagine. I cannot imagine.'*

In contrast, this distance was confirmed by the expression of relatively closer brand-self relationships with environmentally focused brands, though views were mixed on the impact of celebrities campaigning for environmental causes. For example, the data found that consumers perceived close relationships with brands when their values and those for which the brand stands on the environment resonated with their own. Some brands and celebrities expressed positive values on environmental issues which appeared to have self-relevance for some respondents; in the case of one respondent, *'Organic is a big trend, going on for over a year - since last year's scandal about animal testing. Also [I] value everything organic. The Body Shop, for example.'* The Earth Hour campaign, an initiative to switch off the lights for one hour in order to raise awareness of energy consumption, was one initiative given as an example perceived to be aligned with the environmental values of some respondents which were found to be personally meaningful, inspiring action, *'My son told me about the Earth Hour campaign, and we went out and bought candles.'* Vietnamese pop star Thu Minh's campaign was found to be meaningful but not necessarily self-relevant, directed towards a younger generation that felt somewhat removed from the informants' own, *'[Thu Minh's anti-*

rhino horn campaign was] trending on Facebook and social media. People [were] talking about it. [It] even had an impact on the younger generation.'

Others felt a larger self-distance gap, where the values expressed by the celebrity endorsers of the cause lacked credibility and self-relevance, *'You're using the singer, you're using some movie star and, from my perception, movie star and celebrity in the entertainment industry here in Vietnam is carrying the Asian value, the Asian values here. There's a lot of them and then they are making a lot of [things] to be famous and then, from a lot of people's point of view, any wording, talking out from the singer, movie star in Vietnam is third grade.'*

As further evidence of brand-self distance, we observe that respondents perceived interventions to tackle demand for rhino horn as far from themselves, and perceived in a negative light. One respondent gives this example, *'Some of those campaigns were very much speaking down to consumers you know, working on the lines that you are incredibly superstitious and it is your own stupidity that this happening, that sort of thing and playing on that; you know, why are you clinging to these old superstitions, why are you doing that, and a lot of other demand reduction campaigns are clearly designed by people who are coming from not within Vietnam but from outside Vietnam and are essentially imposing their own view on the Vietnamese and how that campaign should be done...I think there is a very real danger that it would come across as incredibly patronising and it is more likely to put people off than get people interested.'*

Evidence was found of the lack of self-relevance of non-local conservation issues. In one case, the rhino itself was perceived to be far from the self, explaining why self-relevance of the issue had not been achieved successfully, *'So why – and then there are many other animals (indistinct) in Vietnam too because of the environment and because there are many regions. Why do I have to care about some of the rhino very far away? A lot of people in the*

world care about that. I know rhinoceros is (indistinct) but people in the world caring about that and then why me? ... But a lot of people I believe don't know that Vietnam is the biggest cruel killer in the world and that Vietnam is the biggest consumption [of that] in the world.'

More and more, however, there was evidence that the self-distance gap was perceived to be closing from an environmental responsibility perspective because, *'Vietnam has been the location of extreme, unusual weather – hurricanes and floods which have affected people's day to day lives. There seems to be a growing awareness that man's impact on the environment needs to be addressed, and that it has come home to the individual who is now personally affected. People should therefore do something about it.'*

Respondents perceived closer brand-self relationships when questioned on their favourite brands, or those that seemed iconic to them. Close brand-self relationships were perceived with brands 'like Dove' and its real women campaign, and Apple. In the case of the latter, the brand-self distance was articulated in terms of the attention it conferred on the buyer in some cases, *'Apple is a star. For Vietnamese people [and] branding...we like attention. Something that proves we are trendy, fashionable. The way that iPhone brands itself as a fashion item, and an icon, not as a phone.'* From the perspective of luxury brands, the brand self-distance gap for some had narrowed to the extent that the brand name had entered the vernacular, for example in the case of Louis Vuitton which for one respondent had been shortened to 'LV'. For others, close self-brand connection was expressed in contexts where the brand was said to be meaningful and essential to everyday life. For example, Apple products were frequently perceived to be meaningful in this way, as were designer handbags.

However, there was also evidence of a generational gap in terms of brand-self distance when it came to luxury brands, a dimension which was also expressed throughout the respondents' views on rhino horn. For Generation X and millennials, the self-relevance of experiences and the expression of values through careful curation of self-relevant brands aimed

at building their own personal brand in the age of Instagram and Facebook, was evident. This is explained by one respondent as follows, *'What is happening amongst my generation and a generation half behind me, there is an emphasis increasingly over the past 5-10 years, when people are considering brands, to really be building up their own personal brand. So if I think of a lot of friends and contacts and colleagues that I have, it feels to me that, in a kind of Instagrammable, Facebook-orientated era, people are increasingly drawn to brands in their specialism, in their area that they particularly like, that they focus on. So, for instance, if someone is into film, they might well have been someone at the outset who said Netflix is something that I want to get involved in and I am really interested in. [I am trying to push] that onto other consumers.'* For others, *'Even if we had all the money in the world, because fashion is transient, we would rather spend money on experiences, explore, try new things. We don't care much about luxury hotels, we want to go sightseeing. Fashion comes and goes, experiences last.'*

In summary, the findings suggest that the valence of the relationship between respondents and illegal wildlife products was negative. There was evidence of highly self-relevant cognitive and affective personally meaningful memories about these items, but these were strongly negatively valenced in most cases, implying aversion. In contrast, closer, positive brand–self relationships were perceived with other self-selected desirable consumer goods and those which expressed ethical values, with brand memories being expressed as more relevant to the self, implying relationships that were positively valenced.

Brand prominence

When personally relevant cognitive and affective memories about a brand are not highly accessible, one may not perceive the relationship with the brand as psychologically close or far as would be the case when memories are highly accessible (Collins, 1996; Mikulincer,

1998). In other words, the perceived brand–self distance is not as psychologically salient when memories are not as readily accessible as when they are.

Brand prominence is operationally defined as the perceived memory accessibility of a brand to an individual. For example, Apple was seen to be highly self-relevant for expressing positive self-identity for a number of respondents, proven by relatively high levels of recall by respondents. One commented, *‘People look at Apple but not just as ‘I’m buying a computer’. It’s because you are buying into the whole ecosystem. You are buying Apple as Apple identity almost and it is kind of cool and it is trendy and you know it.’ The prominence of the brand was notable given the strong positive and recurrent recall by respondents when asked about brands they valued as relevant to themselves. ‘Apple is a star. For Vietnamese people [and] branding...we like attention. Something that proves we are trendy, fashionable. The way that iPhone brands itself as a fashion item, and an icon, not as a phone.’*

In the case of leading electronic items, prominence was evidenced by comments emphasising a combination of usefulness and usability across multiple aspects of daily life, keeping up with trends and modernity, and beautiful design. The evidence found that memories of Apple were brought to mind easily, implying the salience of the brand-self relationship in this case. Apple was mentioned several times, including several mention of ipads and iphones, and Samsung once. *‘Because it is convenient, beautifully designed, luxurious and it serves the needs of today’s life.’*

Memories of Starbucks were also brought to mind easily by one respondent, implying a psychological closeness. The finding that international luxury or high-end brands were prominent was evidenced in the easy recall of Louis Vuitton, Chanel, Dior, Hermes, Burberry, BMW and Audi across interviews and the view that that the Vietnamese consumer *‘likes something foreign’*, and *‘loves to speak to foreigners’*. No local brands were recalled, suggesting that internationally recognised brands offer additional psychological benefits over

local brands in terms of quality, status and security. Evidence of the prominence of the psychological benefits delivered by owning these brands is put by one respondent in their description of reasons to buy them as follows, *'These are both brands and quality products, besides the pride of owning them.'*

Further demonstrating prominence, one respondent commented that, *'I think in the Vietnamese context – well, I mean I think in most contexts but specifically Vietnam, I think they're having a huge influence. If you look at you know the nouveau riche disposable income, you know you want whatever, you know the latest brands, the latest designer outfit.'*

The prominence of The Body Shop was mentioned by one respondent in the following terms, *'[With the Body shop, [it's] the way they signify their brand as something organic, one of the first. [It's] Korean, which Asian people trust. Excellent service, and the price is ok'*, suggesting that the ethical credentials of this brand were both prominent and offered benefits to respondents in terms of the positive expression of their values.

In contrast, the brand prominence of rhino horn was found to be mixed. This was evidenced both by the emotionally charged experiential descriptions provided by respondents, and in contrast elements such as the relative difficulty of recalling interventions relating to the issue of use, and the psychological distance expressed in responses. For example, when asked what ivory items mean, one respondent explained: *'I do not use products made from animals! And I want to call on all people to be aware of good animal welfare'*. On the other hand, one respondent commented as follows, *'Most of the people, they know that the rhinoceros is not existing soon but the impact is not that big. Why? Because 70, 80% of the Vietnamese still under the living standard and then still in the rural country... and then we are killing ourselves in the pollution here on the streets, nothing to inhale, no fresh air, nothing. The city is very big, the congestion, we're killing ourselves in the traffic.'* Others struggled to recall memories as follows, *'I mean if you look at some of those campaigns – I'm trying to think of some off the*

top of my head – I can find examples for you...Some of the early ones just fell fairly flat but the recent one, the singer – my mind has gone blank...’.

For several respondents, the prominence of rhino horn was limited to a brief comment distancing the self from the issue. Thus, the ease and frequency of brand thoughts being brought to mind suggests that the salience of the brand–self relationship and brand prominence is somewhat weak.

Meanings associated with enabling the self

This theme highlights those aspects of the brand that respondents’ perceive as possessing self-enabling beneficial characteristics. The data showed no evidence found for the negative aspect of this attribute, ‘disabling the self’.

From the perspective of respondents’ most favoured brands, frequent responses associated with the enabling aspects of brands concerned three main areas: the status of the brand, its modernity, and its value in consumers’ everyday lives. Respondents believed that the status of brands would give them credibility, and were of practical use in their modern lives; uniting these dimensions, the concept of ‘luxury utility’ was cited and this theme echoed in several responses. Underpinning these dimensions was the dimension of quality.

From the perspective of status and credibility for example, international luxury car brands offered for one respondent, ‘advanced technology, fuel efficiency, speed and eye-catching appearance’. Stylishness across all categories of designer goods - from electronics to cars and designer fashion - was perceived as an enabler in supporting the credibility of respondents’ personal image.

Linked to the frequently cited view of desired goods' necessity in everyday life in both business and social contexts, one respondent said, *'These are useful tools to help me connect with friends and family; they are quick, convenient and affordable'*. Another said, *'I can study, work, anytime, anywhere, at the same time'*. Describing the enabling properties of Apple products, a view shared by several respondents, one respondent described the following, *'...as technology gets more advanced, owning an ipad or iphone is the thought as well as the desire of many people [so that] they can access and search for information they feel is needed and want to know! For example, if they want to buy something, just search google, it's possible to learn about where to buy as well as find many different [information] resources, or simply if lost in a strange city, just using maps can be very helpful, ... etc. All these things wouldn't be possible if ipad or iphone wasn't a star [brand]'*. Enabling respondents to stay at the forefront of modern life, one respondent expressed the view that modern environments demanded increasing convenience, and *'you want to equip yourself with the up-to-date product lines as well as phones or ipad to facilitate this.'*

Underpinning these meanings was the enabling aspect of quality; for example, one respondent said, *'So it's those signifiers when it comes to brands and the same is true I think of electronics and other things. It is just about getting ahead of the game. It is about being able to be a step ahead of many of your colleagues or your fellow residents but the underpin there has to be some degree of visceral belief you are getting something that is quality.'* In the case of a respondent describing designer fashion, *'As for me - a corporate man, I always need confidence in the company, while communicating with employees and customers, both with a beautiful outfit would make me confidence and support work and communicate.'* Products were enabling through their 'luxury utility'; one respondent said, *'I choose iphone 6 for class and the convenience of it, than that of other mobile brands.'*

In the case of designer fashion, another way in which brands enable respondents is by allowing consumers to put their personal mark on creating and sustaining their image of the brand as it is perceived by others. Designer handbags were perceived to be their favourite item by one respondent as *‘Because it represents the style and taste of a person’*.

In contrast, from the perspective of illegal wildlife products, self-enabling benefits were limited in relation to those provided by leading brands. Two main categories of self-enabling benefits emerged from the data. The first concerned the extent to which the items provided meaning as ‘collectors’ items’ and as a financial store of value.

The second, specific to rhino horn, concerned the extent to which the item provided effective medicinal treatment. One respondent commented as follows, *‘Rhinoceros horn has been used for a long, long time in Vietnam for such very rare situations where people think that they have a disease, which is cancer.’*

In the case of ivory, one further benefit mentioned was ‘feng shui’.

Meanings associated with enticing the self

From the perspective of respondents’ most favoured brands, the enticing properties mentioned centred on two dimensions: aesthetic properties, and the novelty of the new. Material evidence of brands ‘annoying the self’ was not found.

The beauty and craftsmanship of their most desired items entice consumers; for example, one respondent explained, *‘Since this is a prestigious brand it has leading quality and exquisite design’*, whilst another commented, *‘I especially like leather [items] with a unique design, which are carefully manufactured and refined. To me, that is a work of art made with valuable skills through craftsmanship’*.

The beauty evoked and experienced by these items for consumers was frequently mentioned; for example, one respondent explained, *'I see the leading electronics brands as not only beautiful and eye-catching in terms of appearance but the build and quality is always guaranteed'*. One respondent commented on how designer fashion was *'beautiful to wear'*, and another explained the *'need for beautiful bags and purses to store favourite things and personal belongings when going out, going to work and going to a party.'*

The novelty of new trends also provided enticement for respondents. One respondent explained that, *'As a young man I love new things and therefore useful technology products are something I love and desire the most'*; others explained how *'everyone likes changing trends'*, and *'what's hot and young'*. The constant development of trends and innovation, for example in technology, featured as a dimension that excited and engaged respondents by virtue of its opportunity to make their daily lives more stylish, connected with the latest developments, and hence more exciting. For example, one respondent explained that, *'All [my] friends will change [their] phone to the new iPhone, not immediately but soon. Perhaps because of new trends and new technologies.'*

In considering the enticing properties of the wildlife products in question, extremely limited evidence was found of the enticing or annoying qualities from the perspective of respondents. Evidence pointed to ivory enticing by its luxuriousness; conversely, respondent commented that rhino horn consumers were *'old fashioned, old, fat and drinkers'*, pointing towards the polarity of *'annoying the self'*

Meanings associated with enriching the self

Enrichment is defined as the extent to which the brand provides meaning to respondents' lives in ways that they find personally inspiring (Park, Eisingerich and Park, 2013). The brand's ability to foster and support a desired identity was clearly observed as a

factor driving consumer brand attachment. This finding is consistent with prior work, which shows that people often use brands for the purpose of affirming an identity – either a desired or an actual self (Ahuvia 2005; Bhattacharya and Sen 2003; Chaplin and John 2005; Chernev et al. 2011; Fournier 1998; Kleine et al. 1993). Conversely, impoverishing the self is defined as the opposite, leading to self-contraction and where meaning is in opposition to self-identity (Park, Eisingerich and Park, 2013).

For both consumers' desired goods and wildlife products, evidence supporting 'enriching the self' and its opposite, 'impoverishing the self', was the richest area of territory.

For consumers' most desired goods, two categories were found in which these self-expanding benefits were realised: (1) the brand's ability to elevate the respondent in the eyes of others through enhanced status or esteem and resultant sense of pride, and (2) the brand's ability to enrich the respondent's life by helping them connect meaningfully with others, fostering belonging. Conversely, for the majority of respondents in the case of illegal wildlife products, two categories were found in which impoverishing dimensions were found: (1) the item's misalignment with the respondent's personal, ethical, and cultural values; (2) the items' ability to foster a sense of disconnection with the meanings and user groups they reflect. From this perspective, illegal wildlife products and the meanings for which they stood were in opposition to the foundational components of the self (McCracken 1988).

Respondents' most desired brand positively supported the elevation of their status. For some, particularly in the case of international car brands, because the brand has a strong reputation in the marketplace, it offers a sense of security, thereby providing emotional stability now and in the future. for example, as one respondent said, *'when people become affluent in life, rich, they want to own a car to take the family to travel, representing luxury and elegance in the eyes of friends.'* Another commented that, *'As the demand for quality of life increases,*

motorcycles became popular and cars become affordable. For what I can afford, I and all my friends want a vehicle [that combines] safety, aesthetics and more.’ A frequent description was the high class and prestige of brands, which is subsequently transferred to the consumer.

For some, self-expressive benefits were inherent in brands that were not luxurious but more affordable and mid-market. This was the case for brands like Topshop and Zara. One respondent said, *‘More reasonable prices but also exalted personality and their own values. Furthermore [there are diverse] line selections, with many styles’*. For others, mixing and matching lower-end items with designer brands offered the chance to express one’s personal sense of style, *‘because if you know how to coordinate, incorporating lower-end fashion can also help you shine like designer items’*.

A less frequent response associated with the enriching aspects of the brand concerned the ability of the brand to facilitate connections with others through conveyed meaning. Self-expression as a benefit was valued in connection with belonging to society, for example, one respondent commented, *‘I think that fashion and style is not only confirmed by brand, but by looking at each of us and the habits and customs of society.’* For another, meaning was described as the ability to *‘develop a vision, learn and perceive the world; these exchanges make friends everywhere, create better relationships and make [me] happier.’* For others, respondents assigned positive meaning to following the trends of their friends in fashion, or in switching to the latest model of Iphone, to strengthen a sense of belonging.

In contrast, from the perspective of ivory and rhino horn, categories of self-impoverishing elements that emerged from the data concerned the extent to which these items jarred with respondents’ personal personal, cultural and positive environmental values. A recurrent theme was the negative perception of the consumption of nature, wildlife, and the destruction of ecosystems and the environment. This was associated with cruelty and

ignorance. In the case of rhino horn, further negative dimensions were added around excess status and wealth. Examples of comments here are as follows: *'Surely they must have better economic possibilities'*; and that users are, *'those who do not understand the real effect, but just follow the trend'*. This negative sentiment was carried into perceptions of celebrity campaigns advocating demand reduction by one respondent, *'A lot of people see the campaign of the big movie stars doing this and that. I say oh, because they are too happy they have a lot of money, they want to be famous more and even they [anchor] on the poor rhinoceros. I don't believe them.'* Furthermore, culturally the meanings assigned to users of rhino horn were perceived as self-impoverishing, for example, *'It doesn't touch the core values, the core of the Vietnamese is a loving nature, loving people and then peaceful people and then the Vietnamese are very proud of being independent, something like that – I am sure the Vietnamese people will never be proud of being the biggest killer for the animal in the world, no way.'*

Whilst the evidence shows acknowledgement that rhino horn and ivory represented meanings of status and connections with others, these meanings were not seen as self-relevant to respondents. For example, one respondent commented,

'It is not just buying a chunk of rhino horn for the sake of buying a chunk of rhino horn and it is not just the medicinal side or that side of it. It has got you know – there are other aspects that come into play. [For rhino horn], the people with the real money, the people who want to buy the stuff will go to a medicinal person or someone that they know and that they trust and it is often by word of mouth. So your friend – let's say you're a CEO of a company, you have got a couple of mates who are also in roughly the same industry, the same level, they will introduce you to people or you will introduce them to people and it becomes a word of mouth thing.'

Supplementary component

Taking an interpretive phenomenological perspective, the following insights were found.

At the experience-near level, the participants' awareness of both their uniqueness and personal moral code in relation to themselves and others coalesced around issues of identity. These self-constructed identities are then projected and realised in the twin dimensions of the visible world (both within their community and globally) and time (their own lives and their legacy).

Previous consumer research has described the psychological importance that identity themes assume in purchase behaviours. This hermeneutic interpretation extends these discussions by showing how the desire for control over identity is related to a broader field of life-world concerns and an anticipation of the future. That is, their ongoing actions and concerns were directed toward creating a desired future - a vision that encompassed the legacy of a world that they would leave to their children (and more broadly, 'the next generation'). In hermeneutic terms, this interrelationship highlights an experience-near manifestation of the historical horizon; a hermeneutic term that refers to the mutually supportive interplay among one's sense of the past, one's actions in the present, and the future toward which present-centred acts are directed (Gadamer 1976; Heidegger 1960).

The following sections will demonstrate how this field of lived meanings is manifested in consumption phenomena and, conversely, how consumption phenomena are meaningfully situated in the participants' temporal horizon. After presenting the emic account, an etic model will be described that links these consumer perceptions to a broader system of cultural narratives and psychosocial structures. Four interpretive themes are presented here as mutually related aspects of an experiential state of being that is shaped by the contextual ground of participants' life-world situations (Thompson, Locander & Pollio, 1990).

I'm a unique being: the lead actor in the movie of my life

Nick: I think that drive to find your own personal brand and your own personal niche and be able to disseminate that information is an important trend for people to note and it is happening here [in Asia], it is happening in New York and London. So I actually think what is happening amongst my generation and a generation kind of half behind me, there is an emphasis increasingly over the past 5-10 years, where people are considering brands, to really be building up their own personal brand.

This emic theme, otherwise characterised as 'I'm the lead actor in the movie of my own life', highlights the focal meanings and experiences that participants expressed toward aspects of communicating their uniqueness, and the importance of expressing their values in this context. Key experiences described in relation to this theme were choices to enact consumer experiences and purchase specific types of product or brand to express status, but this theme was defined equally as much by what participants chose not to buy or enact – the specific case of wildlife products in relation to the unique personal meanings they held for participants was a case in point. From their perspective, status in relation to participants' identities was constructed through the enactment of personalised consumption behaviours underpinned with traditional symbols, revealing an evolving landscape of signifiers governed by a desire for exclusivity and personalisation:

Patrick: So you know, anyone that I know who earns good money would want to be seen flying business when they are going on holiday with a reputable air company such as Singapore Airlines or you know British Airways (even though their reputation has taken a bit of a hit) and Emirates, rather than necessarily flying something a bit more budget. So there are

signifiers when it comes to brands and the same is true I think of electronics and other things. It is just about getting ahead of the game. It is about being able to be a step ahead of many of your colleagues or your fellow residents but the underpin there has to be some degree of visceral belief you are getting something that is quality. So it is not a fixed brand necessarily; people will go to in different spheres. It is just that they want to get ahead of the game and be seen as being much more exclusive. I mean Facebook is a perfect example of this, going back 13 years. Facebook just by its very nature started in Harvard University but there was immense pride amongst some of my fellow alumni that [we were] one of the second or third universities to get Facebook. It is not because they were able to use it quicker than anyone else. It was the fact that that signified something, you know we are getting ahead of the game, we got Facebook ahead of everyone else, and I think that is what you are seeing when you get to the higher and upper echelons of kind status scale. I think that really drives behaviour. I mean ... that is obviously a perception of quality.

As participants grew older amidst developments in technology, such as the ubiquity of the internet and ease of international travel, their growing global perspective was seen to be positive and supportive of the notion of a more individualised perception of themselves, and the symbols and behaviours chosen to express their identity:

Amy: But when I was a little girl I didn't dream I would live this life. Beautiful things, experiences. I see many places, travelled the world. It's exciting. It's a privilege.

Consumption choices were seen as reinforcing the credibility of individualised identity, yet drawing on the more collectively held enriching aspects of certain internationally relevant brands:

Jason: People look at the products and people who buy Apple look at Apple but not just as I'm buying a computer. It's because you are buying into the whole ecosystem. You are buying Apple as Apple's identity almost, and it is kind of cool and it is trendy. There's that shopping mall in Hanoi. It has got a cinema, quite a big sort of place, a lot of brand stores and you take a walk around there, the place is packed. It's the first sort of shop or was the first – there are probably more now but it was the first sort of shopping centre of its kind and you have got all these name brands, you have got your Apple electronic sort of store, you have got Deal or you have got whatever.

How wildlife items related to other salient experiences and lived meanings in participants' life-worlds was expressed in terms of otherness – the notion was frequently expressed that buying such items was something done by someone else, touching on emotionally held experiences of their reactions to hearing of these behaviours:

David: I cannot accept it that the Vietnamese is the most cruel people in the world, killing the rhinoceros like this, unbelievable, disgusting! I can't accept that, the fact and then I tried to figure the evidence for that. So that is my first perception. It doesn't touch into the core value, the core of the Vietnamese is a loving nature. [We are] loving people and then peaceful people.

For these participants the central theme of identity control involves seeing the consumption of wildlife as entirely separate from themselves as they are today, separated either by time, cultural identity, or moral identity:

Amy: I remember when I first heard about it. I remember it when I was a girl. My mother used to have tiger medicine. She say[s] tiger would make me strong, when I was sick, when I had a cold. She say[s] take this, and bring it to me to drink. And then I find out more about what is going on with rhino. And I felt really sad. When I go to visit, I felt really sad, and I touch the rhino, it was a life-changing experience.

Jason characterises himself as a concerned onlooker in a situation which, from a moral perspective, inherently positions him in opposition to those in society enacting these purchases. Frequently reiterated by the participants was the notion of being an anti-consumer of these products, revealing the prototypical pattern that emerged in the participants' perceptions:

Jason: You know I went there and I have seen this and [it is] fairly terrible and I think that reaches a certain level. But then a further complication would be, you know people who just don't care – you know this is something to be coveted, it's a symbol of my wealth or it's something I can just buy. You know it's a bit like going to a restaurant in London that's selling caviar or whatever – how many people are actually really going to care where the caviar came from if they're going to buy it?

The people with the real money, the people who want to buy the stuff will go to a medicinal person or someone that they know and that they trust and it is often by word of mouth. So your friend – let's say you're a CEO of a company, you've got a couple of mates who are also in roughly the same industry, the same level, they will introduce you to people or you will introduce them to people and it becomes a word of mouth thing. So there is that trust level that is built up.

Participants' awareness of the issues surrounding rhino horn consumption was expressed through their position as concerned onlookers of consumption, witness to the dynamics of a powerful and complex series of drivers:

Jason: Yeah, I think people are very well-aware of what rhino horn does or what it supposedly does you know and the reasons that they want it. So I think it is a question of you go to your – you know it's a bit like you go and buy aspirin, you know you go to your local pharmacist: I want aspirin. I think the marketing is very much word of mouth and it is also dates back to, you know, the myth [that] has sort of done the rounds, some of them in newspapers, you know that original one about the person being cured or whatever newspaper-type thing, but the aspirational side of it there, you know the people with the real money. Because you have also got to remember that not so much 2003, but three years later, roughly 2006 and so on, this cancer story starts doing the rounds, you know that a Vietnamese general had been cured of cancer or whatever. So it is not just [about] buying a chunk of rhino horn for the sake of buying a chunk of rhino horn and it is not just the medicinal side or that side of it. There are other aspects that come into play.

Reactions to the subject of wildlife consumption enacted by others was often emotionally charged:

David: I couldn't believe it when an educated scientist who should have known better pulled out a piece of rhino horn. I have a Chinese friend, he was Malaysian but he's a Chinese and it was him the first time I was introduced to the rhinoceros horn. We [lived] in San Francisco and then one day he brought the – it was something looking like ivory colour and he told me that's rhinoceros horn and he cooked something like a soup for me.

Implicit in this self-interpretation is the assumption that a conflict exists between their moral perspectives and beliefs and the ethical code of a perceived 'other', the consumer of rhino horn or ivory. In this context, their purchase behaviours and anti-consumption behaviours act as material symbols of their moral codes. Pervasive feelings of 'otherness' towards the concept of illegal wildlife purchases were frequently evoked:

Amy: We all know people who buy these things, but we have never bought. They are not aware.

As much as certain consumption behaviours helped to define participants' identities, equally, participants' anti-behaviours around the ethical and environmental issues bound up in illegal wildlife product purchases were part of their personalised near experiences; their choices not to purchase were as much a part of their personalised identities and behaviour, in this sense also contributing to their notion of self-identity:

David: We're kind of peaceful, harmonious; and then I cannot imagine the Vietnamese can do the very cruel thing like cutting the horn and then leaving the rhino bloody, living in the field if they don't have a very big motivation. It can be the US\$100,000 per horn but who can do that, probably I cannot imagine. I cannot imagine.

My choices reflect my values

Interviewer: *Are things changing?*

Amy: They don't know. People don't know or understand. So I do my best to spread a message.

Characterised in the phrase, 'My choices reflect my values', this emic theme highlights participants' lived experience in terms of individual choices made in interfacing with the world outwardly. Participants expressed a pattern of negotiating choices to reflect identity and values, evoking an implicit sense of wanting to live by, and be defined by, their individual values and moral codes.

Patrick: So if I think of a lot of friends and contacts and colleagues that I have, it feels to me that, in a kind of Instagrammable, Facebook-orientated era, people are increasingly drawn to brands in their specialism, in their area that they particularly like, that they focus on. So, for instance, if someone is into film, they might well have been someone at the outset who said Netflix is something that I want to get involved in and I am really interested in. [I am trying to push] that onto other consumers.

Participants inherently experienced themselves as role models or educators; part of this involved their inherent experiences of being carriers of a moral code expressed through their life-experiences and consumption or anti-consumption behaviours. In commenting on their role as value-carriers, participants offered expressions of their relationship to these dimensions of behaviours and anti-behaviours through their broader consumption experiences:

Amy: Trust is a big thing.... Organic is a big trend, it's [been] going on for over a year, since last year's scandal about animal testing. Also Asians value everything organic. [With the Body shop, [it's] the way they signify their brand as something organic, one of the first. [It's] Korean, which Asian people trust.

For these participants, being aware of broader environmental issues was tied to their knowledge on the specific issue of rhino horn or ivory consumption, expanding this specific activity into a wider spectrum of their everyday experiences and psychosocial context; this extended into citing personal care activities, for example taking vitamins, awareness of exercise, and going to spas, with ‘more and more spas as a result’, or ‘green’ taxi use:

Patrick: So actually the drive to [get] Singapore to [being] a very green city is real and people are committed to it. So there’s a taxi firm called Grab and they are a bit like Uber and they primarily have electric cars – there’s loads of electric cars driving around Singapore at the moment from this taxi firm, which I think is quite a progressive move. The availability of that says to me that [people] get it and you know are pursuing that on various different levels, especially in the private and public sphere.

In a wider sense, participants had assumed a sense of responsibility for how they believed change could be achieved; implicit in this was a sense that wildlife consumption was something that required addressing on personal and a deeper societal level:

David: My perception is how can the Vietnamese be such a cruel – because of what, because the Vietnamese is loving...nature, loving the animal and peaceful country and that was the reason why. In my belief, if [every] Vietnamese people see[s] the picture, they will have a touch from their insides, from their heart and then they will stop killing and they will voluntarily stop consuming the rhinoceros.

For Jason and others, a position of empathy with consumers was a part of addressing the core of the issue:

Jason: You know (I don't know) you go somewhere and you buy a bone carving, for instance, do you really think where that bone came from or you know what really went into that? And I think there's a similar thing you know on that side where people don't see what is happening further down the chain, you know there's that cut-off. You go and buy a steak at your local shop and you take it home and cook it. You're not thinking what went into the process of making that steak otherwise people probably, you know, might not buy that much. So it's those elements, you know, which I think need to be addressed. One's heritage and that kind of thing also ties in because you can now afford things like that...it's not just about having a chunk of ivory on your mantelpiece. It has got to do with the carving styles, it has got to do with what they represent, it has got to do with the methodology.

Inter-generational influencer

Interviewer: So you think people were interested in hearing more [about the rhino campaign]?

Amy: [It was] trending on social media. People [were] talking about it. [It] had an impact on the younger generation. I can see everything, the Facebook numbers. I can see how people react. The young people today, they are reading more, they are doing more. They care.

Characterised here as intergenerational influencers, participants were energised and encouraged by the change embodied by the attitudes and decisions of the next generation in effecting the changes in which they themselves believed, and which informed their own identities:

Amy: I asked a little boy what he would do if he saw his father using horn again. He said I would tell him ‘NO! Don’t do it. This is wrong!’

Each participant described how ‘the next generation’ touched their personal experience both in the specific area of greater wildlife product awareness in the hope of a better future, and in terms of being part of a shifting generational and geographical evolution of identity creation through consumption choices:

Patrick: I have no interest in a boat. No matter how much money I have, I would never want to buy my own boat and I think that is the case when it comes to high net worth now versus what went on maybe 30 or 40 years ago. I mean golf is a great example. I think the idea of being a member of a very exclusive golf club [wouldn’t now] be something that they would aspire to. I think it is a generational divide... so I really do think that if you are a partner in a very well-respected law firm earning millions and millions of pounds in Singapore and you are in your 50’s, then the golf club membership and the suits are very, very important. If you are in your late 20’s and early 30’s, then I think all the facts that I – well, all the perspectives that I set out in terms of people looking for different signifiers still hold true.

Participants felt as if they were witness to a generational shift where status consumption was evolving in line with the growth of a more globally mobile community, with social media enhancing the individualism of identity portrayal and the impact of consumption choices:

Patrick: Generation X and the Millennials that come afterwards I think are marked by two different trends. Generation X is much more – they probably participate in purchasing for the sake of it. A holiday is a good example here actually. So if you are going to the Maldives,

you make a decision to go there, which I recently did. So I went there about a month ago on honeymoon and I went there for the intrinsic desire to not do anything...[just] sit on the beach and enjoy the sunshine. So that is [a product] decision because the destination will give me what I want. Other people there – there was a French footballer there with his fiancé and they were spending a lot of time taking photos and putting them on Instagram. The great thing about Instagram now is you can obviously see what people are posting for that particular place or the hotel they were in and it is quite clear that [was about] promotion of a lifestyle.

For Patrick, the role of education was emphasised in this breaking down of barriers, and extended into the realm of influencing behaviour change:

Patrick: I think for high net worth individuals it is breaking down, so the geographical boundaries are breaking down. Education is a great leveller for that. So...a lot of wealthy individuals and therefore, from my perspective, the people who are going to become wealthy...the central hierarchies will be determined by your parents' income by and large, then you know these people go to universities, they go to INSEAD, the Business School, they go to Yale, they go to Harvard and there is a cultural commonality that develops there. So I think it is very unlikely that you find a Singaporean high net worth, young guy or girl going to Harvard and still wanting to purchase products that years ago their relatives would have done. For instance, things...have become far, far less acceptable in this market by virtue of that kind of cultural commonality. You know values change as people get exposed to different cultures and different regions and I think that really probably has changed behaviour in Asia more than anything else.

In their description of their lived experiences in relation to wildlife product consumption, participants described feelings of both transferring custodianship of their values to the next generation, whilst also harbouring hope that the younger generation were already better equipped with greater awareness in making informed choices around value-driven consumption activities. As in the case of Jason, each described a perception that they were inherently part of a movement to educate and shape values on the one hand:

Jason: So you meet a businessman at a cocktail party or a function or you have got you know someone at that level and they meet you and you're chatting about your stories and your experiences, and they have read about you and so on, that can have an impact but – and then I think with the broader population possibly you know people that are you know looking up [to them] and so on but the people that have the money to buy the stuff, I think it's much harder.

On the other, the ability of a new generation in taking responsibility for shaping the future was also part of their experiences:

Jason: I think you know in some ways if you're looking at 40 or 50 year old men... what does impact them in this context and I think one thing there that could be quite useful are the kids, the children. If it's coming from a younger generation, if it's coming up from there, it is one way of getting into families. I know of one organisation that I think has been looking into this I think in the Vietnamese context – well, in most contexts, but specifically Vietnam, I think they're having a huge influence.

Alongside participants frequently evoking the concept of a generational divide was their twin notion that some environmental awareness campaigns had worked better than others in

capturing the power of a new generation to effect change. For Amy, an example of success was the 'Earth Hour' campaign:

Amy: There was lots of messaging on the internet and news, in music shows, all featuring the Earth Hour campaign, an entire campaign for schools, universities, and a competition between [schools] in different provinces.'

However, for Jason, some campaigns operating on the characterisation of beliefs as outdated or old fashioned were less effective:

Jason: Some of those campaigns were very much sort of speaking down to consumers you know, working on the lines that you are incredibly superstitious and it is your own stupidity that this happening, that sort of thing and playing on that, you know, why are you clinging to these old superstitions, why are you doing that, and a lot of other demand reduction campaigns are clearly designed by people who are coming from not within Vietnam but from outside Vietnam and are essentially imposing their own view on the Vietnamese and how that campaign should be done and again I think you know those campaigns are difficult.

Envisioned ideals and legacy construction

Although participants frequently related their experience of a disconnect between present and future envisioned ideals, a sense of agency and responsibility in creating a better future through their sense of individual identity construction, and consequently their purchase behaviours and anti-behaviours, was a narrative thread running through the description of their lived experiences.

Jason: I think there is a fundamental disconnect where partially because I'm in Vietnam, Vietnam, Thailand, China, none of those countries have had rhinos in decades and sometimes, in some cases, in centuries. You know they are animals that exist in mythology, they are animals that exist on a television screen if you end up tuning into the right programme and I found this with some of the Thai and Vietnamese pseudo hunters, the sort of sham hunters who came over to South Africa who had never seen a rhino before in their lives, not even in a zoo, you know on TV vaguely, and that disconnect is – you know basically here's a product, here's a piece of horn.

For these participants, the idea of creating their individual legacy in a globally connected ecosystem is a source of motivation whose main purpose is to organise the activities conveying their identities – for example, spanning the gamut of their social interactions or consumer activities – along the lines of a coherent, consistent whole.

Patrick: I think it is very, very important...to be purchasing [something which] is exclusive and goes beyond what others might be able to obtain and I think that pervades the private banking through to holidays, through to cars, through to clothes, and, in an era of increasing social media exposure, where there is a certain affluence that you can demonstrate that you can portray on social media, it is likely to go even beyond that. I think that is what you are seeing when you get to the higher and upper echelons and status scale. If you want to signify a degree of social status, then you want to show them that you are watching something that gives you an extra degree of kind of intellect and intellectual clout.

The transition to a globalised perspective, both from a brand consumption and environmental awareness perspective – and for some, literally, via the medium of social media

– was a tension captured by the spirit of a lifestyle premised on the view that participants felt part of a globally connected community and implicitly questioned their own legacy in that context. Implicit in this self-interpretation is the assumption that globally held concerns resulting from individuals' consumption behaviours are important.

David: Most of the people they say, well, they know that the rhinoceros is not existing soon but the impact is not that big. Why? Because 70, 80% of the Vietnamese still under the living standard and then still in the rural countryside, daily work. [And] then we are killing ourselves in the pollution here on the streets, nothing to inhale, no fresh air, nothing. The city is very big, the congestion, we're killing ourselves in the traffic. So why – [because] there are many other animals [harmed] in Vietnam too because of the environment and because there are many regions – why do I have to care about some of the rhino very far away? A lot of people in the world care about that, why me? But a lot of people I believe don't know that Vietnam is the biggest cruel killer in the world and that Vietnam is the biggest consumption [of that] in the world.

In the case of Amy, motherhood brings the issue of legacy creation into sharper focus:

Amy: Then I think when I have a baby, I think, what world am I creating, what world is he going to live in? What am I leaving behind?

Values-driven protagonist

Figure 12 shows levels of abstraction in the interpretation of the consumer experiences of opinion formers including perspectives on illegal wildlife products derived from the present study. The major emic meanings and life concerns expressed by the participants are consistent with theoretical proposals regarding the values-based, identity-oriented and self-based

dimensions of prevailing consumption patterns (Vinson, Scott & Lamont, 1977; Sheth, Newman & Gross, 1991; Fournier, 1998; Fournier & Alvarez, 2013; Park, Eisingerich & Park, 2013) and the nexus of these with both sustainable consumption goals (Dobers & Strannegård, 2005; Soron, 2010; Bhar, 2019) and moral protagonism (Luedicke, Thompson & Giesler, 2010; Galbraith 1958; Schor 2000; Veblen 1899; Hilton 2004). Thus, here the concept of the 'values-driven protagonist' is adapted from the moral protagonist described in Luedicke et al., 2010)

The etic portion of the analysis expands on previous research on the relationship between consumption and the desire for the expression of values (Vinson, Scott & Lamont, 1977; Sheth, Newman & Gross, 1991). The participants' relationships to consumer products and services also reflected this dynamic. For example, certain consumer goods and services - and the avoidance of others - were used to help them effectively project their individual identities, influence their social network and create a future more in line with their values. The research suggests that values span the gamut of a small number of more centrally-held global beliefs, a greater number that are more domain-specific, and myriad evaluations of product attributes (Vinson, Scott & Lamont, 1977). Rather than being a foundational consumer construct, this analysis suggests that "values" at a global level have a higher consumer meaning that is grounded in existential concerns, for example cultural and interpersonal relations, and one's life projects (Thompson, 1996). This set of textual evidence suggests that values can reflect a 'future legacy' orientation in which one feels responsible for maintaining the integrity of a future world, alongside an appropriate and globally relevant contemporary perspective. This analysis also suggests that the values/consumption complex is projected toward a future horizon of possibilities and the dimension of how about present-day actions will be regarded (by oneself and others in one's social network) in the future.

The expansion of identity orientation captures a series of higher-level meanings that are manifested in the participants' experience-near concerns. Fournier (1998) notes that self-

identity is structured and sustained by themes of connectedness and relationality, with the positive harmonisation of self-beliefs materialising as a recurrent theme in the literature. The analysis also expands on previous research on the relationship between consumption and self-extension (Belk, 1988) and subsequently attachment (Park, MacInnis & Priester, 2007). Park, Eisingerich and Park's (2013) model concerning the importance of salience and valence in customer-brand relationships builds on the stream of literature supporting the critical role of self-relevance in the customer-brand relationship, within which particular importance is given to Aron and Aron's (1986) self-expansion model. This investigation also contributes to a growing stream of research on the socially embedded nature of consumption activities and meanings (Sherry 1991). For these individuals, the meanings of consumption and the realised and unrealised goals that motivate consumer behaviours are interwoven into a field of social relationships, personalised values and ideals, cultural beliefs, and emotional ties (Thompson, 1996).

Finally, a genre of commentaries and analyses concerned with moralism in relation to consumption provides a context for the identity value of participants' perceptions and anti-behaviours expressed here in relation to illegal wildlife products. In the context of the integrity of society, personal well-being, and, most recently, the planet's ecosystem, social theorists have portrayed certain forms of consumption as threats (Galbraith 1958; Schor 2000; Veblen 1899; Hilton 2004). Identifying the thread of consumer identity construction in the context of the literature of moral protagonism suggests that moral polemics and adversarial conflicts are structural features of a 'moral protagonist myth' drawn by consumers in the course of performing moralistic identity work (Luedicke, Thompson & Giesler 2010). Research has shown that consumers' moralistic identity work can serve a multitude of identity goals, such as constructing and maintaining class-based hierarchies of taste (Arnould 2007; Holt 2000; Twitchell 2000). From the perspective of anti-consumer activists, research finds that

adversarial formulations provide a sense of superiority and the moral certainty of good/us versus evil/them dualisms, producing identity value in both a personal and collective sense (Luedicke, Thompson & Giesler, 2010; Hamilton & Denniss, 2006; James, 2007). It follows that identity value is produced by demonstrating the inherent righteousness of their normative and ideological beliefs through ritualistic and rhetorical avenues. From this standpoint, the ‘moral protagonist myth’ also provides consumers with a rhetorical means to link their consumption practices and personal identities to a consequential, collectively shared moral project, thereby insulating themselves from the threats of reflexive doubt, social alienation, and existential insecurity (Bauman, 2000) and ensuring engagement in a collective project of saving a group, society, and even the world (Luedicke, Thompson & Giesler, 2010).

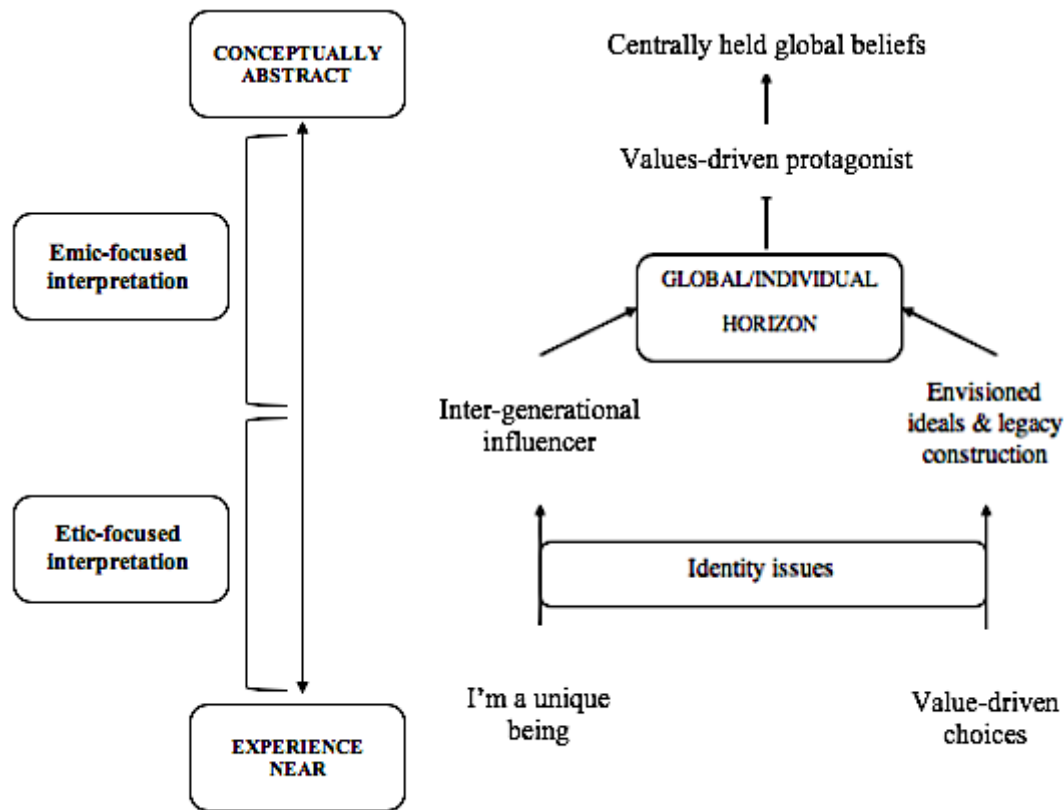


Figure 12 Levels of abstraction in the interpretation of the consumer experiences of opinion formers including perspectives on illegal wildlife products (Luedicke, Thompson & Giesler, 2010; Thompson, 1998)

5.3 Discussion

Summary of findings

This study sought to situate the meanings of specific consumption experiences, namely their most desired goods and illegal wildlife products, for relatively affluent and opinion-forming individuals in relation to a field of personal and interpersonal considerations that pervade their life worlds (Thompson, 1996). In doing so, this enquiry also answers calls for a better socio-culturally situated conceptual understanding of consumers in order to unearth empirical insights into drivers of socio-environmentally impactful consumption (Bhar, 2019). Using the AA model as a guiding framework for the core component of the analysis and an

interpretative phenomenological approach in analysing the supplementary component, the findings suggest that respondents can and do exhibit strong brand-self connections and brand prominence with their most desired branded goods, and that these connections develop when the brand fulfils the self-enabling, self-enticing, and self-enriching benefits that connect them with higher-order needs and emotions (Gill-Simmen et al., 2018). Conversely, their relationships with two illegal wildlife products, ivory and rhino horn, exhibit weak brand-self connections with self-impoverishing dimensions, whilst brand prominence was mixed, disproving H2 and H3a, whilst supporting H3b.

Supported by the findings of the supplementary investigation, the background to these perceptions is composed of a system of cultural meanings, ideals, and conceptions of environmental and ethical responsibility in which the participants were socialised. The emergent model makes several contributions to the literature.

Participants' perceptions of their role in creating value-driven legacies for the future, and enacting their leading role in the stories of their own lives, expressed a broader life project of considering a variety of personal perceptions and cultural ideals. Considering their own moral values in approaching attitudes on lifestyle was valuable, providing feelings of self-enrichment and a sense of constructing a meaningful identity. Participants sought to express their ethical ideals from their value-driven self-identities into their lives while seeking to operate within a contemporary cultural society with expanding global horizons. The future horizon toward which these activities were directed is one that is facilitated by their creation of a better personal quality of life and a better global future, where they are free from regrets about the world they have left behind for their children; indeed they harbour hope that the next generation will be custodians of the future. Further, they sought to create a substantial self-distance between themselves and a perceived 'other' group who may not share their set of beliefs.

Consumption was contextualised within this nexus of personal and cultural meanings, and its symbolic meanings frequently paralleled the participants' self-perceptions. Respondents saw themselves as being effective creators of their self-images; their desired products and services are facilitators of their own life projects (Fournier, 1998). Desired products were those that enhanced, enticed and enabled their personas to expand in the context of a modern world (Park, Eisingerich and Park, 2013).

Conversely, wildlife products were concerning because they were perceived to be in opposition to these self-images, misaligned to life missions and seen as something 'other people' do. Finally, many of the most salient meanings of products and services were lived in relation to interpersonal concerns, such as using consumption to create more effective ideal extensions of self in work or personal settings. These findings offer support for H3b.

For these participants, both 'most desired' purchase decisions and wildlife products often evoked emotionally charged meanings that were grounded in a values-driven context of ideals. For most desired items these were positive and pertained to self-enrichment, enticement and enablement, hence suggesting the attributes of attachment (Novik, Pinto & Guerreiro, 2017). For wildlife products in question, these were negative and averted, pertaining to a conflict with ethical and environmental values, and the participants' own evolving life narratives and self-identities. For these participants, a deeper meaning of avoiding purchases of the wildlife items in the present study was extending care to a future world and creating, by self-extension, a persona which both avoids such purchase decisions and also serves their own self-identity needs in doing so.

However, these findings should be seen in the context of previous findings in the environmental behaviours literature. Stern (1995), for example, found that whilst prominent writers have long blamed environmental problems on basic human values or worldviews and the institutions built on them, it does not follow that a basic change in human values would

make a large difference in the short term. Evidence has not been found that those with strong moral codes about the environment, or non-consumerist world-views, consume substantially fewer resources than average people (Stern, 1995). For example, Dunlap, Gallup and Gallup (1993) found that average citizens in both wealthy and developing countries express strongly pro-environmental attitudes and concerns; the 85% of the U.S. population and the 77% in Norway who expressed "a great deal" or "a fair amount" of personal concern about environmental problems are not much different from the 78% who expressed the same sentiment in Russia, 80% in Brazil, or the 77% in India. Given Stern's (1995) conclusion that pro-environmental values are not enough, and value change may not even be necessary, the call here is for a deeper understanding of the attitudes and incentive structures affecting the behaviours which are not well understood, and likely to vary with the situation (Guagnano, Dietz & Stern, 1994).

Strengths and weaknesses of the study

The survey was the first of its kind to use consumer marketing frameworks in capturing and comparing responses on both premium or luxury goods and wildlife products in tandem. The hermeneutic account sought to highlight certain experiential issues and meanings that were significant in the consumption activities of opinion formers and to link these lived meanings to relevant psychosocial influences (Thompson, 1996), whilst the analysis of textual data gathered from the survey sought to further test the components of the AA model as a means of understanding, comparing and contrasting relationships these consumers built with the two wildlife products in question with most desired goods. Although these interpretations are offered as plausible and textually supportable, there is no pretence to have developed an exhaustive account. Therefore, the present interpretation is attuned to and infused with the reflective and symbolic dimensions of human experience, and combined with characteristics

that arise in situ (Thompson, 1996).

Further limitations of this study included gender imbalances both in the core and supplementary components of the study, and small sample sizes in the core component for rhino horn. The reasons for poor response in this part of the survey were due to an error in the alternating system when the survey launched combined with a lower response rate than anticipated. Moreover, although the questionnaire was designed with care, responses may reflect varying interpretation of the questions and the nuances of the translation process (Booth et al., 2012). Bearing in mind that the supplementary sample consisted primarily of relatively affluent younger women, it may be that this particular demographic group is less engaged with wildlife product use than other demographics, such as older men. As such a broader sample could address this question through questioning other demographic groups. The database used for recruitment may inevitably have been incomplete, and respondents may represent a biased subgroup, even though it was not characterised as a survey related to conservation issues.

The effect of social desirability bias when considering results may also need to be considered, given that respondents may have felt they needed to tone down their preference to horn or ivory because of current behaviour change campaigns. It is possible that high profile campaigns could have been occurring at the time of the survey which might have been particularly influential on results.

Comparison to other studies

Wider interpretation of previous studies is limited by the relatively few number of such studies, differing demographic samples, and their scope, for example focusing on only one product in isolation. Some comparisons can, however, be made with previous research. Though a small number of studies have focused on marketing campaigns for rhino horn, ivory and other wildlife products (Bennett et al., 2017; Olmedo, Sharif & Milner-Gulland, 2018; Veríssimo &

Wan, 2019), there is limited published peer-reviewed evidence on perceptions towards the purchase of the wildlife items considered in this study in the markets under consideration, and the primary aims of previous studies differed from those of the present study. In the conservation literature, (Dang Vu & Nielsen, 2018) examined utilitarian and hedonic values, finding them to be motivations for rhino horn use in Vietnam. Here, their context in the stories of consumers' lives and other purchase behaviours was not considered. The small sample size was also limited to 'self-confessed users'. The present study in contrast did not focus on self-stated users, but a broader range of relatively affluent consumers, finding that in general relationships with the wildlife products were negatively valenced and contrasted with the positively valenced attachments consumers formed with their most desired items. (Truong, Dang & Hall, 2016) focused on examining the consumption of illegally traded rhino horn through a survey of 608 males in Vietnam. Truong, Dang and Hall (2016) found that rhino horn, through its circulation within social clubs and networks, is a means of displaying economic wealth, acquiring social leverage, and initiating business and political contacts among wealthy males, concluding that rhino horn played an important role in wealthy consumers' search for a sense of "self" (who can afford to consume rhino horn products), a sense of "us" (those who belong to a status community), and the delineation of the "other" (who do not belong to that status community) (Truong, Dang and Hall, 2016). Whilst the present study also found that rhino horn and ivory were conferred with dimensions of status and high value, they were not found to be self-relevant for the majority of respondents and prominence was mixed; instead the findings showed that these products were symbols of a set of values that was misaligned to that of the respondents.

Also contrasted were findings on the enabling, enriching and enticing aspects of consuming rhino horn; the present study aligned in some aspects of its findings with Truong, Dang and Hall (2016), who find that rhino horn is similar to other objects in the sense that it

contributes to binding individuals in social networks that become more solid over time, as pleasures are intensified and the relationships between network members are strengthened, and that non-participation in such networks may make business and political relationships more difficult in such a status-conscious society (Kuruoğlu & Ger, 2015). The present study found that these kinds of relationships were acknowledged to some extent; they were also seen as contrasting with, and not self-relevant to, those of respondents from a personal, cultural and values perspective.

Unanswered questions and future direction

Three core areas of future direction in exploring unanswered questions arise from this study.

First, looking to the consumer marketing literature, the present study builds on consumer attachment research which examines the relationships consumers form with objects or brands (Park, MacInnis & Priester, 2007, 2008; Gill-Simmen et al., 2018), specifically advancing the application of measurement scales that are negatively polarised (Fournier & Alvarez, 2013; Park, Eisingerich & Park, 2013; Novik, Pinto & Guerreiro, 2017). Given the findings of the present study, consumer culture theory may be a future research area in exploring how the many ways that consumers interact with consumable resources to establish emotional and hedonistic social relationships could be applied to anti-consumerism of the wildlife products in question (Arnould & Price, 1993; Belk & Costa, 1998; Cova, 1997; Cova & Cova, 2002; Kozinets, 2002; Muniz & O'Guinn, 2001; Muniz & Schau, 2005; Schouten & McAlexander, 1995). Given that such studies lie at the heart of a shift in understanding of the value creation process, where consumers are now viewed as active co-creators of value (Cova & Pace, 2006; Prahalad & Ramaswamy, 2004; Schau, Muniz & Arnold, 2009), the suggestion is that it may follow that value can be eroded if empowered groups of consumers are joined

together by an aversion rather than an attachment to a specific consumer behaviour and erecting strong barriers to entry. The dimensions of wide brand-distance and negative self-based consumer relationships offer a further aspect for future direction.

Secondly, the literature on value construction in the context of consumer behaviour provides a further avenue for enquiry given the ethical and environmental values which were found to influence consumers' relationships with the wildlife products in question. Where values are seen to be in conflict with purchase behaviours, the opportunity exists for further exploration of how this affects consumers in their decision-making.

Finally, discussion of the findings in the context of the literature on mechanisms for influencing behaviour, for example word of mouth, message delivery through a younger generation, and the use of persuasive technologies given the substantial internet penetration in both demand countries, is needed. This will allow the creation of practical, effective and ethically defensible guidelines for the creation of initiatives and perhaps set a precedent for use in other contexts.

6 General Discussion

6.1 Contributions to theory

If “ ‘we are what we have’ is perhaps the most basic and powerful fact of consumer behaviour” (Belk, 1988, p.139), the present study makes an important initial contribution to the literature by answering this most foundational of questions posed by Belk (1988) and subsequent theories of consumer behaviour founded in self-extension theory. By answering a question acknowledged in the literature as ‘the most basic and powerful fact of consumer behaviour’ (Belk, 1988, p.139), the present study fills a gap that has received almost no attention in the context of illegal wildlife purchases despite playing a foundational role in analysing consumer behaviour.

The present research contributes to the literature by testing the multiple facets of an individual’s relationship to high profile illegal wildlife products, providing insights on the following: first, the meanings conferred on products and consumers’ emotional connection to these purchases; second, measuring parallels with purchases of similarly high-value goods, and examining attitudes expressed by consumers in relation to both sets of products; and finally, understanding how self-relevance of these purchasing behaviours may both predict purchase behaviour and anti-purchase behaviours. This final effect was observed among participants, driven at least in part by psychosocial, self-relevant values held by consumers.

The studies showed that while the overall characteristics of consumers’ perceptions of these items can support the positive achievement of consumers’ goals, for the majority of consumers these goals are not self-relevant. The overall characteristics of consumers’ perceptions of the attributes of these items are aligned with those of luxury goods from a perceived value, social and cultural perspective, but while the particular attitudes and perceptions of consumers regarding these attributes applied to rhino horn and ivory are aligned to positive self-actualisation through the conferring of status and affluence, the inconsistency

of brand image, values and morals with those of consumers discourages self-relevance. This builds on prior research, which finds that consumers reject brands to prevent bringing undesired meaning into their lives (Banister & Hogg 2004; Lee, Motion & Conroy, 2009; Muñiz & Hamer 2001; Thompson & Arsel 2004 ; Thompson et al. 2006).

The current research contributes theoretically to the consumer behaviour literature in several ways. First, this research, which to my knowledge is the first to compare attitudes towards consumers' most desired products with those towards two wildlife products, will contribute to conservation psychology and marketing theory by exploring the related effects of increasing negatively valenced self-relevance and the prominence of brands or products on intention to purchase in the context of environmentally or ethically deleterious items. Where consumers' self-identity goals are oriented towards positive ethical or environmental polarities, the self-relevant dimension of purchasing wildlife products is weakened and negatively valenced relationships tend to occur.

While Truong, Dang and Hall (2016) and Dang Vu and Neilsen (2018) noted the importance of hedonic and utilitarian usage for rhino horn with some focus on the dimensions of the self, empirical research on how these attitudes compare and contrast with a broader set of consumption behaviours, including the valence and prominence of relationships with products in the context of self-relevant values, is very limited. In addition, taking a phenomenological approach finds that product purchase behaviours may be contextualised in the stories of respondents' lives and mission (Thompson, 1996). Consequently, this research will make a contribution to the conservation literature on influencing human behaviour, and the consumer marketing literature on anti-consumption behaviours.

Past research has found that the self-disabling, self-impoverishing aspect of a relationship with a brand or collection of product attributes contributes to negatively valenced, or averted, relationships (Hogg, Banister & Stephenson, 2009; Park, Eisingerich & Park, 2013;

Novik, Pinto & Guerreiro, 2017). In this case, Study 3 found that the values held by respondents on environmental issues and the self-enriching rewards perceived by respondents in holding such values were consistent with aversion to wildlife products.

The link between values and purchase motivation orientation is empirically mixed. For instance, the role of personal values in marketing and consumer behaviour suggest that values are centrally held cognitive elements which stimulate motivation for a behaviour response (Vinson, Scott & Lamont, 1977). They exist in an interconnected, hierarchical structure in which global values are related and connected to generalised consumption-related values, which are in turn associated with product attributes. Changing values were found to potentially have a profound impact upon behaviour; global and consumption-related values and the evaluation of product attributes were consistent with preferences for the consumer product or services as well as for the perceived importance of the social issue selected (Vinson, Scott & Lamont, 1977).

Similarly, the overlap between values and identity-creation have been considered in the literature concerning the formation of consumer tribes and consumer-brand co-creation (Thompson, Rindfleisch & Arsel, 2006; Cova, Kozinets & Shankar, 2007; Bocconi & White, 2013; Goulding, 2013), which shows how consumer learning can also be understood as a situated social practice (Goulding, 2013). Further, values have been examined in the context of a particular form of anti-consumption termed brand avoidance, which specifically explores why people may avoid some brands even when their financial circumstances allow them the option to purchase (Lee, Motion & Conroy, 2009; White, Breazeale & Webster, 2012; Rindell, 2014). Lee, Motion and Conroy (2009) reveal three types of brand avoidance: experiential, identity and moral brand avoidance, where identity avoidance develops when the brand image is symbolically incongruent with the individual's identity and moral avoidance arises when the consumer's ideological beliefs clash with certain brand values or associations, particularly

when the consumer is concerned about the negative impact of a brand on society. Following from this is the body of research focusing on the construction and measurement of consumers' ecological world-views (Dunlap, 2000).

On the other hand, Fournier & Alvarez (2013) acknowledge the need for further research on the self-relevant aspects of forming negative relationships with brands, proposing two theoretical extensions to Park, Eisingerich and Park's (2013) AA Model; first, additional negativity dimensions beyond brand–self distance including pathology, power, and self-versus brand-focused emotionality; and secondly, distinctions between neutrality and variations of emotional ambivalence “in the middle” of the Attachment–Aversion spectrum. My findings suggest that decreased self-relevance and increased brand-prominence in the context of environmental or ethical awareness theoretically could provide the motivational energy to spur individuals into an averted attitude toward the consumption of wildlife products.

Secondly, this study adds to the two nascent fields of conservation psychology and conservation marketing. Repeated calls in the conservation science literature note that the implementation of effective conservation actions involves strong, long-term collaborations with practitioners from other disciplines (Reyers et al., 2010, Pooley, Mendelsohn & Milner-Gulland, 2014). However, perspectives from other disciplines which aim to understand consumers' relationships to products, such as marketing, are currently lacking in conservation. These three studies show that the integration of methods from consumer marketing into conservation science adds depth to our understanding of the complex drivers behind consumers' buying decisions for both illegal wildlife and goods which they consider desirable, helping us to understand the emotional territory which these products occupy for different individuals, and the degree of self-relevance of these products. Indirectly, the efficacy of marketing messages which are being used around both luxury items and illegal wildlife products are revealed.

Tools for social research are critical for developing an understanding of conservation problems and assessing the feasibility of conservation actions (Nuno & St John, 2014), the motivations of end-users and how these can be influenced (Drury 2011). This study takes an interdisciplinary approach to understanding how consumers relate to illegal wildlife purchases, allowing for these insights to inform the design of interventions, providing novel approaches to reducing demand for illegal wildlife products.

Finally, this research adds to the marketing literature on environmental issues which itself is linked with the fields of environmental, behavioural and conservation science. Grounded in a history of research and stimulated by Pirages and Ehrlich's (1974) explication of the anti-environmental thrust of society's dominant social paradigm (DSP), in the late 1970s Dunlap and Van Liere (1978) argued that implicit within environmentalism was a challenge to our fundamental views about nature and humans' relationship to it (Dunlap, 2000). Since that time, research on understanding how the public sees environmental problems has proliferated, including within the consumer marketing literature, seeking a deeper understanding of human consumption patterns, pro-environmental behaviours and public perceptions of issues such as climate change and biodiversity preservation (Stern, 1995; Newing, 2010; Cronin et al., 2011; Ross & Tomlinson, 2011; Isenhour, 2012). As Dunlap (2000) noted, and as is relevant now, the emergence of global environmental problems as major policy issues symbolises the growing awareness of the problematic relationship between modern industrialised societies and the physical environments on which they depend (Dunlap, 2000; Stern, Young & Druckman 1992). Recognition that human activities are altering the ecosystems on which our existence—and that of all other living species—depends, and growing acknowledgment of the necessity of achieving more sustainable forms of development have underpinned a stream of transdisciplinary research which are complemented by the present studies.

6.2 Managerial implications

From a managerial perspective, understanding what motivates consumers to buy through insights into the meanings conferred on particular products in relation to themselves is perhaps the most basic and powerful of insights (Belk, 1988). Following from this, insights into what motivates present consumption behaviours and predictors of future consumption behaviours are useful because of the resources required to implement effective campaigns (Danzinger, 2004). Bringing a new campaign to market is relatively costly, calling attention to the need to design communications that facilitate adoption intentions.

From a managerial perspective, the present study's findings suggest that in the case of rhino horn and ivory, for a majority of the relatively affluent sampled, increasing brand self-distance whilst enhancing the prominence of campaigns would result in more averted relationships with these items given that the majority of wildlife product respondents expressed indifference in terms of their relationship to the illegal wildlife product on which they were questioned. The small number of those attached to either wildlife product suggests the lack of general self-relevance of these items, with the majority expressing neutral or negatively valenced relationships. This result suggests that the majority of the sample were not interested in consumption of illegal wildlife products questioned in the survey. The prevalence of this attitude could result in the majority of people being unlikely to challenge consumption as social norms because they do not care strongly enough. Therefore, turning indifference into aversion may be key for developing and changing social norms in a way that is likely to influence other people's behaviour, particularly in the context of a relatively collectivist society.

Novel data on identifying the most prominent sources of influence on buyers has also emerged from the study, enabling a better understanding of which mechanisms may be the most powerful in shaping purchase decisions. From these data points, a picture of different

consumers and a baseline for measuring changes in attitudes moving forward may be built, with results appearing to show telling differences between individuals' attitudes even within this relatively homogeneous group. Thinking from the consumer's perspective, the correct message needs to be delivered to the right people, suggesting that different approaches to shaping consumer behaviour may need to be taken depending on how people relate to goods.

Refusing to purchase or consume wildlife products should ultimately be positioned to accrue greater social capital than doing so (Truong, Dang & Hall, 2016). The role of the individual in creating their own self-identity through purchase behaviours, particularly in the growing arena of social media, should be considered amidst a landscape of actors, including the actions of high-status individuals, business people, and officials. For the small number of consumers attached to wildlife product consumption, this may be one way of reversing attachment.

Practical suggestions offered to marketers in undertaking campaigns include the following. The present study has shown that attachment-aversion comprises two dimensions, brand self-distance and brand prominence; the implication is that campaigns would benefit from addressing these two levers in achieving the outcome of averted relationships with the illegal wildlife products in question. The following actions are suggested in this context.

Based on past research shows that motivating consumers to participate voluntarily in product development is more likely to increase purchase intentions and amount of spending, hence motivation to act (Merlo, Eisingerich & Sun, 2014), campaign designers may benefit from encouraging the already-averted to participate in new campaign development and dissemination. This results in individuals becoming advocates themselves (i.e. increasing self-relevance of an anti-brand behaviour) and in the process creates growing communities of socially-connected behaviours (i.e. increasing prominence). Involvement of locally situated individuals would also go some way to aligning with appropriate cultural contexts and ensure

local involvement, rather than potentially imposing a less efficacious strategy or message. In the conservation sphere, the inclusion of local participation in interventions is one means suggested in the literature of moving towards more successful interventions (Waylen et al., 2010), addressing the concerns found in the literature of placing any social interventions into the affairs of specific cultures on firm ground that is based on clear knowledge of universals and their boundary conditions, as well as the particular prerogatives and psychological preferences of those cultures that may differ considerably from one's own (Norenzayan & Heine, 2005).

Further to this, building on previous research on emotional branding (Roberts 2004), potent consumer-brand linkages typically emerge when branding strategies use narratives and tactics that demonstrate an empathetic understanding of customers' inspirations, aspirations, and life circumstances and that generate warm feelings of community among brand users (Atkin 2004; Cova & Cova 2002; Fournier 1998; Muniz & Schau 2005). This suggests that the emotive and self-relevant nature of an advocate's story in the contexts of their life-stories should be heightened. If an existing narrative on the beneficial effects of wildlife product consumption exists which is based on deeply held emotional attachment, the research on emotional-branding strategies suggest that such a scenario is conducive to the emergence of a doppelgänger brand image, which is defined as a family of disparaging images and meanings about a brand that circulate throughout popular culture (Thompson, Rindfleisch & Arsel, 2006) . This doppelgänger brand image can undermine the perceived authenticity of an emotional-branding story and, thus, the identity value that the brand provides to consumers (Thompson, Rindfleisch & Arsel, 2006). Research has also shown that undesirable behaviours may spur discussion and lead to consumers becoming involved in identifying potential problems and solutions (Lin, 2018). Inviting consumers to participate in campaign design and

dissemination may not only stimulate consumers' attention, but also result in campaigners receiving useful comments regarding actions which might ensure favourable outcomes.

Conceptually this also aligns with frameworks such as the 'dark side' of brand attachment developed by (Japutra et al., 2014), which posits that the link between brand attachment and oppositional brand loyalty is driven by consumers' social identity and sense of rivalry; furthermore, findings show that brand attachment leads to anti-brand actions when relationships deteriorate in the case of incongruity occurring between consumers' values and the brand's values.

The role of education in fostering loyalty to a firm or brand, constructively influence consumers' perception of product offerings, has been considered in the consumer marketing context; for example, Bell and Eisingerich (2007) find that the main effect of customer education on loyalty was significant. If applied in the context of NGOs seeking advocates for their campaigns, by means of a message framing strategy that offers educational benefits, enhancing the expertise of consumers on the deleterious effects of consuming the wildlife products in question, could foster greater trust, loyalty and brand prominence. Further to this, Lin and Eisingerich (2018) state that, "consumer cynicism runs high these days" and Eisingerich and Kretschmer (2008) remarked that consumers are motivated to want to know more information about what they are buying – a notion of 'more is more' in e-commerce (Lin, 2018). Providing objective and accessible information acts as a gesture of goodwill, demonstrating that there is nothing to hide (Foscht, Lin & Eisingerich, 2018; Merlo et al., 2018). Such a policy might equip consumers with sufficient facts and knowledge to allow them to process information defensively (Lin, 2018), increasing expertise and therefore the self-relevance on non-purchase behaviours for wildlife products.

Looking to the literature on anxiety and hope in the context of purchasing decisions, consumers may even be more willing to systematically process and review this kind of negative

educational information, given that research suggests that more attention is given to anxiety-provoking situations (Lin, 2018). Additionally, the AA model's predictive properties could act as a forecaster of future behaviour by providing the basis for measuring consumer-brand relationships with wildlife products over time. Given the notion of 'intenders' in the context of rhino horn and other potential demand markets, this could have useful application in the planning of demand reduction interventions.

In addition to advancing theory, more general empirical findings on the impact of the illegal wildlife trade have promising implications for managers when looking to achieve the ultimate goal of species preservation – the other side of the coin of demand reduction. In one example, data gathered on the illegal wildlife trade is currently proving useful in a digital application designed to better understand the impact on biodiversity of companies and countries implicated or affected by the trade. In this case, illegal wildlife trade data is provided as one input into a digitised metric as part of an aggregation of global and local biodiversity indicators. This is then applied to the supply chains and environmental footprint of companies and sovereign bonds within investment portfolios to analyse their impact on nature. This indicator is being made available to end investors managing their savings, encouraging a better understanding of the impact of the investment decisions they are making, answering calls from society for more transparency about the allocation of capital of their long-term savings.

The potential advantages of such an approach are not yet well understood, given that the data and processing power required to achieve this form of digitised metric has only recently come to the fore across the investment industry, partly as a result of increased environmental and societal scrutiny and regulation such as the Taskforce for Climate-Related Financial Disclosures. However the shaping of company and national behaviours through the democratisation of such information has the potential to lead to fundamental shifts in capital

allocation. The results of such metrics are intended to encourage companies and governments to consider their practises in light of their impact on endangered species and nature as a whole, lest stock market investors are influenced to remove their capital.

The impact of environmental, societal and governance ratings, a commonly used framework for evaluating non-financial performance metrics, on a firm's stock returns—a metric that is of importance to a firm's managers and shareholders – constitutes a growing field of research. Research has examined the stock market premium added to companies' share prices of relatively higher ESG rating, showing a generally positive to neutral relationship (Gillan et al., 2010; Giese et al., 2017; Fatemi, Glaum & Kaiser, 2018; Aouadi & Marsat, 2018; Henriksson et al., 2018; Giese et al. 2019). The literature on Environmental, Social, and Governance (ESG) issues is extensive, yet far from conclusive; though one area of agreement in the literature centres on the positive effects of ESG on the cost of capital; companies with better ESG scores tend to be able to borrow more cheaply, have higher credit rankings and lower cost of equity capital (Henriksson et al., 2018). In one further example, Fatemi, Glaum & Kaiser (2018) find that ESG strengths increase firm value and that weaknesses decrease it, with disclosure playing a crucial moderating role by mitigating the negative effect of weaknesses and attenuating the positive effect of strengths. In highlighting a formerly hidden opportunity for managers to both mitigate and enhance environmentally aware practises, the potential exists to influence investor behaviour, attracting capital and out-performance in stock market terms.

6.3 Limitation and future research

The limitations of this study included gender imbalances and small sample sizes, particularly for rhino horn, reducing the sample size for aspects of the study and restricting the ability to estimate prevalence. The reasons for poor response in this part of the survey were due

to an error in the alternating system when the survey launched and a lower response rate than anticipated. Moreover, although the questionnaire was designed with care, responses may reflect varying interpretation of the questions and the nuances of the translation process (Booth et al. 2012). Bearing in mind that the sample consisted primarily of relatively affluent younger women, it may be that this particular demographic group is less engaged with wildlife product use than other demographics, such as older men. As such a broader sample could address this question through questioning other demographic groups. The database used for recruitment may inevitably have been incomplete, and respondents may represent a biased subgroup, even though it was not characterised as a survey related to conservation issues.

The effect of social desirability bias when considering results may also need to be considered, given that respondents may have felt they needed to tone down their preference to horn or ivory because of current behaviour change campaigns. It is possible that high profile campaigns could have been occurring at the time of the survey which might have been particularly influential on results.

Future research may centre on the following four areas of enquiry: prevalence; future economic and social developments influencing self-identity in demand countries; sources of influence, including the role of persuasive technologies and social media; and applications to behavioural change in the context of green consumer behaviours.

First, whilst this study attempted to calculate the prevalence of purchasing behaviour for the two wildlife products in question using the unmatched count technique, small sample sizes prevented an effective output metric. Future research might expand upon sample sizes and country locations, allowing for an empirical baseline of prevalence to be established. For example, similar surveys could be enacted in potentially up-and-coming demand markets, providing a window for preventative action.

Secondly, whilst cultural context was examined in the present study, future research could benefit from a deeper understanding of the impact of the economic and political transformations seen over the past decade in China and Vietnam and its impact on both self-identity and consumption behaviour. Given that economic development continues to thrive relative to developed markets, the future implications of this transformation on perceptions of individualism and self-identity are in question, with implications for our understanding of self-based consumer behaviours. In his seminal cross-cultural study, Hofstede (1980) examined variation in individualism and collectivism and concluded that economic development encourages individualism. Further to this, a field of literature examining the transition from collectivist to individualist dimensions in society is exemplified by an in-depth study examining the consequences of China's dramatic socioeconomic and political transformations for individual subjective well-being from 1990 to 2007, conducted by Steele and Lynch (2013). This shows that while both individualist and collectivist factors predict subjective well-being in China, individualist factors have become more important over time, and collectivist factors have become less important. These results substantiate the link between higher subjective well-being and individualism found by Diener (1995), whose analysis demonstrates that individualist factors are increasingly being prioritised in assessments of happiness and life satisfaction, substantiating descriptions of Chinese society as becoming increasingly individualistic (Moore 2005; Yan 2010; Zeng & Greenfield, 2015). Vietnamese society has experienced a similar economic transformation (Vanham, 2018). Hand in hand with economic growth, if a transition over time to a more individualistic society continues, questions on the impact on self-relevance of products and behaviours should form a further area of enquiry because the bases for self-based attachment relationships may well shift.

Third, the role of sources of influence demands further enquiry, set in the context of China and Vietnam's economic and social transformation (Steele & Lynch, 2013). The

implications of the role of self-identity should be considered in an increasingly connected online world of high mobile penetration rates, where a landscape of constructed social media identities is becoming ubiquitous, and where the internet may have the power to strengthen social and political agency (Aouragh, 2008).

McCay-Peet and QuanHaase (2017) state that ‘social media refers to web-based services that allow individuals, communities and organisations to collaborate, connect, interact, and build a community by enabling them to create, co-create, modify, share, and engage with user-generated content that is easily accessible’ (p.13). Rapid changes in technology have therefore created advances in global communication systems, not only affecting how people communicate, but also who has access to communication tools and, in turn, who can reach a broader public sphere of debate and discussion (Harp 2012). For example, Kahn and Kellner (2004) argued that the internet offers alternative forces and progressive groups a chance to reconfigure the political sphere, whilst Harp (2012) examines the role of social networking sites in mobilising activists’ efforts. In the field of conservation, applications of social media are considered in the context of network monitoring and message dissemination (Wright et al., 2015; Hinsley et al., 2016), and in examples including Di Minin et al. (2018), who demonstrated the use of automated social media content analysis for tracking illegal wildlife trade, and Becken et al. (2017) where a case study analysing human sentiment towards the environment, in this case the Great Barrier Reef, from social media was demonstrated. An impressive recent paper by Toivonen et al. (2019) considering social media’s methodological applications for conservation found that developing an understanding of values and sentiments towards conservation issues was amongst the most prevalent of uses. Findings suggested that social media data could be seen as a platform for active communication by individuals and organisations, and a channel for nudging people towards more biodiversity-aware lifestyles (Toivonen et al., 2019). Whilst social media provides a rich source for studying people’s

activities in nature and understanding conservation debates or discussions online (Di Minin et al., 2015), in turn it offers a future direction for research into the field of persuasive technology in behavioural science (Fogg, 2009; Eckles et al., 2009a).

In China, an environment where new mobile technologies influence the daily lives of their users (Leung & Liang, 2019), where 85.8% of netizens are connected to internet service via their advanced mobile devices (CNNIC, 2015), and where mobile subscribers in Hong Kong were 227.9% of the entire population indicates that many citizens had more than one mobile phone (Office of the Communications Authority, 2015), the impact of this relatively recent development on communications, identity-creation, and the extension of social domains is deserving of future study. Further, as in other consumer research domains, future enquiry is needed into consumer responses to emotional appeals across various types of mobile interfaces and among distinct characteristics of digital services in order to offer actionable guidance and implications in digital marketing (Lin, 2018).

Future enquiry could be actioned in the field of green consumer marketing strategies. The interplay between values, purchase behaviours, the individual and society have factored into the extant research on the promotion of pro-environmental behaviours (Dembkowski & Hanmer-Lloyd, 1994; Burgess et al., 2003; Jansson, Marell & Nordlund, 2010; Eagle, Hamann & Low, 2016). The present research's findings on self-identity in relation to environmentally positive behaviours, expressed in this case in relation to illegal wildlife, may have broader applications in other consumption situations. Further, the present study could be enhanced and extended in relation to the extant literature, both in furthering understanding and application.

REFERENCES

- Aaker, J. L. (1997) 'Dimensions of Brand Personality', *JMR, Journal of Marketing Research*. SAGE Publications Inc, 34(3), pp. 347–356.
- Ahuvia, A. (1995) 'Materialism: Origins and Implications for Personal Well-Being', in *Proceedings of the 1995 European Conference for the Association for Consumer Research*. European Conference for the Association for Consumer Research, Copenhagen, 12-14 June.
- Ahuvia, A. C. (2005) 'Beyond the Extended Self: Loved Objects and Consumers' Identity Narratives', *The Journal of consumer research*, 32(1), pp. 171–184.
- Aouadi, A. and Marsat, S., 2018. Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics*, 151(4), pp.1027-1047.
- Ajzen, I. (1985) 'From Intentions to Actions: A Theory of Planned Behavior', in Kuhl, J. and Beckmann, J. (eds) *Action Control: From Cognition to Behavior*. Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 11–39.
- Akella, A. S. and Allan, C. (2012) 'Dismantling Wildlife Crime: Executive Summary', in *Proceedings of the Fuller Science for Nature Symposium on Conservation Crime*. World Wildlife Fund, Washington DC, 14 November.
- Alase, A. (2017) 'The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach', *International Journal of Education and Literacy Studies*. journals.aiac.org.au, 5(2), pp. 9–19.

American Enterprise Institute (2019) 'China Global Investment Tracker', *American Enterprise Institute, Washington DC*, 6 October 2019. Available at: <https://www.aei.org/china-global-investment-tracker/>. [Accessed: 6 October 2019]

Ammann, K. (2011) 'The Vietnamese and Rhino horn-a dealer speaks', *Swara*, October 2011, pp. 33–37.

Armstrong Soule, C. A. and Reich, B. J. (2015) 'Less is more: is a green demarketing strategy sustainable?', *Journal of Marketing Management*. Routledge, 31(13-14), pp. 1403–1427.

Arnould, E. J. and Thompson, C. J. (2005) 'Consumer Culture Theory (CCT): Twenty Years of Research', *The Journal of consumer research*, 31(4), pp. 868–882.

Aron, A. and Aron, E. N. (1986) *Love and the expansion of self: Understanding attraction and satisfaction*. New York, NY: Hemisphere Publishing Corp/Harper & Row Publishers.

Atkin, D. (2004) 'The culting of brands.' *When Customers Become True Believers*, New York: Portfolio.

Ayling, J. (2013) 'What sustains wildlife crime? Rhino horn trading and the resilience of criminal networks'. *Journal of International Wildlife Law & Policy*, 16(1), pp.57-80.

Bagozzi, R. P., Gopinath, M. and Nyer, P. U. (1999) 'The Role of Emotions in Marketing', *Journal of the Academy of Marketing Science*. SAGE Publications Inc, 27(2), pp. 184–206.

Ball, A. D. and Tasaki, L. H. (1992) 'The Role and Measurement of Attachment in Consumer Behavior', *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*, 1(2), pp. 155–172.

Balmford, A. and Cowling, R. M. (2006) 'Fusion or failure? The future of conservation biology', *Conservation biology: the journal of the Society for Conservation Biology*. Wiley Online Library, 20(3), pp. 692–695.

Batra, R. and Ahtola, O. T. (1991) 'Measuring the hedonic and utilitarian sources of consumer attitudes', *Marketing letters*. Springer, 2(2), pp. 159–170.

Batra, R., Ahuvia, A. and Bagozzi, R. P. (2012) 'Brand Love', *Journal of marketing*. SAGE Publications Inc, 76(2), pp. 1–16.

Bauer, H. H., Heinrich, D. and Martin, I. (2007) 'How to create high emotional consumer-brand relationships? The causalities of brand passion', *Proceedings of the Australian and New Zealand Market Acad, University of Otago*, pp. 2189–2198.

BBC Online (2018) 'China's ban on ivory trade comes into force', *BBC Online*, 1 January 2018. Available from: <https://www.bbc.co.uk/news/world-asia-china-42532017> [Accessed: 17 November 2019]

BBC Online (2018) 'Hong Kong bans ivory trade in 'historic' vote', *BBC Online*, 31 January 2018. Available from: <https://www.bbc.co.uk/news/world-asia-china-42891204>. [Accessed: 17 November 2019]

Bearden, W. O. and Etzel, M. J. (1982) 'Reference Group Influence on Product and Brand Purchase Decisions', *The Journal of consumer research*, 9(2), pp. 183–194.

Becken, S. et al. (2017) 'Monitoring the environment and human sentiment on the Great Barrier Reef: Assessing the potential of collective sensing', *Journal of environmental management*. Elsevier, 203(Pt 1), pp. 87–97.

Belk, R. W. (1975) 'Situational Variables and Consumer Behavior', *The Journal of consumer research*, 2(3), pp. 157–164.

Belk, R.W. (1985) 'Materialism: Trait aspects of living in the material world'. *Journal of Consumer research*, 12(3), pp.265-280.

Belk, R. W. (1988) 'Possessions and the Extended Self', *The Journal of consumer research*, 15(2), pp. 139–168.

Belk, R. W., Wallendorf, M. and Sherry, J. F. (1989) 'The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey', *The Journal of consumer research*, 16(1), pp. 1–38.

Belk, R.W., 2013. Extended self in a digital world. *Journal of consumer research*, 40(3), pp.477-500.

Belk, R., 2014. Alternative conceptualizations of the extended self. *ACR North American Advances*.

Bennett, N.J., Roth, R., Klain, S.C., Chan, K., Christie, P., Clark, D.A., Cullman, G., Curran, D., Durbin, T.J., Epstein, G. and Greenberg, A. (2017) 'Conservation social science: Understanding and integrating human dimensions to improve conservation.' *Biological Conservation*, 205, pp.93-108.

Bergenstock, D. J. and Maskulka, J. M. (2001) 'The De Beers story: are diamonds forever?', *Business horizons*, 44(3), pp. 37–44.

Beverland, M. (2004) 'Uncovering "theories-in-use": building luxury wine brands', *European journal of marketing*. Emerald Group Publishing Limited, 38(3/4), pp. 446–466.

Bhar, S. (2019) 'Introducing Phenomenological Research Methodology in Sustainable Consumption Literature: Illustrations From India', *International Journal of Qualitative Methods*. SAGE Publications Inc, 18, p. 1609406919840559.

Bieri, F. (2016) *From blood diamonds to the Kimberley Process: How NGOs cleaned up the global diamond industry*. Routledge.

Biernacki, P. and Waldorf, D. (1981) 'Snowball Sampling: Problems and Techniques of Chain Referral Sampling', *Sociological methods & research*. SAGE Publications Inc, 10(2), pp. 141–163.

Ble, D. (2008) *What's Driving the Wildlife Trade? A Review of Expert Opinion on Economic and Social Drivers of the Wildlife Trade and Trade Control Efforts in Cambodia, Indonesia, Lao PDR and Vietnam*. East Asia and Pacific Region Sustainable Development Discussion Papers. East Asia and Pacific Region Sustainable Development Department, World Bank, Washington, DC.

Bocconi, M. and White, T. (2013) 'Counter-brand and alter-brand communities: the impact of Web 2.0 on tribal marketing approaches', *New Developments in Online Marketing*. Routledge, p. 77.

Booth, T.C., Waldman, A.D., Wardlaw, J.M., Taylor, S.A. and Jackson, A., 2012. 'Management of incidental findings during imaging research in "healthy" volunteers: current UK practice.' *The British journal of radiology*, 85(1009), pp.11-21.

Bowlby, J., 1997. *Attachment* (Vol. 1). Random House.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative research in psychology*. Routledge, 3(2), pp. 77–101.

Bretschneider, E., (1910). *Mediaeval Researches from Eastern Asiatic Sources*, Vol. 1, 2, London: Kegan Paul, Trench, Trübner & Co.

Brookings Institute (2018) 'Figures of the week: Chinese investment in Africa', *Brookings, Washington DC*, 6 September 2018. Available at: <<https://www.brookings.edu/blog/africa-in-focus/2018/09/06/figures-of-the-week-chinese-investment-in-africa/>>. [Accessed: 18 November 2018]

Bryman, A. (2006). 'Integrating quantitative and qualitative research: how is it done?' *Qualitative research*, 6(1), pp. 97–113.

Burgess, G., Olmedo, A., Veríssimo, D. and Waterman, C., 2020. Changing consumer behavior for pangolin products. In *Pangolins* (pp. 349-366). Academic Press.

Burgess, J., Bedford, T., Hobson, K., Davies, G. and Harrison, C., (2003). '(Un)sustainable consumption.' *Negotiating environmental change: new perspectives from social science*, 261.

Capstone Vietnam (2018) 'How the Vietnamese use the Internet', *The PIE Blog*, March 2018. Available at <https://blog.thepienews.com/2018/03/how-the-vietnamese-use-the-internet-including-social-media>. [Accessed: 18 October 2019]

Carroll, B. A. and Ahuvia, A. C. (2006) 'Some antecedents and outcomes of brand love', *Marketing letters*, 17(2), pp. 79–89.

Cătălin, M. C. and Andreea, P. (2014) 'Brands as a Mean of Consumer Self-expression and Desired Personal Lifestyle', *Procedia - Social and Behavioral Sciences*, 109, pp. 103–107.

Challender D. (2011) 'Asian Pangolins: Increasing affluence driving hunting pressure.' *TRAFFIC Bulletin* 23, 92-93

Challender, D., Hywood, L. (2012) 'African pangolins: Under increased pressure from poaching and intercontinental trade.' *TRAFFIC Bulletin* 24, No 2

Challender, D. W. S. and MacMillan, D. C. (2014) 'Poaching is more than an Enforcement Problem', *Conservation Letters*. Wiley Online Library, 7(5), pp. 484–494.

Challender, DWS., Waterman, C., Baillie, JEM. (2014). Scaling up pangolin conservation. Recommendations from the 1st IUCN SSC Pangolin Specialist Group Conservation Conference, June 24-27, 2013, Singapore.

Chapman, J. (1999). *The art of rhinoceros horn carving in China*. Christies Wine Publications.

Chaudhuri, H. R. (2006). 'Of Diamonds and Desires: Understanding Conspicuous Consumption from a Contemporary Marketing Perspective.' *Academy of Marketing Science Review*, 2006 p.1.

Child, M.F., Roxburgh, L., Linh San, E.D., Raimondo, D. and Davies-Mostert, H. (2016). 'The red list of mammals of South Africa, Swaziland and Lesotho 2016.' South African National Biodiversity Institute and Endangered Wildlife Trust, South Africa.

Cho, J. Y. and Lee, E.-H. (2014) 'Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences', *The qualitative report*, 19(32), pp. 1–20.

Cialdini, R. B. and Cialdini, R. B. (1993) 'Influence: The psychology of persuasion'. Morrow New York.

Cialdini, R. B., Reno, R. R. and Kallgren, C. A. (1990) 'A focus theory of normative conduct: recycling the concept of norms to reduce littering in public places', *Journal of personality and social psychology*. American Psychological Association, 58(6), p. 1015.

Cialdini, R. B. and Trost, M. R. (1985) 'Social influence: Social norms, conformity and compliance', in Gilbert, D. T. (ed.) *The handbook of social psychology, Vols.* New York, NY, US: McGraw-Hill, x, pp. 1–2.

CITES (1993) Amendments to Appendices I and II of the Convention: Other Proposals, In: Report of the Secretariat, *CITES*, Geneva

CITES (2019) Revisions to resolution Conf. 9.14 (Rev COP17) on the conservation of and trade in African and Asian rhinoceroses, and associated decisions: Species specific matters: Rhinoceroses (*Rhinocerotidae* spp.), In: *CITES, Eighteenth meeting of the Conference of the Parties*, Colombo

Cohen, J.B. and Reed, A., 2006. 'A multiple pathway anchoring and adjustment (MPAA) model of attitude generation and recruitment.' *Journal of Consumer Research*, 33(1), pp.1-15.

Collins, A., Fraser, G. and Snowball, J., 2013. 'Rhino poaching: supply and demand uncertain.' *Science*, 340(6137), pp.1167-1167.

Courchamp, F. *et al.* (2006) 'Rarity value and species extinction: the anthropogenic Allee effect', *PLoS biology*, 4(12), p. e415.

Coutts, E. and Jann, B. (2011) 'Sensitive Questions in Online Surveys: Experimental Results for the Randomized Response Technique (RRT) and the Unmatched Count Technique (UCT)', *Sociological Methods & Research*, pp. 169–193.

Cova, B., Kozinets, R. V. and Shankar, A. (2007) *Consumer Tribes*. Routledge.

Creswell, J. (1998) *Qualitative inquiry and research design: Choosing among five traditions*, 2.

Creswell, J. W. *et al.* (2006) 'How interpretive qualitative research extends mixed methods research', *Research in the schools: a nationally refereed journal sponsored by the Mid-South Educational Research Association and the University of Alabama*. msra.org, 13(1), pp. 1–11.

Cronin, J. J. *et al.* (2011) 'Green marketing strategies: an examination of stakeholders and the opportunities they present', *Journal of the Academy of Marketing Science*. Springer, 39(1), pp. 158–174.

Crookes, D. J. and Blignaut, J. N. (2015) 'Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand', *Journal for Nature Conservation*, 28, pp. 11–18.

Csikszentmihalyi, M. and Halton, E. (1981) *The Meaning of Things: Domestic Symbols and the Self*. Cambridge University Press.

Dang Vu, H. N. and Nielsen, M. R. (2018) 'Understanding utilitarian and hedonic values determining the demand for rhino horn in Vietnam', *Human Dimensions of Wildlife*. Routledge, 23(5), pp. 417–432.

D'Arpizio, C., Levato, Prete, F., Del Fabbro, E., and de Montgolfi, J. (2018) *Luxury Goods Worldwide Market Study*, Fall-Winter 2018. Bain & Company, Milan

De Chernatony, L. and Dall'Omo Riley, F. (1998) 'Defining a "brand": Beyond the literature with experts' interpretations', *Journal of Marketing Management*. Taylor & Francis, 14(5), pp. 417–443.

Defra (2008) *A Framework for Pro-Environmental Behaviour*, Department for Environment, Food and Rural Affairs, London.

Dembkowski, S. and Hanmer-Lloyd, S. (1994) 'The environmental value-attitude-system model: A framework to guide the understanding of environmentally-conscious consumer behaviour', *Journal of Marketing Management*. Routledge, 10(7), pp. 593–603.

Diener, E. D. (1995) 'A value based index for measuring national quality of life', *Social indicators research*. Springer, 36(2), pp. 107–127.

Di Minin, E., Fink, C., Tenkanen, H. and Hiippala, T. (2018) 'Machine learning for tracking illegal wildlife trade on social media.' *Nature ecology & evolution*, 2(3), p.406.

Dobers, P. and Strannegård, L. (2005) 'Design, lifestyles and sustainability. Aesthetic consumption in a world of abundance', *Business Strategy and the Environment*. Wiley Online Library, 14(5), pp. 324–336.

Douglas-Hamilton, I. (1987) 'African elephants: population trends and their causes', *Oryx: the journal of the Fauna Preservation Society*. Cambridge University Press, 21(1), pp. 11–24.

Drury, R. (2011) 'Hungry for success: urban consumer demand for wild animal products in Vietnam', *Conservation and Society*. JSTOR, 9(3), pp. 247–257.

Dubois, B., Czellar, S. and Laurent, G. (2005) 'Consumer Segments Based on Attitudes Toward Luxury: Empirical Evidence from Twenty Countries', *Marketing letters*. Springer, 16(2), pp. 115–128.

Dubois, B. and Laurent, G. (1994). Attitudes towards the concept of luxury: An exploratory analysis. *ACR Asia-Pacific Advances*.

Dubois, B. and Paternault, C. (1995). 'Observations: Understanding the world of international luxury brands: The "dream formula."'. *Journal of Advertising research*.

Dunlap, R. E., & Van Liere, K. D. (1978). The "new environmental paradigm": A proposed measuring instrument and preliminary results. *Journal of Environmental Education*, 9, 10–19.

Dunlap, R. E. (2000) 'Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale', *The Journal of social issues*, 56(3).

Dunlap, R. E., Gallup, G. H., Jr and Gallup, A. M. (1993) 'Of global concern: Results of the health of the planet survey', *Environment: Science and Policy for Sustainable Development*. Taylor & Francis, 35(9), pp. 7–39.

Dunning, D. (2007) 'Self-Image Motives and Consumer Behavior: How Sacrosanct Self-Beliefs Sway Preferences in the Marketplace', *Journal of Consumer Psychology*, pp. 237–249.

Duthie, E., Verissimo, D., Keane, A. and Knight, A.T. (2017) 'The effectiveness of celebrities in conservation marketing.' *PloS one*, 12(7), p.e0180027.

Dwyer, S., Mesak, H. and Hsu, M. (2005) 'An Exploratory Examination of the Influence of National Culture on Cross-National Product Diffusion', *Journal of International Marketing*. SAGE Publications Inc, 13(2), pp. 1–27.

Eagle, L., Hamann, M. and Low, D. R. (2016) 'The role of social marketing, marine turtles and sustainable tourism in reducing plastic pollution', *Marine pollution bulletin*, 107(1), pp. 324–332.

Eatough, V. and Smith, J.A. (2008) 'Interpretative phenomenological analysis.' *The Sage handbook of qualitative research in psychology*, 179, p.194.

Eckles, D., Wightman, D., Carlson, C., Thamrongrattanarit, A., Bastea-Forte, M. and Fogg, B.J. (2009) 'Social responses in mobile messaging: influence strategies, self-disclosure, and source orientation.' In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1651-1654). ACM.

EIA (2011) 'Key features of the Asian Big Cat Skin and Bone Trade in China in 2005-2011.' *Environmental Investigation Agency, London, UK*

EIA (2013) Vietnam's Illegal Rhino Horn Trade: Undermining the Effectiveness of CITES. *Environmental Investigation Agency, Washington*

Eisingerich, A. B. *et al.* (2019) 'Hook vs. hope: How to enhance customer engagement through gamification', *International Journal of Research in Marketing*. Elsevier, 36(2), pp. 200–215.

Eisingerich, A. B. and Rubera, G. (2010) 'Drivers of Brand Commitment: A Cross-National Investigation', *Journal of International Marketing*. SAGE Publications Inc, 18(2), pp. 64–79.

Emslie, R. and Brooks, M. (1999) *African Rhino: Status Survey and Conservation Action Plan*. IUCN.

ENV (2014) 'Summary of Tiger Seizures 2006-2013.' *Hanoi, Vietnam*

Farley, J., Zahvoyska, L. and Maksymiv, L. (2009) 'Transdisciplinary paths towards sustainability: new approaches for integrating research, education and policy.' *Ecological economics and sustainable forest management: developing a transdisciplinary approach for the Carpathian Mountains*. IP Soloviy, WS Keeton (Eds.).–Lviv: UNFU Press, Liga-Press, pp.55-69.

Felbab-Brown, V. (2011) 'The disappearing act: The illicit trade in wildlife in Asia', *Brookings Institution, Washington*.

Felbab-Brown, V. (2013) The Illegal Trade in Wildlife in South East Asia and Its Links to East Asian Markets. In: An Atlas of Trafficking in South East Asia., ed. Chouvy, P. l.B Touris.

Fellmann, F. (2017) 'From Social Psychology to Cultural Psychology: The Redemption of Personality', *Psychology*, 08(10), pp. 1586–1600.

Ferraro, R., Escalas, J. E. and Bettman, J. R. (2011) 'Our possessions, our selves: Domains of self-worth and the possession--self link', *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*. Wiley Online Library, 21(2), pp. 169–177.

Fetters, M. D., Curry, L. A. and Creswell, J. W. (2013) 'Achieving integration in mixed methods designs-principles and practices', *Health services research*, 48(6 Pt 2), pp. 2134–2156.

Fogg, B.J., Cueller, G. and Danielson, D. (2007) 'Motivating, influencing, and persuading users: An introduction to captology.' In *The human-computer interaction handbook* (pp. 159-172). CRC Press.

Fogg, B.J. (2009) 'A behavior model for persuasive design.' In *Proceedings of the 4th international Conference on Persuasive Technology* (p. 40). ACM.

McCarthy, N. (2018) 'China now boasts more than 800 million internet users and 98% of them are mobile', *Forbes*, 23 August 2018. Available from: <https://www.forbes.com/sites/niallmccarthy/2018/08/23/china-now-boasts-more-than-800-million-internet-users-and-98-of-them-are-mobile-infographic/#1456952e7092>. [Accessed 26 October 2019].

Fatemi, A., Glaum, M. and Kaiser, S. (2018) 'ESG performance and firm value: The moderating role of disclosure.' *Global Finance Journal*, 38, pp.45-64.

Foscht, T. (2018) 'Blinds up or down? The influence of transparency, future orientation, and CSR on sustainable and responsible behavior', *European journal of marketing*. Emerald Publishing Limited, 52(3/4), pp. 476–498.

Fournier, S. (1998) 'Consumers and Their Brands: Developing Relationship Theory in Consumer Research', *Journal of Consumer Research*, pp. 343–353.

Fournier, S. and Alvarez, C. (2013) 'Relating badly to brands', *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*. Elsevier, 23(2), pp. 253–264.

Foxall, G. R. *et al.* (2006) 'Consumer Behavior Analysis and Social Marketing: The Case of Environmental Conservation', *Behavior and Social Issues*. Springer, 15(1), pp. 101–125.

French, J.R., Raven, B. and Cartwright, D. (1959) 'The bases of social power.' *Classics of organization theory*, 7, pp.311-320.

Gabriel, G., Hua, N. and Wang, J. (2012) 'Making a killing: A 2011 survey of ivory markets in China.' *International Fund for Animal Welfare, Beijing*.

Gadamer (1975) *Truth and method*. Continuum; New Ed edition (15 Oct. 2004), pp. 385–406.

Gao, Y. (2014) 'Elephant ivory trade in China: comparing different perspectives', *The Bulletin of the Yale Tropical Resources Institute*, pp. 32–33.

Gao, Y. and Clark, S. G. (2014) 'Elephant ivory trade in China: Trends and drivers', *Biological conservation*, 180, pp. 23–30.

Gao, Y. *et al.* (2016) 'Rhino horn trade in China: An analysis of the art and antiques market', *Biological conservation*, 201, pp. 343–347.

Gaur, S. S., Herjanto, H. and Makkar, M. (2014) 'Review of emotions research in marketing, 2002–2013', *Journal of Retailing and Consumer Services*. Elsevier, 21(6), pp. 917–923.

Giese, G., Lee, L.E., Melas, D., Nagy, Z. and Nishikawa, L. (2017) Foundations of ESG investing. *Part 1: How ESG Affects Equity*.

Giese, G., Lee, L.E., Melas, D., Nagy, Z. and Nishikawa, L. (2019) Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance. *The Journal of Portfolio Management*, 45(5), pp.69-83.

Geletkanycz, M. A. (1997) 'The salience of "culture's consequences": The effects of cultural values on top executive commitment to the status quo', *Strategic Management Journal*. Wiley Online Library, 18(8), pp. 615–634.

Gillan, S., Hartzell, J.C., Koch, A. and Starks, L.T. (2010) Firms' environmental, social and governance (ESG) choices, performance and managerial motivation. *Unpublished working paper*.

Gill-Simmen, L. et al. (2018) 'Brand-self connections and brand prominence as drivers of employee brand attachment', *AMS Review*. Springer, 8(3), pp. 128–146.

Giorgi, A. (1970) *Psychology as a Human Science*. New York: Harper & Row.

Glynn, A. N. (2013) 'What Can We Learn with Statistical Truth Serum? Design and Analysis of the List Experiment', *Public opinion quarterly*. 77(S1), pp. 159–172.

Goldstein, N. J., Cialdini, R. B. and Griskevicius, V. (2008) 'A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels', *The Journal of consumer research*. 35(3), pp. 472–482.

Goulding, C. (2005) 'Grounded theory, ethnography and phenomenology', *European journal of marketing*. Emerald Group Publishing Limited, 39(3/4), pp. 294–308.

Goulding, C. (2013) 'Learning to be tribal: facilitating the formation of consumer tribes', *European journal of marketing*. Emerald Group Publishing Limited, 47(5/6), pp. 813–832.

Greene, J. C. and Caracelli, V. J. (1997) 'Defining and describing the paradigm issue in mixed-method evaluation', *New directions for evaluation*. Wiley Online Library, 1997(74), pp. 5–17.

Greenfield, S. and Veríssimo, D. (2019) 'To What Extent Is Social Marketing Used in Demand Reduction Campaigns for Illegal Wildlife Products? Insights From Elephant Ivory and Rhino Horn', *Social marketing quarterly*. SAGE Publications Inc, 25(1), pp. 40–54.

Guagnano, G. A., Dietz, T. and Stern, P. C. (1994) 'Willingness to Pay for Public Goods: A Test of the Contribution Model', *Psychological science*. SAGE Publications Inc, 5(6), pp. 411–415.

Guest, G. (2013) 'Describing Mixed Methods Research: An Alternative to Typologies', *Journal of mixed methods research*. SAGE Publications, 7(2), pp. 141–151.

Guevarra, D. A. and Howell, R. T. (2014) 'To have in order to do: Exploring the effects of consuming experiential products on well-being', *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*, 25(1), pp. 28–41.

Gwin (2012) 'Rhino Wars', *National Geographic*, March 2012. Available at: <https://www.nationalgeographic.com/magazine/2012/03/> [Accessed: 4 October 2019].

Haas, T. C. and Ferreira, S. M. (2016) 'Combating Rhino Horn Trafficking: The Need to Disrupt Criminal Networks', *PloS one*. journals.plos.org, 11(11), p. e0167040.

Hall, R. J., Milner-Gulland, E. J. and Courchamp, F. (2008) 'Endangering the endangered: the effects of perceived rarity on species exploitation', *Conservation Letters*. Wiley Online Library, 1(2), pp. 75–81.

Hanley, N., Sheremet, O., Bozzola, M. and MacMillan, D.C. (2018) 'The allure of the illegal: choice modeling of rhino horn demand in Vietnam.' *Conservation Letters*, 11(3), p.e12417.

Hansen, J. and Wänke, M. (2011) 'The abstractness of luxury', *Journal Of Economic Psychology*. Elsevier, 32(5), pp. 789–796.

Han, Y. J., Nunes, J. C. and Drèze, X. (2010) 'Signaling Status with Luxury Goods: The Role of Brand Prominence', *Journal of marketing*. SAGE Publications Inc, 74(4), pp. 15–30.

Hassel, L.G. and Semenova, N. (2013) 'The added value of ESG/SRI on company and portfolio levels–What can we learn from research'. *CSR and beyond–A Nordic perspective*, pp.137-163.

Heidegger, M. (1994) *Hegel's Phenomenology of Spirit*. Indiana University Press.

Heidegger, M. (2010) *The Phenomenology of Religious Life*. Indiana University Press.

Heine, S. J. and Hamamura, T. (2007) 'In Search of East Asian Self-Enhancement', *Personality and social psychology review: an official journal of the Society for Personality and Social Psychology, Inc*, 11(1), pp. 4–27.

Henriksson, R., Livnat, J., Pfeifer, P., Stumpp, M. and Zeng, G. (2018) 'ESG Literature Review.' *Quantitative Management Associates & Stern Business School, New York*

Hinsley, A. *et al.* (2016) 'Estimating the extent and structure of trade in horticultural orchids via social media', *Conservation biology: the journal of the Society for Conservation Biology*. Wiley Online Library, 30(5), pp. 1038–1047.

Hinsley, A., Verissimo, D. and Roberts, D. L. (2015) 'Heterogeneity in consumer preferences for orchids in international trade and the potential for the use of market research methods to study demand for wildlife', *Biological conservation*. Elsevier, 190, pp. 80–86.

Hirschman, E. C. and Holbrook, M. B. (1982) 'Hedonic Consumption: Emerging Concepts, Methods and Propositions', *Journal of marketing*. SAGE Publications Inc, 46(3), pp. 92–101.

Hoeffler, S. and Keller, K. L. (2003) 'The marketing advantages of strong brands', *Journal of Brand Management*, 10(6), pp. 421–445.

Hoffmann and Lannes (2013) 'China's e-commerce prize.' *Bain & Company, Shanghai*

Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. SAGE Publications.

Hogg, M. K., Banister, E. N. and Stephenson, C. A. (2009) 'Mapping symbolic (anti-) consumption', *Journal of business research*. Elsevier, 62(2), pp. 148–159.

Holt, D.B. (2003) 'How to build an iconic brand.' *Market Leader*, 21, pp.35-42.

Horizon Key Research, USAid, Freeland, Conservation International (2012) ‘Report of Chinese Urban Residents Consumption Behavior and Protection Awareness Toward Wildlife’ (Draft).

HSI and CITES (2014) Viet Nam Rhino Horn Demand Reduction Campaign since August 2013, Humane Society International, Hanoi, Vietnam

Huang, M.-H. (2001) ‘The Theory of Emotions in Marketing’, *Journal of business and psychology*. Springer, 16(2), pp. 239–247.

Hübschle, A. (2016) *A game of horns: transnational flows of rhino horn*. (Doctoral dissertation, Universität Köln, Köln).

Hübschle, A. (2017) ‘Fluid interfaces between flows of rhino horn’, *Global Crime*. Routledge, 18(3), pp. 198–217.

Husic, M. and Cicic, M. (2009) ‘Luxury consumption factors’, *Journal of Fashion Marketing and Management: an international journal*. Emerald Group Publishing Limited, 13(2), pp. 231–245.

IFAW (2007) ‘China ivory trade poll’, *International Fund for Animal Welfare, Washington DC*. Available at: <https://www.ifaw.org/eu/projects/wildlife-crime-prevention-china>. [Accessed: 20 July 2014]

Isaac, N., Turvey, S, Collen, B, Waterman, C, Baillie, J.E.M. (2007). Mammals on the EDGE: Conservation Priorities Based on Threat and Phylogeny. PLoS ONE 2(3): e296. doi:10.1371/journal.pone.0000296

Isenhour, C. (2012) 'On the challenges of signalling ethics without the stuff: Tales of conspicuous green anti-consumption'. *Ethical consumption: Social value and economic practice*, 164.

IUCN (2013) 'Scaling up pangolin conservation' conference a success but highlights challenges to conserving pangolins,' *SSC Pangolin Specialist Group*, Singapore. Available at: www.pangolinsg.org. [Accessed 14 July 2014]

Ivankova, N. V., Creswell, J. W. and Stick, S. L. (2006) 'Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice', *Field methods*. SAGE Publications Inc, 18(1), pp. 3–20.

Jäckel, M. and Kochhan, C. (2000) 'Notwendigkeit und Luxus. Ein Beitrag zur Geschichte des Konsums', in Rosenkranz, D. and Schneider, N. F. (eds) *Konsum: Soziologische, ökonomische und psychologische Perspektiven*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 73–93.

James, W., Burkhardt, F., Bowers, F. and Skrupskelis, I.K., 1890. *The principles of psychology* (Vol. 1, No. 2). London: Macmillan.

Jansson, J., Marell, A. and Nordlund, A. (2010) 'Green consumer behavior : Determinants of curtailment and eco-innovation adoption', *Journal of Consumer Marketing*. Emerald Group Publishing Limited, 27(4), pp. 358–370.

Japutra, A. et al. (2014) 'The dark side of brand attachment: A conceptual framework of brand attachment's detrimental outcomes', *The Marketing Review*. ingentaconnect.com, 14(3), pp. 245–264.

Jiménez, F. R. and Voss, K. E. (2015) 'An alternative scale of emotional attachment', in *Proceedings of the 2010 Academy of Marketing Science (AMS) Annual Conference*. Springer, pp. 18–18.

Johnson, A. R., Matear, M. and Thomson, M. (2010) 'A coal in the heart: Self-relevance as a post-exit predictor of consumer anti-brand actions', *The Journal of consumer research*. University of Chicago Press Chicago, IL, 38(1), pp. 108–125.

Kapferer, J.-N. (1997) 'Managing luxury brands', *Journal of Brand Management*. Springer, 4(4), pp. 251–259.

Kemp, S. (1998) 'Perceiving luxury and necessity', *Journal Of Economic Psychology*. Elsevier, 19(5), pp. 591–606.

Kennaugh, A. (2016) 'Rhino rage: What is driving illegal consumer demand for rhino horn,' *NRDC, Washington DC*

Kenya Elephant Forum (2013) 'The Ivory Trade and Elephant Poaching: Factsheet 2'. *Kenya Elephant Forum, Nairobi*

Khanna, J. and Harford, J. (1996) 'The ivory trade ban: Is it effective?', *Ecological economics: the journal of the International Society for Ecological Economics*. Elsevier, 19(2), pp. 147–155.

Kibeom Lee, M. C. A. (2007) 'Factor Analysis in Personality Research', in Richard W. Robins, R. Chris Fraley, and Robert F. Krueger (ed.) *Handbook of Research Methods in Personality Psychology*. Guilford Publications.

Kim, H. and Markus, H. R. (1999) 'Deviance or uniqueness, harmony or conformity? A cultural analysis', *Journal of Personality and Social Psychology*, pp. 785–800.

Kleine, S. S. and Baker, S. M. (2004) 'An integrative review of material possession attachment', *Academy of marketing science review*, 1(1), pp. 1–39.

Knight Frank (2018) *Knight Frank Wealth Report 2018*. Knight Frank, London

Kotler, P. (1999) 'Demarketing yes, demarketing no.' *Brands, Consumers, Symbols and Research: Sidney J Levy on Marketing*, p.75.

Kuruoğlu, A. P. and Ger, G. (2015) 'An emotional economy of mundane objects', *Consumption Markets & Culture*. Routledge, 18(3), pp. 209–238.

Laufer, B. (1914) 'Chinese clay figures: Part 1 Prolegomena on the history of defensive armor'. *Publications of the Field Museum of Natural History. Anthropological Series*. Field Museum of Natural History, 13(2), pp. 73–315.

Leader-Williams, N. (1990) 'Black rhinos and African elephants: lessons for conservation funding', *Oryx: the journal of the Fauna Preservation Society*. Cambridge University Press, 24(1), pp. 23–29.

Lee, M. (2011) 'Anti-consumption and consumer resistance: concepts, concerns, conflicts and convergence', *European journal of marketing*. Translated by B. Cova. Emerald Group Publishing Limited, 45(11/12).

Lee, M., Motion, J. and Conroy, D. (2009) 'Anti-consumption and brand avoidance', *Journal of business research*. Elsevier, 62(2), pp. 169–180.

Leung, L. and Liang, J. (2019) 'Psychological Traits, Addiction Symptoms, and Feature Usage as Predictors of Problematic Smartphone Use Among University Students in China', in *Substance Abuse and Addiction: Breakthroughs in Research and Practice*. IGI Global, pp. 321–341.

- Leung, N. (2019) *China Brief: The state of the economy*. McKinsey.
- Levy, S. J. (1981) 'Intepreting Consumer Mythology: A Structural Approach to Consumer Behavior', *Journal of marketing*. SAGE Publications Inc, 45(3), pp. 49–61.
- Levy, S. J. (1999) 'Symbols for sale', *Brands, Consumers, Symbols and Research: Sidney J Levy on Marketing*. Sage, pp. 203–212.
- Li, J. J. and Su, C. (2007) 'How face influences consumption', *International Journal of Market Research*. researchgate.net, 49(2), pp. 237–256.
- Ling, S. and Milner-Gulland, E. J. (2006) 'Assessment of the sustainability of bushmeat hunting based on dynamic bioeconomic models', *Conservation biology: the journal of the Society for Conservation Biology*. Wiley Online Library, 20(4), pp. 1294–1299.
- Lin, Y. T. (2018) *The effects of hope and anxiety in driving consumer intentions to adopt new product solutions*. (Doctoral dissertation, Imperial College Business School.)
- Lopez, K. A. and Willis, D. G. (2004) 'Descriptive versus interpretive phenomenology: their contributions to nursing knowledge', *Qualitative health research*, 14(5), pp. 726–735.
- Luedicke, M. K., Thompson, C. J. and Giesler, M. (2010) 'Consumer Identity Work as Moral Protagonism: How Myth and Ideology Animate a Brand-Mediated Moral Conflict', *The Journal of consumer research*. 36(6), pp. 1016–1032.
- Luntz, F. (2007) *Words That Work: It's Not What You Say, It's What People Hear*. Hachette UK.

MacInnis, D. J. and de Mello, G. E. (2005) 'The Concept of Hope and its Relevance to Product Evaluation and Choice', *Journal of marketing*. SAGE Publications Inc, 69(1), pp. 1–14.

MacMillan, D. C. and Challender, D. W. S. (2014) 'Changing behavior to tackle the wildlife trade', *Frontiers in ecology and the environment*. ESAjournals, 12(4), pp. 203–203.

MacMillan, D. C. and Nguyen, Q. A. (2014) 'Factors influencing the illegal harvest of wildlife by trapping and snaring among the Katu ethnic group in Vietnam', *Oryx: the journal of the Fauna Preservation Society*. Cambridge University Press, 48(2), pp. 304–312.

Mahajan, V. and Wind, Y., 2002. 'Got emotional product positioning?.' *Marketing Management*, 11(3), p.36.

Manson, S. M. and Evans, T. (2007) 'Agent-based modeling of deforestation in southern Yucatan, Mexico, and reforestation in the Midwest United States', *Proceedings of the National Academy of Sciences of the United States of America*. National Acad Sciences, 104(52), pp. 20678–20683.

Marsat, S. and Williams, B. (2011) 'CSR and market valuation: International evidence.' In *International Conference of the French Finance Association (AFFI)*.

Martin, E. and Vigne, L. (2011) 'The Ivory Dynasty: A report on the soaring demand for elephant and mammoth ivory in southern China.' *The Aspinall Foundation and Columbus Zoo and Aquarium*.

McCay-Peet, L. and Quan-Haase, A. (2017) 'What is social media and what questions can social media research help us answer', *The SAGE handbook of social media research methods*. SAGE Publications Ltd London, pp. 13–26.

McCracken, G. (1986) 'Culture and consumption: A theoretical account of the structure and movement of the cultural meaning of consumer goods', *The Journal of consumer research*. The University of Chicago Press, 13(1), pp. 71–84.

McCracken, G. (1988) *The long interview* (Vol. 13). Sage.

Menon, A. and Menon, A. (1997) 'Enviropreneurial Marketing Strategy: The Emergence of Corporate Environmentalism as Market Strategy', *Journal of marketing*. SAGE Publications Inc, 61(1), pp. 51–67.

Merlo, O., Eisingerich, A.B. and Auh, S. (2014) 'Why customer participation matters.' *MIT Sloan Management Review*, 55(2), p.81.

Merlo, O., Eisingerich, A., Auh, S. and Levstek, J. (2018) 'The benefits and implementation of performance transparency: The why and how of letting your customers 'see through' your business.' *Business Horizons*, 61(1), pp.73-84.

Mick, D. G. and Buhl, C. (1992) 'A Meaning-based Model of Advertising Experiences', *The Journal of consumer research*, 19(3), pp. 317–338.

Mikulincer, M. *et al.* (2005) 'Attachment, caregiving, and altruism: boosting attachment security increases compassion and helping', *Journal of personality and social psychology*, 89(5), pp. 817–839.

Milliken, T., Shaw, J. and Emslie, R.H. (2012) 'The South Africa-Vietnam rhino horn trade nexus: a deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates.', Traffic International, Johannesburg.

Milner-Gulland, E. J. (1993) 'An econometric analysis of consumer demand for ivory and rhino horn', *Environmental & Resource Economics*, 3(1), pp. 73–95.

Milner-Gulland, E. J. (2012) 'Interactions between human behaviour and ecological systems', *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 367(1586), pp. 270–278.

Morse, J. M. (2010) 'Simultaneous and Sequential Qualitative Mixed Method Designs', *Qualitative inquiry: QI*. SAGE Publications Inc, 16(6), pp. 483–491.

Morse, J. M. and Cheek, J. (2014) 'Making room for qualitatively-driven mixed-method research', *Qualitative health research*. journals.sagepub.com, 24(1), pp. 3–5.

Nadal, A. and Aguayo, F. (2014) 'Leonardo's sailors: A review of the economic analysis of wildlife trade', *The Leverhulme Centre for the Study of Value*.

National Geographic (2013) 'The ivory trade: Thinking like a businessman to stop the business', *National Geographic, New York*, 26 February, 2013. Available at: <https://blog.nationalgeographic.org/2013/02/26/the-ivory-trade-thinking-like-a-businessman-to-stop-the-business/>. [Accessed: 24 July 2014]

Neubauer, B. E., Witkop, C. T. and Varpio, L. (2019) 'How phenomenology can help us learn from the experiences of others', *Perspectives on medical education*, 8(2), pp. 90–97.

Newing, H. (2010) *Conducting Research in Conservation: Social Science Methods and Practice*. Routledge.

News.com.au, (2018) 'China reconsiders its controversial decision to lift the ban on the use of tiger and rhino products', *News Corp Australia Network*, 13 November 2018. Available at: <https://www.news.com.au/technology/science/animals/china-reconsiders-its-controversial-decision-to-lift-the-ban-on-the-use-of-tiger-and-rhino-products/news-story/28dc17a41a4d4092803dd17c2d9a711d>. [Accessed: 27 December 2018]

Ng, Y.K. (1987) 'Diamonds Are a Government's Best Friend: Burden-Free Taxes on Goods Valued for Their Values', *The American economic review*. American Economic Association, 77(1), pp. 186–191.

Norenzayan, A. and Heine, S. J. (2005) 'Psychological universals: what are they and how can we know?', *Psychological bulletin*, 131(5), pp. 763–784.

Novik, V., Pinto, P. and Guerreiro, M. (2017) 'Analysis Of The Attachment-Aversion Model Of Consumer-Brand Relationships In A Different Cultural Background', *Journal of Spatial and Organizational Dynamics*. jsod-cieo.net, 5(3), pp. 278–295.

NSMC (2016) 'Social Marketing Benchmark Criteria', *National Social Marketing Association, London*. Available at: <https://www.thensmc.com/sites/default/files/benchmark-criteria-090910.pdf>. [Accessed: 17 July 2019]

Nuno, A. et al. (2013) 'A novel approach to assessing the prevalence and drivers of illegal bushmeat hunting in the Serengeti', *Conservation biology: the journal of the Society for Conservation Biology*, 27(6), pp. 1355–1365.

Nuno, A. and St. John, F. A. V. (2015) 'How to ask sensitive questions in conservation: A review of specialized questioning techniques', *Biological conservation*. Elsevier, 189, pp. 5–15.

Nguyen and Nguyen (2008) 'An overview of the use of plants and animals in traditional medicine systems in Viet Nam.' *TRAFFIC Southeast Asia, Greater Mekong Programme, Ha Noi, Viet Nam*.

OECD (2018) 'Economic Outlook for Southeast Asia, China and India 2018: Fostering Growth Through Digitalisation', *OECD Publishing, Paris*. doi: 9789264286184-en.

Oetzel, J. *et al.* (2001) 'Face and facework in conflict: a cross-cultural comparison of China, Germany, Japan, and the United States', *Communication monographs*. Routledge, 68(3), pp. 235–258.

Offord-Woolley, S. (2017) 'The Chi Initiative: A behaviour change initiative to reduce the demand for rhino horn in Viet Nam', *Pachyderm*. pachydermjournal.org, 0(58), pp. 144–147.

Oliver, R. L., Rust, R. T. and Varki, S. (1997) 'Customer delight: Foundations, findings, and managerial insight', *Journal of Retailing*. Elsevier, 73(3), pp. 311–336.

Olmedo, A., Sharif, V. and Milner-Gulland, E. J. (2018) 'Evaluating the design of behavior change interventions: a case study of rhino horn in Vietnam', *Conservation Letters*. Wiley Online Library, 11(1), p. e12365.

Pantel, S. and Chin, S.Y. eds. (2009) *Proceedings of the Workshop on Trade and Conservation of Pangolins Native to South and Southeast Asia: 30 June-2 July 2008*, Singapore Zoo. TRAFFIC Southeast Asia.

Park, C. W. *et al.* (2010) 'Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers', *Journal of marketing*. SAGE Publications Inc, 74(6), pp. 1–17.

Park, C. W., Eisingerich, A. B. and Park, J. W. (2013) 'Attachment–aversion (AA) model of customer–brand relationships', *Journal of consumer psychology: the official journal*

of the Society for Consumer Psychology. (Love and the expansion of self: Understanding attraction and satisfaction), 23(2), pp. 229–248.

Park, C. W. and MacInnis, D. J. (2006) ‘What’s In and What’s Out: Questions on the Boundaries of the Attitude Construct’, *The Journal of consumer research*, 33(1), pp. 16–18.

Park, C. W., MacInnis, D. J. and Priester, J. (2008) ‘Brand Attachment: Constructs, Consequences, and Causes’, *Foundations and Trends® in Marketing*. Now Publishers, 1(3), pp. 191–230.

Park, C.W., MacInnis, D.J. and Priester, J.R. (2007) ‘Brand attachment and management of a strategic brand exemplar.’

Parker, J. (2013) *The Mythic Chinese Unicorn*: FriesenPress.

Park, MacInnis and Priester (2007) ‘Brand Attachment and Management of a Strategic Brand Exemplar’.

Penrod, J., Preston, D.B., Cain, R.E. and Starks, M.T. (2003) ‘A discussion of chain referral as a method of sampling hard-to-reach populations.’ *Journal of Transcultural nursing*, 14(2), pp.100-107.

Persky, J. (1995) ‘The Ethology of Homo Economicus’, *Journal of Economic Perspectives*, pp. 221–223.

Pfund, J.L., O’Connor, T., Koponen, P. and Boffa, J.M. (2006) ‘Transdisciplinary research to promote biodiversity conservation and enhanced management of tropical landscape mosaics.’ In *IUFRO Landscape Ecology Conference, Italy*.

Phau, I. and Prendergast, G. (2000) ‘Consuming luxury brands: the relevance of the “rarity principle”’, *Journal of Brand Management*. Springer, 8(2), pp. 122–138.

Phu, E. (2014) Learnings and Insights from Social Media: proceedings of the Zoological Society of London Symposium: International wildlife trafficking: solutions to a global crisis. London, 12-13 February 2014

Pooley, S. P., Mendelsohn, J. A. and Milner-Gulland, E. J. (2014) ‘Hunting down the chimera of multiple disciplinarity in conservation science’, *Conservation biology: the journal of the Society for Conservation Biology*, 28(1), pp. 22–32.

Reid, K., Flowers, P. and Larkin, M. (2005) ‘Interpretative phenomenological analysis: An overview and methodological review’, *The Psychologist*.

Reyers, B. *et al.* (2010) ‘Conservation planning as a transdisciplinary process’, *Conservation biology: the journal of the Society for Conservation Biology*, 24(4), pp. 957–965.

Richins, M. L. (1994a) ‘Special Possessions and the Expression of Material Values’, *The Journal of consumer research*. Oxford University Press, 21(3), pp. 522–533.

Richins, M. L. (1994b) ‘Valuing Things: The Public and Private Meanings of Possessions’, *The Journal of consumer research*, 21(3), pp. 504–521.

Ricoeur, P. (1981) *Hermeneutics and the Human Sciences: Essays on Language, Action and Interpretation*. Cambridge University Press.

Rindell, A. (2014) ‘Ethical consumers’ brand avoidance’, *Journal of Product & Brand Management*. Emerald Group Publishing Limited, 23(2), pp. 114–120.

Rivalan, P. *et al.* (2007) 'Can bans stimulate wildlife trade?', *Nature*. nature.com, 447(7144), pp. 529–530.

Robinson, D. and Reed, V. (2019) *The A–Z of Social Research Jargon*. Routledge.

Romo, V. (2018) 'Sothebys and Bonhams bow to pressure and ban sale of rhino horn artefacts', *NPR*, 26 November 2018. Available at:
<https://www.npr.org/2018/11/26/671012239/sothebys-and-bonhams-bow-to-pressure-ban-the-sale-of-rhino-horn-artifacts?t=1574025223566> [Accessed: 17 November 2019].

Ross, J. and Tomlinson, B. (2011) 'Negabehaviors and environmental sustainability.' *Journal of Sustainability Education*, 2, p.2011.

Roux, D. (2007) 'Consumer Resistance: Proposal for an Integrative Framework', *Recherche et Applications en Marketing (English Edition)*. SAGE Publications, 22(4), pp. 59–79.

Ruby, M. B. and Heine, S. J. (2012) 'Too close to home. Factors predicting meat avoidance', *Appetite*, 59(1), pp. 47–52.

Russo C.M. (2012) 'How China is driving the grim rise in illegal ivory', *The Guardian*, 23 January 2012. Available at:
<https://www.theguardian.com/environment/2012/jan/23/china-rise-illegal-ivory> [Accessed 18 August 2018]

Sartre, J.P. (1956) *Being and Nothingness: An Essay on Phenomenological Ontology*. 1943. Trans. Hazel E. Barnes. New York: Philosophical Library.

Saunders, C. D. (2003) 'The Emerging Field of Conservation Psychology', *Human Ecology Review*. Society for Human Ecology, 10(2), pp. 137–149.

Schau, H. J., Muñiz, A. M. and Arnould, E. J. (2009) 'How Brand Community Practices Create Value', *Journal of marketing*. SAGE Publications Inc, 73(5), pp. 30–51.

Schneider, J. L. (2008) 'Reducing the Illicit Trade in Endangered Wildlife: The Market Reduction Approach', *Journal of contemporary criminal justice*. SAGE Publications Inc, 24(3), pp. 274–295.

Schouten, J. W. and McAlexander, J. H. (1995) 'Subcultures of Consumption: An Ethnography of the New Bikers', *The Journal of consumer research*, 22(1), pp. 43–61.

Schultz, P. W. *et al.* (2007) 'The constructive, destructive, and reconstructive power of social norms', *Psychological science*. journals.sagepub.com, 18(5), pp. 429–434.

Scott, F. and Yelowitz, A. (2010) 'Pricing anomalies in the market for diamonds: Evidence of conformist behaviour', *Economic inquiry*. Wiley Online Library, 48(2), pp. 353–368.

Sedikides, C., Gaertner, L. and Vevea, J. L. (2005) 'Pancultural self-enhancement reloaded: a meta-analytic reply to Heine (2005)', *Journal of personality and social psychology*, pp. 539–551.

Shepherd, C.R. (2009) 'Overview of pangolin trade in Southeast Asia.' In *Proceedings of the workshop on trade and conservation of pangolins native to South and Southeast Asia* (Vol. 30, pp. 6-9).

Shepherd, C. R., Gray, T. N. E. and Nijman, V. (2018) 'Rhinoceros horns in trade on the Myanmar–China border', *Oryx: the journal of the Fauna Preservation Society*. Cambridge University Press, 52(2), pp. 393–395.

Sherry, J. F. (1991) 'Postmodern alternatives: the interpretive turn in consumer research', *Handbook of consumer behavior*. Englewood Cliffs, NJ: Prentice-Hall, 199, pp. 548–591.

Sheth, J. N., Newman, B. I. and Gross, B. L. (1991) 'Why we buy what we buy: A theory of consumption values', *Journal of business research*. Elsevier, 22(2), pp. 159–170.

Shiu, E., Hassan, L. M. and Walsh, G. (2009) 'Demarketing tobacco through governmental policies--the 4Ps revisited', *Journal of business research*. Elsevier, 62(2), pp. 269–278.

Smith, J. A. and Shinebourne, P. (2012) *Interpretative phenomenological analysis*. American Psychological Association.

Smith, R. J., Veréssimo, D. and MacMillan, D. C. (2010) 'Marketing and Conservation: How to Lose Friends and Influence People', in Leader-Williams, N., Adams, W. M., and Smith, R. J. (eds) *Trade-Offs in Conservation*. Chichester, UK: Wiley-Blackwell, pp. 215–232.

Solomon, M. R. (1983) 'The role of products as social stimuli: A symbolic interactionism perspective', *The Journal of consumer research*. The University of Chicago Press, 10(3), pp. 319–329.

Sosnowski, M.C., Knowles, T.G., Takahashi, T. and Rooney, N.J., 2019. 'Global ivory market prices since the 1989 CITES ban'. *Biological Conservation*, 237, pp.392-399.

Soron, D. (2010) 'Sustainability, self-identity and the sociology of consumption', *Sustainable Development*, 18(3), pp. 172–181.

Species Survival Network & ENV (2014) CAGED ASSETS: TIGER FARMING AND TRADE. Species Survival Network (SSN) Big Cat Working Group and Education for Nature – Vietnam (ENV), Hanoi

Steele, L. G. and Lynch, S. M. (2013) The Pursuit of Happiness in China: Individualism, Collectivism, and Subjective Well-Being during China's Economic and Social Transformation, *Social indicators research*. Springer, 114(2). pp. 441-451

Stern, P. C. (1995) 'Understanding and Changing Environmentally Destructive Behavior', in Fuhrer, U. (ed.) *Ökologisches Handeln als sozialer Prozess: Ecological action as a social process*. Basel: Birkhäuser Basel, pp. 89–96.

Stern, P. C., Young, O. R. and Druckman, D. E. (1992) *Global environmental change: Understanding the human dimensions*. National Academy Press.

Stern, P.C. (1995) 'Understanding and changing environmentally destructive behavior.' In *Ökologisches Handeln als sozialer Prozeß*, Birkhäuser, Basel. pp. 89-96.

Stoner, S.S, and Pervushina, N. (2013). Reduced to Skin and Bones Revisited: An Updated Analysis of Tiger Seizures from 12 Tiger Range Countries (2000–2012). TRAFFIC, Kuala Lumpur, Malaysia.

Stiles (2008) 'An assessment of the illegal ivory trade in Viet Nam.' *TRAFFIC Southeast Asia, Petaling Jaya, Selangor, Malaysia*

St. John, F. A. V. *et al.* (2010) 'Testing novel methods for assessing rule breaking in conservation', *Biological conservation*, 143(4), pp. 1025–1030.

St John, F. A. V., Edwards-Jones, G. and Jones, J. P. G. (2011) 'Conservation and human behaviour: lessons from social psychology', *Wildlife research*. CSIRO PUBLISHING, 37(8), pp. 658–667.

Strauss, A. and Corbin, J. (1990) *Basics of qualitative research*. Sage publications.

Tessier, S. (2012) 'From Field Notes, to Transcripts, to Tape Recordings: Evolution or Combination?', *International Journal of Qualitative Methods*. SAGE Publications Inc, 11(4), pp. 446–460.

Thaler, R. (1980) 'Toward a positive theory of consumer choice', *Journal of economic behavior & organization*. Elsevier, 1(1), pp. 39–60.

The Guardian (2018) 'Experts fear impact of China lifting trade ban on tiger and rhino parts', *The Guardian, London*, 3 November 2018. Available at: <https://www.theguardian.com/environment/2018/nov/03/experts-fear-impact-of-china-lifting-trade-ban-on-tiger-and-rhino-parts>. [Accessed: 3 November.]

Thompson, C. J., Locander, W. B. and Pollio, H. R. (1989) 'Putting Consumer Experience Back into Consumer Research: The Philosophy and Method of Existential-Phenomenology', *The Journal of consumer research*, 16(2), pp. 133–146.

Thompson, C. J., Locander, W. B. and Pollio, H. R. (1990) 'The Lived Meaning of Free Choice: An Existential-Phenomenological Description of Everyday Consumer Experiences of Contemporary Married Women', *The Journal of consumer research*, 17(3), pp. 346–361.

Thompson, C. J. (1996) 'Caring Consumers: Gendered Consumption Meanings and the Juggling Lifestyle', *Journal of Consumer Research*, p. 388.

Thompson, C. J., Rindfleisch, A. and Arsel, Z. (2006) 'Emotional Branding and the Strategic Value of the Doppelgänger Brand Image', *Journal of marketing*. SAGE Publications Inc, 70(1), pp. 50–64.

Thomson, M. (2006) 'Human brands: Investigating antecedents to consumers' strong attachments to celebrities', *Journal of marketing*. SAGE Publications Sage CA: Los Angeles, CA, 70(3), pp. 104–119.

Thomson, M., MacInnis, D. J. and Park, C. W. (2005) 'The ties that bind: Measuring the strength of consumers' emotional attachments to brands', *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*. Elsevier, 15(1), pp. 77–91.

Toivonen, T. *et al.* (2019) 'Social media data for conservation science: A methodological overview', *Biological conservation*, 233, pp. 298–315.

Tourangeau, R. and Yan, T. (2007) 'Sensitive questions in surveys', *Psychological bulletin*, 133(5), pp. 859–883.

Traffic (2013) Consumer factsheet: Rhino horn consumers: Who are they? Traffic International, Hanoi

Traffic (2014) Analysis of seizure data for *Manis* spp. submitted by Member States of the European Union to the European Union to the European Commission, January 2012-December 2013 SC65 Doc. 27.1 Annex 4

Truong, V. D., Dang, N. V. H. and Hall, C. M. (2016) 'The marketplace management of illegal elixirs: illicit consumption of rhino horn', *Consumption Markets & Culture*. Routledge, 19(4), pp. 353–369.

't Sas-Rolfes, M., Challender, D.W., Hinsley, A., Veríssimo, D. and Milner-Gulland, E.J., 2019. Illegal wildlife trade: scale, processes, and governance. *Annual Review of Environment and Resources*, 44, pp.201-228.

Ulrich, R. *et al.* (2012) 'Asking sensitive questions: a statistical power analysis of randomized response models', *Psychological methods*, 17(4), pp. 623–641.

Unattributed (n.d.) 'The Rhino and the Bling'.

United Nations Environment Programme (2014) (Unpublished) Collaborative action to address the illegal trade in wildlife and timber. Nairobi, Kenya

United Nations Office on Drugs and Crime (2016) *World wildlife crime report: trafficking in protected species*. United Nations Office on Drugs and Crime (UNODC).

Vaismoradi, M., Turunen, H. and Bondas, T. (2013) 'Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study', *Nursing & health sciences*, 15(3), pp. 398–405.

Valle, R. S. and Halling, S. E. (1989) *Existential-phenomenological perspectives in psychology: Exploring the breadth of human experience*. Plenum Press.

Vanham, P. (2018) 'The story behind Viet Nam's miracle growth', *World Economic Forum, Cologny*, 11 September 2018. Available at: <https://www.weforum.org/agenda/2018/09/how-vietnam-became-an-economic-miracle/> [Accessed: 6 October 2019].

Van Kaam, A. (1966) 'Application of the phenomenological method', *AL van Kaam, Existential foundations of psychology*, pp. 294–329.

Veblen, T. (1899) *The theory of the leisure class*. Routledge.

Venkataraman, B. (2007) 'A Matter of Attitude: The consumption of wild animal products in Ha Noi, Viet Nam', *TRAFFIC Southeast Asia, Greater Mekong Programme, Hanoi, Viet Nam*.

Verhage, B. J., Dahringer, L. D. and Cundiff, E. W. (1989) 'Will a global marketing strategy work? An energy conservation perspective', *Journal of the Academy of Marketing Science*. Springer, 17(2), pp. 129–136.

Veríssimo, D. (2013) 'Influencing human behaviour: an underutilised tool for biodiversity management', *D. Verissimo / Conservation Evidence*, 2, pp. 9–31.

Veríssimo, D. and Wan, A. K. Y. (2019) 'Characterizing efforts to reduce consumer demand for wildlife products', *Conservation biology: the journal of the Society for Conservation Biology*. Wiley Online Library, 33(3), pp. 623–633.

Vigneron, F. and Johnson, L. W. (2004) 'Measuring perceptions of brand luxury', *Journal of Brand Management*. Springer, 11(6), pp. 484–506.

Vinson, D. E., Scott, J. E. and Lamont, L. M. (1977) 'The Role of Personal Values in Marketing and Consumer Behavior', *Journal of marketing*. SAGE Publications Inc, 41(2), pp. 44–50.

Waylen, K. A. *et al.* (2010) 'Effect of local cultural context on the success of community-based conservation interventions', *Conservation biology: the journal of the Society for Conservation Biology*, 24(4), pp. 1119–1129.

White, A., Breazeale, M. and Webster, C. (2012) 'Motivations for the brand avoidance relationship', in *Consumer-Brand Relationships*. Routledge, pp. 83–99.

The White House (2013) 'Press Release: Executive Order — Combatting Wildlife Trafficking.' Office of the Press Secretary, Washington DC

WildAid (2012) Ivory Demand in China (Survey). WildAid, Beijing

Winn, P. (2012) 'Vietnam: we're too poor to fuel rhino horn craze', *Global Post*, 29 August 2012. Available at: <https://www.pri.org/stories/2012-08-29/vietnam-were-too-poor-fuel-rhino-horn-craze> [Accessed: 6 October 2019].

Wittemyer, G. *et al.* (2014) 'Illegal killing for ivory drives global decline in African elephants', *Proceedings of the National Academy of Sciences of the United States of America*, 111(36), pp. 13117–13121.

Wong, A. C. Y. and Zaichkowsky, J. L. (1999) 'Understanding Luxury Brands in Hong Kong', in *E - European Advances in Consumer Research* Volume 4, eds. Bernard Dubois, Tina M. Lowrey, and L. J. Shrum, Marc Vanhuele, Provo, UT : Association for Consumer Research, Pages: 310-316.

Wong, R. W. Y. (2019) 'China and the Illegal Wildlife Trade', *The Illegal Wildlife Trade in China*, pp. 13–38.

Woods, R. (2004) 'Exploring the emotional territory for brands', *Journal of Consumer Behaviour*. Wiley Online Library, 3(4), pp. 388–403.

Wu, S., Liu, N., Zhang, Y. and Ma, G.Z., 2004. Assessment of threatened status of Chinese Pangolin (*Manis pentadactyla*). *Chinese Journal of Applied and Environmental Biology*, 10(4), pp.456-461.

World Bank Group (2016) 'New Analysis Shows Scale of International Commitment to Tackle Illegal Wildlife Trade: Over \$1.3 Billion Since 2010', *World Bank, New York*, 17

November 2016. Available at: <https://www.worldbank.org/en/news/press-release/2016/11/17/new-analysis-shows-scale-of-international-commitment-to-tackle-illegal-wildlife-trade-over-13-billion-since-2010>. [Accessed: 18 November 2019]

World Bank (2018) *Wildlife Law Enforcement*. World Bank, Washington DC

Wright, A. J. et al. (2015) 'Competitive outreach in the 21st century: Why we need conservation marketing', *Ocean & coastal management*, 115, pp. 41–48.

WWF and Dalberg (2012) 'Fighting illicit wildlife trafficking: A consultation with governments.' *WWF International, Gland, Switzerland*

Yuan, Y. and Lei, M. (2017) 'The Negative Effect of Brand Attachment: How Attachment Styles Help Explain Anti-Brand Behavior', *Open Journal of Business and Management*, 05(01), pp. 141–148.

Zain, S. (2012) 'Behaviour change we can believe in: towards a global demand reduction strategy for tigers', *TRAFFIC International, Cambridge*.

Zeng, R. and Greenfield, P. M. (2015) 'Cultural evolution over the last 40 years in China: using the Google Ngram Viewer to study implications of social and political change for cultural values', *International journal of psychology*. Wiley Online Library, 50(1), pp. 47–55.

Zeng, Shang & Chishty (2015) *The Evolution of China's Private Wealth Market*. Bain & Company, Boston MA

Zhang, L. Yin, F. (2012). Wildlife consumption and conservation awareness in China: a long way to go. In: Hawksworth, D., ed. *Biodiversity and Conservation*. Springer.

Zhou, Z. Zhou, Y. Newman, C. and Macdonald, D (2014) Scaling up pangolin protection in China. *Frontiers in Ecology and the Environment* 12: 97–98.

Zigerell, L. J. (2011) ‘You Wouldn’t Like Me When I’m Angry: List Experiment Misreporting’, *Social science quarterly*, 92(2), pp. 552–562.

Zoller, U. (2000) ‘Environmental chemistry: The disciplinary/correction-transdisciplinary/prevention paradigm shift’, *Environmental science and pollution research international*. Springer, 7(2), pp. 63–65.

ZSL (2014) ‘EDGE’, London. Available at: www.edgeofexistence.org. [Accessed: 7 July 2014]

APPENDIX A: STUDY 1

APPENDIX A.1

Questionnaire for analysis & review of Demand Reduction initiatives for endangered species

Name of organisation

Key individuals involved and location

Date project or research was carried out

Location in which project or research was carried out

Would you summarise the nature of the demand reduction project or research carried out?

What was the scope of the project?

What was the primary aim of your work?

1) Demand reduction through behaviour change through awareness raising

2) Demand reduction through Behaviour change through demand

3) Influencing policy or legislation change?

4) Mapping the market? If so, which area? Why?

How did it/would you like it to inform demand reduction for illegal wildlife products?

Was it commissioned by a government or any other party?

Did you hire any external party to do the work? if so, how did you select them?

How did you go about doing this - what was the methodology used?

What were your findings?

What future projects would you like to see done which would be i) helpful to you in carrying out your own work ^[17]_{SEP} ii) in general?

Is there anything that wasn't captured that you believe is important to mention?

What do you believe will be the most effective way of reducing demand? Tell us why.

APPENDIX A.2

Species-specific overview and analysis of consumption data gathered from non-peer reviewed literature in Study 1

Drivers of demand: key themes

Increased affluence

A consistent theme raised in the analysis of non-peer reviewed literature is that increased affluence is one of the facilitating factors for increased demand with wealth, rather than poverty, cited as a strong driver of demand in South East Asia (Nguyen and Nguyen, 2008; Traffic, 2013; CITES, 2014). Related to this is the insight that consumer demand appears to be fuelled by rarity, increasing desirability. Though specific reasons behind consumers' decision to buy or consume varies according to animal product, the research examined suggests that in general, purchasing these items has become a signifier and enhancer of status given the twin characteristics of high value and scarcity. Further related to affluence, the literature revealed the perceived investment value of some illegal wildlife products as a driver of demand. IFAW describes how shrinking returns on traditional investments such as stocks and real estate are driving Chinese investors to buy elephant ivory, rhino horns and tiger-bone wine. These are new asset classes based on ancient Chinese traditions and the increasing rarity of certain wildlife species (IFAW, 2011).

The online trade was identified as a highly relevant threat as a conduit in the illegal wildlife trade. As of April 2010, China became the largest online user country in the world (IFAW, 2011) and overtook the US as the biggest online shopper in 2013 (Hoffman & Lannes, 2013). Chinese Internet users numbered over 610 million by the end of January 2014 - nearly twice as many users as there are people in the US-. Due to its autonomous nature, global reach

which raises a number of law enforcement issues, and its use in building effective national and international networks (Stoner and Pervushina, 2013), the online market place has become an area of focus for several organisations monitoring the illegal wildlife trade and a number of surveys and interventions have been carried out.

A rise in illegal demand

PIKE data, ETIS figures and weights of ivory seizures, and mortality curves from specific populations show an apparent but statistically insignificant increase after 1999, and a rapid and highly-significant acceleration after 2008 to 2012 (Kenya Elephant Forum, 2013).

Price inflation

An analysis of price rises per kilogram of raw ivory in China shows significant rises between 2010 and 2014, growing from \$750 (£437) in 2010 to \$2,100 (£1225) in 2014 and representing a trebling in price-. This follows a previous trebling in prices between 2005 and 2011 (IFAW, 2011).

Cultural values & status

Traffic International notes that:

‘Ivory, historically, was a substance from which Chinese artisans would produce magnificent sculptures. But these offerings were only available to the imperial court and the aristocracy in different Chinese dynasties, and perhaps exceedingly wealthy business people. Now, with the phenomenal economic growth that China has experienced, you have more disposable income, more wealth distributed through the population than ever before. So even middle-class people are able to own pieces of ivory. And ivory confers status.’ (Russo, 2012)

A revival of traditional arts and crafts as a means of exhibiting status has contributed to ivory products being termed as “white gold” by Chinese collectors and investors, with products fetching high prices at auction (IFAW, 2011). From 2010-2011, the total number of ivory items auctioned on record in mainland China doubled and total sales volume increased by 170% (IFAW, 2011). IFAW notes that after the establishment of the ivory registration system in 2004 by China’s State Forestry Administration (SFA), there was a significant increase in both ivory processing and retail stores. Within three years, authorised ivory processing manufacturers increased from 9 to 17 and accredited wholesalers and retailers increased from 31 to 87. Developments in the investment climate are also cited as a driver of ivory being described as a new ‘asset class’ for investment, particularly given low rates of return from traditional asset classes such as equities and property.

Turning to illegal ivory, throughout the period 2009-2013 successive ETIS analyses have identified China as the leading destination. Using the ETIS Transaction Index as a reflection of growing ivory demand, Chinese involvement in the illicit ivory trade grew by 3.5% per annum between 1998 and 2013, with a greater rate of increase in recent years. There was also a reported surge in cross border trade between China and Vietnam during this period. A 2008 survey and study of the Vietnam ivory market conducted by Traffic noted that whilst the scale of the market remained modest on a global scale, the great increase in prices of raw and worked ivory, the larger number of outlets selling ivory, and the observed upsurge in activity of craftsmen working ivory between 2001 and 2008 all strongly suggested that demand for ivory was rising (Traffic, 2008). Since that time seizure data notably included the uncovering of 11 tonnes of ivory destined for Vietnam and the Philippines between October 2008 and March 2009 (Kenya Elephant Forum, 2013).

Foreign exchange incentives exist, where currency fluctuations may also have fuelled demand to some extent, given that the strength of the Chinese Yuan against the US dollar

provides a favourable incentive for Chinese to purchase ivory in US dollars, in turn making it attractive for illegal traders to engage in ivory smuggling operations (IFAW, 2011). In overseas markets where illegal ivory is sourced, the strengthened RMB provides more purchasing power for Chinese buyers who convert Chinese Yuan to US dollars for ivory purchases. The illegally obtained ivory, when successfully smuggled into China and sold under the cover of the legal market, can bring substantial profits (IFAW, 2011).

Activation vs evaluation of demand reduction campaigns

WildAid founder Peter Knights observes that the proportion of funding absorbed in research and analysis should be compared with that being used to activate actual implementation. Past interventions have seen the bulk of funds going into research analysis and assessment, in his view, with a significantly lower proportion being used for implementation. This will go some way to ensuring that the scale required to reach an effective ‘tipping point’ for efficacy is achieved - prior to 2011, the funding behind demand-side initiatives was not great enough to achieve this ‘tipping point.’

Consumer attitudes: Species-specific findings

Ivory

From the literature, the main findings on consumer attitudes and behaviours around the purchase of ivory were synthesised as follows.

Buyers fell into two categories. The first were middle to upper-middle class and had relatively higher levels of income and education (CI and Freeland, 2012). 68% of families had bought at least one piece of ivory (National Geographic, 2013). For this group, reasons to buy included reasons of tradition, status and investment. Those buying for reasons of tradition described their purchases as cultural relics (WCS, 2013), conferring on them cultural links to

defining status given that ivory carvings have traditionally been bought/owned by a privileged elite (IFAW, 2007). Reasons to buy were described as a demonstration of privileged social and collector status (IFAW, 2007), and gifting ivory demonstrated affluence; private gift giving amongst families and social circle was noted (IFAW, 2007; WildAid 2012). Around half of consumers described ivory as a ‘rarity’ in one survey (National Geographic, 2013). Investment value was cited as a further reason, because value was thought to grow as an item becomes more rare/desirable (IFAW, 2007). Ivory was dubbed ‘white gold’ by investors for its investment value, with items rising in price at auction (IFAW, 2011).

Looking through the lens of attitudes towards conservation and morality, notable findings included fewer than 20% associating ownership of ivory with animal cruelty (National Geographic, 2013); 34% believing that ivory comes from elephants who die naturally (WildAid, 2012); and almost half being unaware of the official license system for ivory (IFAW, 2013). The second consumer group were female city dwellers (WCS, 2013) who bought items as fashion or ornamental items (CI and Freeland, 2012), and as purchases made whilst on holiday (WCS, 2013).

Rhino

Rhino horn prices rose over the period to highly inflated levels, with media reports citing prices of \$65,000 per kilogram, or nearly \$30,000 per pound, on global black markets, making it worth more than the street price of cocaine at the time of writing. In 2006, one average-sized rhino horn typically sold for about \$760. Today, the same horn may fetch more than \$57,000. With its roots as an ingredient in traditional Chinese medicine, the literature shows that contemporary usage in Vietnam, thought to be the main consumer market of rhino horn, now extends far beyond the treatment of basic ailments. Traffic’s extensive research reveals how urban myths not only cite rhino horn as a cure for life-threatening diseases such

as cancer, but also as a treatment for symptoms that can accompany the lifestyles of the affluent - excessive food, drink and drugs. Local websites describe rhino horn with wine as “the alcoholic drink of millionaires” (Milliken and Shaw, 2012).

Vietnam is cited as the leading destination for illegal rhino horn, though this view is based largely on anecdotal and observational accounts (Traffic, 2013). China is also cited as ‘stepping back into the trade’ based on data of seizures in China (Traffic, 2013). This view is also supported by the emergence of growing exports from Europe to China and Hong Kong of antique and sport-hunted rhino horns acquired at auction (before EU regulation foreclosed on such trade), and growing awareness of Chinese involvement in the Vietnamese trade, for example regular cross-border tourist purchases of bracelets (Traffic, 2013).

A series of factors have been suggested by the literature as drivers of demand for rhino horn, which cumulatively have pushed prices to highly inflated levels and fuelled a worldwide trade thought to be have been worth as much as \$9.5bn annually by 2012 (WWF/Dahlberg, 2012). Vietnam’s leading role in the consumption of illegal rhino horn is attributed to a mix of factors underpinned by unprecedented economic growth in the country, where GNP growth averaged 7% annually for most of the preceding decade. This new wealth and affluence overlay a tradition of using rhino horn as traditional medicine (Traffic, 2013), and combined with a perception of its rarity, medical efficacy and high price, have led to a shift in recent years of consumer attitudes around rhino horn. Traffic (2013) consumer attitude survey data reveals that consumers perceive purchasing rhino horn as a signifier of status, evidenced by the fact that at these prices, only a wealthy elite have the purchasing power to be able to buy.

Alongside price inflation, the number of Vietnam’s high net worth individuals continues to grow, fuelling a booming market for luxury goods and providing an indicator of growing affluence and purchasing power. As a marker of Vietnam’s growing interest in luxury purchases and its growing affluence, Bain’s Luxury Goods Worldwide Market Study notes that

the country's luxury goods market was worth around \$405 million in 2013, and forecast to grow. In tandem, the number of High Net Worth Individuals was forecast to increase by 85% in the coming decade, according to Knight Frank's 2013 Wealth Report. Based on this data, the segment of consumers able to afford to buy rhino horn looks set to continue to grow.

Use of traditional medicines has also experienced a significant resurgence, particularly in the last quarter of the 20th century, with government policies designed to enable the development of both traditional and Western medicines (Milliken and Shaw, 2012). The scale of traditional medicine usage within Vietnam is significant with at least 48 hospitals and institutes devoted to the practice, over 240 traditional medicine departments in central and provincial hospitals, and over 9000 health centres reportedly licensed to practise traditional medicine (Nguyen and Nguyen, 2008). Within this context, Vietnam has an ancient history of using rhino horn as a traditional medicine to cure a range of illnesses. Traffic has undertaken extensive research into the evolving reasons behind the use of rhino horn for medicinal use in Vietnam, and found that uses beyond those found in historical pharmacopoeia have arisen in recent years. Emerging evidence of rhino horn being used as a palliative medicine for cancer, though previously never having been indicated for this purpose, is central to this consideration and is believed to be a significant factor in the upsurge in rhino horn trading in Vietnam. This is supported by urban myths such as those uncovered by Traffic researchers in Hanoi's traditional medicine markets, where local traditional medicine practitioners told stories of important individuals – an unnamed Prime Minister, or another celebrity, for example – who had cancer but were miraculously cured, or were at least in remission, following treatment with rhino horn (Milliken and Shaw, 2012).

Contemporary usage also extends well beyond cancer to detoxification and the treatment of symptoms that can accompany the lifestyles of the affluent - food, drink and drugs. Local websites have also been found to promote the ability of rhino horn "to improve

concentration and cure hangovers” and to describe rhino horn with wine as “the alcoholic drink of millionaires” and “like a luxury car”. In addition, rhino horn was also cited as having aphrodisiac effects for men by some sources. (Milliken and Shaw, 2012).

The illegal rhino trade, characterised by organised crime syndicates engaged in poaching and smuggling in both range and consumer countries, has been described by CITES as ‘one of the most structured criminal activities currently faced’ across its scope of work (EIA, 2013). Asian-run, African-based criminal networks have been identified as being behind most of the rhino horns moving out of Africa to Asia via a number of means. Criminal operations include those run by Vietnamese nationals out of established footholds in South Africa and Mozambique; Vietnamese nationals posing as trophy hunters in South Africa acquiring trophy horns for commercial trade purposes in Vietnam - as well as bogus trophy hunters recruited by resident Vietnamese from the Czech Republic and potentially other parts of Europe; acquisition of ‘loose’ unregistered rhino horn from private sector sellers for export to Vietnam; financing of the development of local networks facilitating the acquisition of poached/stolen horn; and Vietnamese networks operating in Europe and North America engaging in the illegal procurement of rhino horn. Further to this prosecutions and convictions of Vietnamese nationals and others has occurred in the US where legally obtained sporting trophies have been illegally exported to Vietnam and China (Milliken and Shaw, 2012; Traffic 2013).

Surveys on consumer attitudes towards rhino horn consumption were carried out by NGOs Traffic, and by HIS in association with CITES most recently. From these surveys, the main findings on consumer attitudes and behaviours around the purchase of rhino horn may be synthesised as follows: the main users of the product were men over 40 (Traffic 2013), with women supplying their families. Also, the literature identified a group of ‘intenders’; of those not using rhino horn currently, 16% are said they wanted to buy or consume rhino horn in the future.

Reasons to buy were identified as twofold; first for reasons of tradition, and second to confer or convey status. Looking first at tradition, an underlying belief in health benefits (Traffic, 2013) was cited. Users were often health conscious, with reasons like detoxification as a use for rhino horn, alongside a view that the product could cure anything from a hangover to serious illnesses. A very small percentage of purchases were made from traditional medicine doctors or clinics (HSI, 2013). Also unearthed was a belief by consumers that having it at home ensured the wellbeing of their families (Traffic, 2013).

Turning to status-driven purchases, consumers were seen as influential people in Vietnamese society. Buyers and users form a powerful social network consisting of important individuals with whom it is crucial to maintain good relationships, with rhino horns sometimes bought with the sole purpose of being gifted to others - family members, business colleagues, or others in authority. The rarity of the product adds to its appeal both because the network of those able to access supply is very limited, and the product itself is perceived as rare.

The literature addressed attitudes towards conservation and morality, finding that some were consumers aware that animals are killed in order to obtain horn, but feel disconnected from this, leading to a sense of absolved responsibility from the current rhino poaching crisis, and the extinction of the species (Traffic, 2013). Most buyers and users knew that rhinos are impacted by demand for rhino horn and that demand is likely to outstrip supply, with a third of buyers or users in one survey saying it did not matter to them if rhinos become extinct (HSI, 2013). Further views included the opinion that if the species is lost forever, they personally would not be affected and so do not care about the issue (Traffic, 2013). Rhino horn consumers also said they used other illegal wildlife products, for example bear bile and tiger bone (Traffic, 2013). Around a quarter of respondents in one survey did not know it is illegal to buy horn (HSI 2013)

Tiger

Both China and Vietnam have been identified as important zones of consumption for illegal tiger products. Whole skins are in some cases promoted as status symbols for decorative purposes as demand for skin in clothing has dwindled. In Vietnam, the most commonly used tiger part is bone, which is boiled until it forms a glue-like substance known as cao; this is then dried and ground to a fine powder to be consumed with alcohol (Stoner & Pervushina, 2013). Tiger bone wine, often marketed as a general tonic and aspirational purchase, is priced at accordingly high prices and is perceived as being bought by those of high status.

Comparison of seizure data over the periods 2000-2009 and 2010-12 suggests if not an overall increase in trade, then at least persistent demand, with seizure data and contents pointing to indications of a possible organised transnational crime networks (Traffic, 2013; Stoner & Pervushina, 2013). Since 2000 there have been 654 seizures of tiger parts and derivatives across 12 tiger range countries, representing an estimated total of a minimum of 1425 tigers seized over the period. Given that seizure data represents only the fraction of tigers in the illegal trade intercepted by law enforcement, the scale of criminal activity represents a serious threat to wild tiger populations' survival, generally considered to be as low as 3200 individuals (Stoner & Pervushina, 2013).

Both China and Vietnam have been identified as important zones of consumption for illegal tiger products, with these two countries reporting the most seizures of tiger products after India in terms of quantity between 2000 and 2012 (Stoner & Pervushina, 2013). Hanoi and Ho Chi Minh City in Vietnam have been identified as key tiger crime trade hubs, with data also pointing to Guangzhou, China, as a location of concern given an increase in seizures (Stoner & Pervushina, 2013). The proportion of total seizures accounted for by Vietnam has increased most notably over this period, rising from 6% to 14% though this could be attributed

to factors such as improved law enforcement, as well as trade remaining active (Stoner & Pervushina, 2013).

Demand for illegal tiger parts falls broadly into two categories, skins and bone (EIA, 2011). Tiger skins were the most commonly seized items over the period 2000-2013, accounting for almost half of all commodity types seized. However more recently during the period 2010-2013 the proportion being skins has declined with around 1/4 of all seizures being bone (Stoner & Pervushina, 2013).

Skins of tigers continue to be sold in China (EIA, 2011), with reported seizures across TRCs cited to be destined for markets in China. Evidencing consumer demand for tiger products in Vietnam, tiger bone being the most commonly used tiger part in this country, an investigation by ENV Vietnam in 2010 revealed that tigers sourced from farms in Lao and elsewhere are typically smuggled into the country with traders often selling animals to brokers organising glue-making operations (Stoner & Pervushina, 2013). ENV Vietnam's database of seizures and illegal trade activities/law contraventions has logged a total of 280 violations involving tigers and tiger products over the period 2006-2013 (ENV, 2014). These include 120 incidents of advertising tiger products, 55 possession cases involving both live and trophy tigers, and 107 violations involving smuggling and trade of tigers.

China went from being a range country with the greatest number of tigers to one of the least over a relatively short period of time. This was attributed to China's use of tiger bone in traditional medicine (Stoner & Pervushina, 2013). In China, tiger bone use in medicine was made illegal under 1993 State Council Order. Whilst raw tiger bone was still available to buy in Western China as late as 2011, surveys and studies by Traffic and EIA note that little packaged and branded tiger medicine was found in recent years leading up to 2011, coupled with relatively high levels of awareness amongst traders and industry. Anecdotal evidence from

Vietnam suggests that tiger bone remains in use as a traditional medicine, thought to provide general resilience, and treat arthritis and bone problems.

Following the successful decline in demand for clothing purposes, EIA (2011) cites the promotion of trade in whole skins as a status symbol for decorative purposes as a further driver of trade in tiger skins. The Species Survival Network and ENV (2014) also cites use by high status individuals for luxury home decorative purposes, noting that the outcome of recent corruption cases in China confirms the ‘gifting’ of tiger skins as non-financial bribes to officials in some cases–.

The legal domestic trade in skins of captive tigers has been cited as perpetuating the desirability of tiger parts, and potentially driving the illegal trade (Species Survival Network, 2014). EIA notes that the means by which to distinguish legal from illegal products is insufficient (EIA, 2011).

It is suggested that there is less clarity around the legal status of tiger bone wine, which is often marketed as a general tonic and high status purchase, and often sold to high status individuals, such as government and business people (EIA, 2011).

In Vietnam, rapid economic expansion has been cited as contributing to the rise in consumer demand for products such as tiger bone wine (Stoner & Pervushina, 2013) which may be perceived to confer status given their relatively high price. As a growing number of consumers become more affluent, their purchasing power becomes greater. Analysis of Chinese trade data shows that a shift to online trade is taking place. Surveys conducted by Traffic in 2012 on the online trade highlighted a number of items being offered for sale with 270 advertisements purporting to offer illegal tiger products. Further analysis shows how advertisements then directed interested buyers to communicate via online messaging services (Stoner & Pervushina, 2013).

No stand-alone surveys of consumer attitudes towards tiger parts were conducted within the scope of the project's parameters. However Traffic's extensive research of the market for tiger parts from 1994 and analyses of seizure data from 2000-2012 combined with a small amount of data from Conservation International and Freeland 2012's China wildlife consumption survey & EIA studies of 2011 provide the following insight into consumer attitudes and behaviours around the purchase and usage of tiger parts.

For clothing, the literature revealed that whole skins were bought by high status individuals. Tiger bone wine was bought by government officials, high status individuals such as business people (EIA, 2011), and for use in Traditional Chinese Medicine (Traffic, 2007).

Reasons to buy included tradition, status and health. Tradition was cited as a reason for buying both in clothing and traditional Chinese medicine contexts (Traffic, 2007). Turning to status, whole skins were perceived as a status symbol for home decorative purposes (EIA, 2011); gifting as bribes was cited (Species Survival Network 2014); and tiger bone wine was perceived as a high value, high status purchase (EIA, 2011). The health benefits of tiger parts referred to tiger bone wine as a general wellness tonic (EIA, 2011), and bone consumed as an ingredient for medicine or healthcare - one of the top five species consumed in Beijing and Nanning (CI.& Freeland 2012).

There was relatively high awareness that tigers are endangered and protected, and that the trade is illegal outside the trade in captive tiger skins (Traffic, 2007).

Pangolin

According to research by the IUCN SSC Pangolin Specialist Group, pangolins are now the most illegally traded mammal in the world, with more than one million individuals believed to have been taken from the wild over the past decade. All eight pangolin species are now listed as threatened with extinction largely due to trade destined for China and Vietnam (IUCN,

2014). All eight species of pangolin are classified as EDGE species - the world's most Evolutionarily Distinct and Globally Endangered (EDGE) species as classified by the ZSL EDGE Programme, representing a unique and irreplaceable part of the world's natural heritage, yet receiving little conservation attention to date.

Despite international protection through CITES, and legal protection of varying levels at national levels, the illegal trade of pangolins continues on a large scale (Chin & Pantel, 2009). Fuelled by Asian demand for pangolin meat which is consumed as a delicacy, and for scales destined for use in traditional Chinese medicine, increasing rarity continues to push prices ever higher, increasingly conferring status on those with the ability to buy.

China is cited as the key consumer market of pangolin parts with Vietnam also featuring as a primary demand market (Challender & Hywood, 2012). Vietnam has also been cited as the 'back door' to the pangolin trade in China, with most pangolin shipments seized here reportedly heading for China, according to cases documented by the ENV Wildlife Crime Unit (Chin & Pantel, 2009).

In determining the size of the market and evidence of rising demand, available price and seizure data may be examined as indicators, though seizure data may also reflect greater levels of enforcement.

Demand for pangolin products in Chinese markets remains high with Guangzhou believed to represent the biggest destination for smuggled pangolins at the time of a 2007-8 survey (Chin & Pantel, 2009). By 2007, it was estimated that an annual average of between 100,000 and 135,000 pangolins were needed to meet demand in China (Wu et al., 2007). In 2009 an estimated 117,500 of pangolins per year were in demand (Chin & Pantel, 2009).

The price of pangolin products has escalated substantially since 2008, with prices for a live pangolin rising from \$80 per kilogram to over \$200 per kilogram in 2014, and scale prices from \$300 to \$600 per kilo in Kunming, the capital of Yunnan Province, China (Zhou, Zhou,

Newman & MacDonald, 2014). 2008 prices for live pangolins were found to be almost 20 times higher than that of the early 1990s; while 2008 prices for pangolin scales were 100 times higher than that of the early 1980s (Chin & Pantel, 2009). Price rises have subsequently restricted the availability of these products to wealthy consumers and contributed to a continued overland trade from Vietnam into China (Chin & Pantel, 2009).

A zero quota for trade in wild caught pangolins was imposed in 2000 for the three then known Asian species followed by a zero export quota established in 2007 when the Philippine pangolin was recognised as a species distinct from the Sunda pangolin. However the several hundred seizures of pangolins in trade that have taken place demonstrates the scale of illegal trade that continues (Challender, 2011). Between 2000 and the end of 2012, there had been 825 seizures involving Asian species of pangolin and/or their products recorded in Asia (collated from local/national Asian media sources and the international press). These involved an estimated 218,155 pangolins.

Frequent seizures occurred in 2013 suggesting trade is ongoing, including 2592kg of scales representing around 4870 pangolins seized between 2010-2013 in China's Yunnan Province alone (Zhou, Zhou, Newman & MacDonald, 2014), and 232 live Asian pangolins seized in the five months between January and May 2013 (CITES 2014). Postal services are also being used as a means to trade, with Beijing customs officials having apprehended several parcels containing around 1100kg of scales over an 8-month period in 2013 (Zhou, Zhou, Newman & MacDonald, 2014). The very large nature of some seizures indicates the involvement of organised criminal trade syndicates. (Traffic, 2013).

Whilst demand for pangolins in China was previously met with supply nationally and from imports from neighbouring countries, depletion of populations due to the extent of the international trade has caused the harvesting of pangolins to shift south, placing pressure on populations across Asia (Challender, 2011). Countries closest to China have seen dramatic

declines in wild populations of pangolins and subsequently traders are sourcing animals further afield in Indonesia and Malaysia to meet Chinese demand (Chin & Pantel, 2009). The bulk of supply today is being met with Sunda pangolins, though the Philippine pangolin is appearing in international trade. All indications suggest that the destination of these products is China (Challender, 2011).

Although evidence for the scale of trade in pangolins from Africa is extremely limited, recent data reveals the growing intercontinental trade in pangolin derivatives between African range states and East Asian markets, including each of the four species in Africa (Challender & Hywood, 2012, Challender, 2011). A number of seizures in Asia of African pangolins provide evidence of this intercontinental trade in African pangolins (Challender & Hywood, 2012), and recent data from seizures of frozen pangolins are reflective of an escalating rate of illegal trade mostly from Africa to Asia (CITES, 2014).

Seizure data submitted by the Member States of the European Union to the European Commission shows that the majority of seizure records reported for 2012 and 2013 involved the seizure of pangolin parts and products exported from West and Central Africa with over 80% of items destined for Hong Kong and mainland China. In view of information on trade routes involved in EU seizures of pangolin, it may be assumed that the majority of seizures carried out in EU member states in 2012 and 2013 involved African species of pangolin rather than Asian (Traffic, 2014).

Several further significant seizures have been made on the African continent, with the reported destination of items being either the international trade and/or Asia. Furthermore, some seizure data support the hypothesis that the illegal intercontinental trade in African pangolins may use rhino horn and ivory trading routes (Challender, 2011).

In general, reasons for purchase revealed by the data showed that pangolins and their products are sourced for two main uses: restaurants for special occasion celebrations where

their meat is consumed as a delicacy, and traditional Chinese medicine preparations (Chin & Pantel, 2009). Pangolin meat is considered a luxury, with demand fuelled by rarity and the subsequent perception that consumption is a signifier and enhancer of status. As such pangolin may be consumed by state officials and business people in celebration of business deals or similar special occasions. Pangolins are usually served from live and whole in high-end speciality restaurants or with animals being sold by weight (Chin & Pantel (ed.), 2009). Pangolin scale has a long history of use in traditional Chinese medicine given a belief in its ability to detoxify and treat a variety of medical conditions, including asthma and the improvement of blood circulation (Zhou, Zhou, Newman & MacDonald, 2014, Challender, 2011).

The decline in pangolin populations in Asia, increased economic exchange between Africa and China, and increased Chinese presence in Africa (Challender & Hywood, 2012) are cited as drivers of Asian demand for African pangolin species. Providing further anecdotal evidence to support seizure data of the growing intercontinental trade in pangolin derivatives between African range states and East Asian markets, ongoing research by conservationists in Ghana and Gabon indicates that demand continues from China in the form of unlimited orders for pangolins (Challender & Hywood, 2012).

The growth of demand is thought to be underpinned by increasing affluence in China and Vietnam (Challender, 2011). Relatively high and rising prices restrict purchase to a relatively wealthy consumer segment. Rapid economic growth has seen this segment of the consumer market grow, signifying greater purchasing power. Lucrative prices have also been cited as a driver for actors in the international trade (Pantel and Yun (ed.), 2009) given the potential financial rewards on offer.

Whilst no initiatives were conducted in the scoping period solely to assess consumer attitudes towards pangolin consumption, a large amount of research conducted by members of

the IUCN Pangolin Specialist Group and its partners have provided an insight into consumer attitudes to consumption of pangolin parts and derivatives. In addition, the IUCN Pangolin Specialist Group has identified a series of user groups for both scales and meat in line with its recommendations for effective demand reduction (Challender, Waterman & Baillie, 2014). A small amount of data from Conservation International and Freeland 2012's China wildlife consumption survey which featured the inclusion of pangolins also exists. These sources combined provide the following insight into consumer attitudes and behaviours around the purchase and usage of pangolin parts.

For pangolin meat as a delicacy, state officials, business people (Chin & Pantel 2009) and affluent consumers 'trying something new' amongst friends (Challender & Baillie, 2014) were cited as consumers by the literature. There was also a marginal family market characterised as those trying an exotic meat at festivals (Challender & Baillie, 2014). For pangolin scale, Traditional Chinese Medicine practitioners were cited as buyers (Traffic 2008, Challender & Baillie, 2014).

Reasons to buy were cited as tradition, health and status. Pangolin has a long history of use in traditional medicine (Zhou, Zhou, Newman & MacDonald, 2014; Challender, 2011) and this is somewhat mingled with its health-giving properties. Scales are used to treat a number of conditions (Traffic 2008). Purchasing pangolin meat appears to confer status, given that it is bought in restaurants to demonstrate status, celebrate business deals (Chin & Pantel 2009) and used whole (foetuses) in wine. It is cited as a curiosity or wild meat, featured in specialist wild meat restaurants (CI & Freeland 2012).

APPENDIX B: STUDY 2

APPENDIX B.1

Questionnaire: Analysis & review of Demand Reduction initiatives for endangered species

Programmer note: *Random allocation to 1) Baseline UCT; 2) Treatment Group UCT*

Capture date: _____ **Capture respondent Number:** _____

We are conducting a short survey about the views of people in Vietnam about lifestyle, brands, and product purchases. The questionnaire will only take around 5 minutes to complete.

If you choose to take part in the questionnaire, all your answers will be completely anonymous and cannot be traced back to you.

Section 1: About you

1.1) Gender: Male/Female

1.2) Age: 18-25 _____ 26-45 _____ 46-65 _____ 66+ _____

1.3) Level of education [tick one]

a) Primary b) Secondary c) University degree/higher education d) None

1.4) What is your occupation (*tick as appropriate*)?

a) Freelance /consultant b) Office worker c) Blue collar - unskilled/skilled d) Homemaker e) Business owner f) Government officer g) Student h) Management j) Retiree k) Professor/academic l) Doctor/Lawyer m) Teacher n) Other

Please specify.....

1.5) Location of your residence: City/Region?

Section 2) General opinion on lifestyle, brands, and product purchases

Below are a number of things other people have said about their attitude to lifestyle, brands and other product purchases. Please indicate your level of agreement with each statement using a scale from 1 to 9, where 1 means you don't agree at all and 9 means you agree completely.

a) It is important to me to be able to own luxury goods	1 2 3 4 5 6 7 8 9
b) The approval of my family and friends is important to me	1 2 3 4 5 6 7 8 9
c) It is important to me to be able to buy branded or premium goods for business contacts and colleagues	1 2 3 4 5 6 7 8 9
d) The majority of my friends don't enjoy buying branded and lifestyle items	1 2 3 4 5 6 7 8 9

Section 3) Lifestyle and product purchases

This section is about products you may have bought or activities you may have carried out in the last 12 months.

3.1) Please read the list of activities below and count up how many of them you have done in the last 12 months. Choose the number from the drop down list.

1. My home has undergone renovation
2. Purchased an item of art for my home
3. Purchased a piece of a piece of antique or new ivory as an investment
4. Purchased a piece of antique furniture to display in my home
5. Employed a cleaner or maid

3.2) Please indicate how many of the following you have done in the last 12 months. Choose the number from the drop down list.

1. I have invested in real estate or another property
2. I have invested in vintage wine or liquor
3. I have bought ivory, for example a carved item, as an investment
4. I have made investments on the stock market
5. I have bought gold as an investment

3.3) Please indicate how many of the following you have bought for yourself in the last 12 months. Choose the number from the drop down list.

1. a new motorcycle

2. a new car made by an international car maker^{[1][1]}_[SEP]
3. designer perfume or aftershave^{[1][1]}_[SEP]
4. a trinket or keepsake made from ivory, for example chopsticks, figurines
5. a new mobile phone

3.4) Please indicate how many of the following you have bought as a gift for a personal friend or family member in the last 12 months . Choose the number from the drop down list.

1. Designer perfume or aftershave as a gift
2. ^{[1][1]}_[SEP]Taken them out for a meal or drinks^{[1][1]}_[SEP]
3. An electronic item, for example a tablet or iphone, as a gift^{[1][1]}_[SEP]
4. A gift item made from ivory, for example a carving, ornament, figurine, pendant, chopsticks
5. A designer branded item such as a purse, wallet, or handbag as a gift

3.5a) Have you bought a gift for a colleague or superior over the last 12 months? Y/N *Programmer note: If Y, go to part (b), if N, skip directly to the next question.*

3.5b) Please indicate how many of the following you have bought as a gift for a colleague or superior over the last 12 months. Choose the number from the drop down list.

1. a premium liquor
2. an antique vase or ceramic object^{[1][1]}_[SEP]
3. taken them out for a meal or drinks^{[1][1]}_[SEP]
4. an item made from ivory as a gift, for example a carved piece, ornament, figurine, pendant, chopsticks^{[1][1]}_[SEP]
5. a designer branded item such as a purse, wallet, or handbag as a gift^{[1][1]}_[SEP]

Section 4) General opinion on lifestyle, brands, and product purchases

4.1a) From the list of items below, which would you say is the most desirable to people you know? Pick one only

4.1b) Which is the second most desirable? Pick one only

	Most Desirable	Second Most Desirable
a) Designer leather goods e.g. handbags, wallets		
b) Designer fashions		
c) Products made from rhino horn		
d) Imported car brands		

i) Leading electronic brands (e.g. ipad, iphone)		
j) Ivory products		
k) Antiques		

4.2a) Why do you think *(insert item chosen at 4.1a)* is the most desired? Please write answer below

4.2b) What are the first words that come to mind when you think of the type of person who owns *(insert item chosen at 4.1a)*? Please write answer below.

4.3a) You chose *(insert item chosen at 4.1b)* as the second most desirable, why do you think these items are desired? Please write answer below

If ivory not mentioned at Q4.1a, Ask: 4.3b) What are the first words that come to mind when you think of the type of person who owns ivory products? Please write answer below

Section 5) Your opinion on selected products

5.1) Which, if any, of the following words do you strongly associate with *(insert item chosen at 4.1a – if ivory chosen at 4.1a then replace with item chosen at 4.1b)*? You can select as many or as few as appropriate

a) Craftsmanship b) High quality c) Selfish d) Treat e) Unethical f) Indulgence g) Over priced h) Rare i) Luxury j) Sexy k) High Status l) Exclusive m) Old fashioned n) Accessible o) Useless p) None of these words

Do any other words come to mind? If so write them here: _____

5.2) Which, if any, of the following words do you strongly associate with ivory? You can select as many or as few as appropriate.

a) Craftsmanship b) High quality c) Selfish d) Treat e) Unethical f) Indulgence g) Over priced h) Rare i) Luxury j) Sexy k) High Status l) Exclusive m) Old fashioned n) Accessible o) Useless p) None of these words

Do any other words come to mind? If so write them here: _____

5.3) Please consider how you feel about and what you associate with *(insert item chosen at 4.1a – if ivory chosen at 4.1a then replace with item chosen at 4.1b)* and for each of the statements below rate

your level of agreement. Using a scale from 1 to 9, where 1 means you don't agree at all and 9 means you agree completely.

Programming – please insert item chosen at 4.1a where XX is in all statements below – if ivory chosen at 4.1a then replace with item chosen at 4.1b.

XX are appealing and attractive to me	1 23456789
XX give me sensory pleasure (e.g. feel good to touch, look at)	1 23456789
XX connect to me emotionally	1 23456789
XX help me feel safe and secure	1 23456789
XX help me feel part of a connected group	1 23456789
XX help enhance my relationships with those I am close to	1 23456789
XX help express my identity	1 23456789
XX help me appreciate my heritage and where I am from	1 23456789
XX improves the quality of my life with their performance	1 23456789
XX helps make my daily life easier	1 23456789
The majority of people in my business circle think that XX is a prestigious gift	1 23456789
Most people in my community believe that buy- ing XX is a good thing	123456789

5.4) Now please consider how you feel about and what you associate with ivory products (e.g. carved, wellness, medicinal use, other decorative objects) and for each of the statements below rate your level of agreement. Using a scale from 1 to 9, where 1 means you don't agree at all and 9 means you agree completely.

Ivory products are appealing and attractive to me	1 23456789
Ivory products give me sensory pleasure (e.g. feel good to touch, look at)	1 23456789
Ivory products connect to me emotionally	1 23456789
Ivory products help me feel safe and secure	1 23456789
Ivory products help me feel part of a connected group	1 23456789
Ivory products help enhance my relationships with those I am close to	1 23456789
Ivory products help express my identity	1 23456789
Ivory products help me appreciate my heritage and where I am from	1 23456789

Ivory products improve the quality of my life with their performance	1 23456789
Ivory products help make my daily life easier	1 23456789
The majority of people in my business circle think that ivory products are a prestigious gift	1 23456789
Most people in my community believe that buying ivory products is a good thing	1 23456789

3.2) What words best characterise how you evaluate [insert item selected at 1.1a - if ivory chosen, insert item chosen at 1.1b]?

a. Is [insert item selected at 1.1a - if ivory chosen, insert item chosen at 1.1b]...

i) Unappealing or appealing to you?

-4 -3 -2 -1 0 1 2 3 4

ii) Unattractive or attractive to you? -4 -3 -2 -1 0 1 2 3 4

b. Does [insert item selected at 1.1a - if ivory chosen, insert item chosen at 1.1b]

i) Lower or enhance the quality of your life with its functional performance?

-4 -3 -2 -1 0 1 2 3 4

ii) Hinder or help you make daily life easier (time efficiency, money savings, comfort, convenience, etc.)?

-4 -3 -2 -1 0 1 2 3 4

c. Does [insert item selected at 1.1a - if ivory chosen, insert item chosen at 1.1b]...

i) Mischaracterise or characterise who you are as a person?

-4 -3 -2 -1 0 1 2 3 4

ii) Misrepresent or represent who you want to be?

-4 -3 -2 -1 0 1 2 3 4

iii) Undermine or reinforce your deepest values?

-4 -3 -2 -1 0 1 2 3 4

iv) Lower or enhance how you feel about yourself as a person? -

-4 -3 -2 -1 0 1 2 3 4

5.5) With [insert item selected at 4.1a - if ivory chosen, insert item chosen at 4.1b] in mind, please answer the following questions:

a) I feel personally disconnected from I feel personally connected to [item chosen at 4.1a/4.1b] [item

chosen at 4.1a/4.1b]

-4 -3 -2 -1 0 1 2 3 4

b) [Item chosen at 4.1a/b] IS NOT a part of me [Item chosen at 4.1a/b] / IS a part of me and who I am

-4 -3 -2 -1 0 1 2 3 4

c) With items made from ivory in mind, please answer the following questions: I feel personally disconnected from / I feel personally connected to ivory products

-4 -3 -2 -1 0 1 2 3 4

d) Ivory products ARE NOT a part of me Ivory products / ARE a part of me and who I am

-4 -3 -2 -1 0 1 2 3 4

5.6a) For each of the statements below regarding [Item selected at 4.1a, if ivory selected, insert item selected at 4.1b] please rate your level of agreement using a scale from 1 to 9, where 1 means you don't agree at all and 9 means you agree completely.

X says something to other people about who I am	1 23456789
My thoughts and feelings toward X are often automatic, coming to mind seemingly on their own	1 23456789
My thoughts about X come to mind naturally and instantly	1 23456789
I would be distressed if X were not available	1 23456789

5.6b) For each of the statements below regarding ivory products please rate your level of agreement using a scale from 1 to 9, where 1 means you don't agree at all and 9 means you agree completely.

Ivory products say something to other people about who I am	1 23456789
My thoughts and feelings toward ivory products are often automatic, coming to mind seemingly on their own	1 23456789
My thoughts about ivory products come to mind naturally and instantly	1 23456789
I would be distressed if ivory products were not available	1 23456789

5.6c) Which, if any, of the following groups, organisations or sources influence your opinion of [insert item chosen at 4.1a, if item at 4.1a was ivory, insert item chosen at 4.1b]?

a) Friends b) Family c) Business contacts d) Colleagues e) Government f) Vietnamese media
g) International media h) Social Media i) Advertising j) Celebrities

5.6d) Which, if any, of the following groups, organisations or sources influence your opinion of ivory products?

a) Friends b) Family c) Business contacts d) Colleagues e) Government f) Vietnamese media

g) International media h) Social Media i) Advertising j) Celebrities

Section 6) About your household

6.1) What is your household's annual income?

6.2) Do you own a car YES/NO If yes, what model?

6.3) Do you belong to any exclusive members' clubs (e.g. golf club).... YES/NO

6.4) Are you: Single_____ Married_____ Have children_____ Other_____

Thank you very much for your cooperation in responding to this questionnaire. Do you have any further comments on the questions covered? If so, please write them here _____

APPENDIX B.2

Brand AA Scores & Demographic Variables

- 1) Gaussian GLM to determine whether demographic variables influence Brand Attachment-Aversion Scores

<i>Independent Variable:</i>	<i>Dependent variable:</i>		
	Most Desirable	Ivory	Horn
Gender: Male	-0.719 (2.220)	1.334 (1.509)	-2.864 (6.483)
Age: 26-45	-0.679 (2.453)	0.779 (1.754)	6.575 (8.463)
Age: 46-65	4.304 (5.772)	-1.461 (3.734)	
Income: \$100K+	1.107 (3.019)	2.710 (2.087)	3.483 (6.424)
Income: \$<30K	0.998 (2.632)	-0.950 (1.799)	2.820 (5.311)
Income: \$31-\$40K	0.026 (3.266)	-0.203 (2.188)	3.970 (8.675)
Income: \$41-\$50K	1.146 (3.848)	1.860 (2.611)	-10.211 (13.962)
Income: \$51-\$60K	1.993 (4.128)	1.072 (2.853)	-3.772 (8.676)
Income: \$61-\$70K	-0.203 (4.161)	3.095 (2.818)	4.348 (10.130)
Income: \$71-\$80K	-2.363 (4.965)	1.413 (3.262)	-9.461 (13.962)
Income: \$81-\$90K	0.486 (6.036)	-5.642 (4.756)	7.252 (11.744)
Income: \$91-\$100K	6.904 (6.000)	2.414 (3.622)	
Occupation: Blue collar	5.832 (9.328)	2.771 (5.825)	
Occupation: Business owner	8.620 (9.846)	5.112 (6.530)	
Occupation: Doctor/Lawyer	15.528 (9.994)	2.600 (6.466)	
Occupation: Freelance/Consultant	7.969 (8.397)	0.727 (5.362)	24.741 (15.602)
Occupation: Gov Officer	2.137 (8.559)	-2.026 (5.445)	10.277 (16.107)
Occupation: Homemaker	7.121 (8.727)	6.384 (5.537)	27.178 (26.237)
Occupation: Management	4.882 (9.515)	1.140 (6.106)	10.422 (16.481)
Occupation: Office worker	8.178 (8.160)	3.710 (5.161)	13.779 (13.861)
Occupation: Other	9.873 (8.633)	1.327 (5.512)	-0.678 (18.504)

Occupation: Retiree	-35.335*	-4.675	
	(18.030)	(11.348)	
Occupation: Student	6.088	0.427	23.053
	(8.786)	(5.630)	(16.541)
Occupation: Teacher	9.672	0.791	21.623
	(9.145)	(5.820)	(19.340)
Constant	4.034	-7.914	-28.220
	(8.366)	(5.328)	(17.038)
Observations	321	278	35
Akaike Inf. Crit.	2,705.217	2,088.238	270.381

Significance values: * '0.1', ** '0.05', *** '0.01'

APPENDIX B.3

Factor Analysis results for Brand Attachment-Aversion

1) HORN – ALL VARIABLES FACTOR ANALYSIS

Variable:	Uniqueness	Factor			
		1	2	3	4
Appealing & attractive to me	0.087	0.335	0.733	0.356	0.370
Give me sensory pleasure	0.034	0.459	0.795	0.265	0.228
Connect to me emotionally	0.148	0.499	0.428	0.325	0.560
Make me feel safe and secure	0.074	0.650	0.377	0.262	0.541
Help me feel part of a connected group	0.005	0.837	0.377	0.260	0.290
Help enhance my relationship with those I am close to	0.093	0.759	0.368	0.303	0.742
Help express my identity	0.005	0.478	0.326	0.330	0.742
Helps me appreciate my heritage and where I am from	0.064	0.692	0.340	0.340	0.475
Improves the quality of my life with their performance	0.109	0.557	0.320	0.501	0.477
Helps make my daily life easier	0.117	0.624	0.306	0.408	0.483
Majority of those in my business circle think this is a prestigious gift	0.200	0.133	0.433	0.737	0.226
Most people in my community believe buying this is a good thing	0.005	0.510	0.143	0.809	0.246

	Factor1	Factor2	Factor3	Factor4
Factor name:				
SS loadings	3.957	2.40	2.371	2.332
Proportion Variable	0.330	0.20	0.198	0.194
Cumulative Variable	0.330	0.53	0.727	0.922

The chi square statistic is 115.82 on 24 degrees of freedom.

The p-value is 5.35e-14

2) HORN – EMOTIONAL CONNECTION REMOVED

Variable:	Uniqueness	Factor			
		1	2	3	4
Appealing & attractive to me	0.113	0.389	0.359	0.713	0.314
Give me sensory pleasure	0.005	0.469	0.273	0.824	0.150
Make me feel safe and secure	0.074	0.718	0.271	0.384	0.435
Help me feel part of a connected group	0.005	0.867	0.268	0.385	0.157
Help enhance my relationship with those I am close to	0.093	0.789	0.312	0.384	0.197
Help express my identity	0.005	0.580	0.342	0.330	0.658
Helps me appreciate my heritage and where I am from	0.064	0.750	0.350	0.347	0.360
Improves the quality of my life with their performance	0.109	0.615	0.510	0.329	0.380
Helps make my daily life easier	0.116	0.681	0.418	0.320	0.378
Majority of those in my business circle think this is a prestigious gift	0.206	0.159	0.739	0.427	0.200
Most people in my community believe buying this is a good thing	0.005	0.534	0.814	0.148	0.157

	Factor1	Factor2	Factor3	Factor4
Factor name:	Identity	Senses	Opinions	
SS loadings	4.312	2.330	2.275	1.288
Proportion Variable	0.392	0.212	0.207	0.117
Cumulative Variable	0.392	0.604	0.811	0.928

The chi square statistic is 88.99 on 17 degrees of freedom.

The p-value is 9.3e-12

3) HORN – EMOTIONAL CONNECTION & IDENTITY REMOVED

Variable:	Unique nesses	Factor		
		1	2	3
Appealing & attractive to me	0.120	0.450	0.723	0.394
Give me sensory pleasure	0.033	0.488	0.805	0.285
Make me feel safe and secure	0.144	0.764	0.426	0.302
Help me feel part of a connected group	0.048	0.852	0.418	0.227
Help enhance my relationship with those I am close to	0.083	0.840	0.398	0.233
Helps me appreciate my heritage and where I am from	0.082	0.825	0.375	0.311
Improves the quality of my life with their performance	0.124	0.738	0.327	0.474
Helps make my daily life easier	0.111	0.811	0.324	0.355
Majority of those in my business circle think this is a prestigious gift	0.114	0.203	0.402	0.826
Most people in my community believe buying this is a good thing	0.055	0.636	0.125	0.724

	Factor1	Factor2	Factor3
Factor name:	Identity	Senses	Opinion
SS loadings	4.783	2.215	2.088
Proportion Variable	0.478	0.222	0.209
Cumulative Variable	0.478	0.700	0.909

The chi square statistic is 45.21 on 18 degrees of freedom.

The p-value is 0.000387

4) IVORY – ALL VARIABLES

Variable:	Unique nesses	Factor		
		1	2	3
Appealing & attractive to me	0.242	0.354	0.717	0.345
Give me sensory pleasure	0.138	0.418	0.776	0.294
Connect to me emotionally	0.172	0.605	0.629	0.260
Make me feel safe and secure	0.189	0.728	0.469	0.246
Help me feel part of a connected group	0.208	0.777	0.388	0.194
Help enhance my relationship with those I am close to	0.125	0.849	0.294	0.259
Help express my identity	0.252	0.686	0.389	0.355
Helps me appreciate my heritage and where I am from	0.213	0.693	0.427	0.352
Improves the quality of my life with their performance	0.220	0.692	0.347	0.425
Helps make my daily life easier	0.152	0.808	0.300	0.323
Majority of those in my business circle think this is a prestigious gift	0.217	0.203	0.263	0.820
Most people in my community believe buying this is a good thing	0.244	0.475	0.270	0.676

	Factor1	Factor2	Factor3
Factor name:			
SS loadings	4.872	2.655	2.102
Proportion Variable	0.406	0.221	0.175
Cumulative Variable	0.406	0.627	0.802

The chi square statistic is 160.37 on 33 degrees of freedom.

The p-value is 1.17e-18

5) IVORY – EMOTIONALLY CONNECTED REMOVED

Variable:	Unique nesses	Factor		
		1	2	3
Appealing & attractive to me	0.311	0.408	0.627	0.359
Give me sensory pleasure	0.005	0.413	0.865	0.278
Make me feel safe and secure	0.189	0.741	0.450	0.244
Help me feel part of a connected group	0.219	0.786	0.352	0.198
Help enhance my relationship with those I am close to	0.129	0.858	0.269	0.252
Help express my identity	0.250	0.711	0.340	0.360
Helps me appreciate my heritage and where I am from	0.216	0.724	0.364	0.357
Improves the quality of my life with their performance	0.216	0.718	0.309	0.416
Helps make my daily life easier	0.151	0.822	0.282	0.306
Majority of those in my business circle think this is a prestigious gift	0.190	0.215	0.243	0.840
Most people in my community believe buying this is a good thing	0.255	0.490	0.258	0.662

	Factor1	Factor2	Factor3
Factor name:	Identity	Senses	Opinions
SS loadings	4.745	2.088	2.035
Proportion Variable	0.431	0.190	0.185
Cumulative Variable	0.431	0.621	0.806

The chi square statistic is 136.45 on 25 degrees of freedom.
The p-value is 2.53e-17

6) DESIRABLE ITEMS – ALL VARIABLES

Variable:	Unique nesses	Factor				
		1	2	3	4	5
Appealing & attractive to me	0.242	0.139	0.747	0.243	0.186	0.295
Give me sensory pleasure	0.303	0.248	0.757	0.208	0.130	
Connect to me emotionally	0.281	0.568	0.582	0.170	0.168	
Make me feel safe and secure	0.500	0.285	0.509	0.201	0.299	0.175
Help me feel part of a connected group	0.455	0.601	0.244	0.324	0.106	
Help enhance my relationship with those I am close to	0.417	0.544	0.346	0.360	0.194	
Help express my identity	0.418	0.593	0.334	0.241	0.217	0.117
Helps me appreciate my heritage and where I am from	0.298	0.780		0.119	0.155	0.215
Improves the quality of my life with their performance	0.217	0.346	0.243	0.705	0.107	0.310
Helps make my daily life easier	0.171	0.269	0.320	0.735	0.338	
Majority of those in my business circle think this is a prestigious gift	0.364	0.268	0.284	0.211	0.370	0.550
Most people in my community believe buying this is a good thing	0.119	0.271	0.286	0.263	0.782	0.210

	Factor1	Factor2	Factor3	Factor4	Factor 5
Factor name:					
SS loadings	2.438	2.351	1.629	1.164	0.634
Proportion Variable	0.203	0.196	0.136	0.097	0.053
Cumulative Variable	0.203	0.399	0.535	0.632	0.685

The chi square statistic is 44.17 on 16 degrees of freedom.

The p-value is 0.000186

7) DESIRABLE ITEMS – EMOTIONAL CONNECTION REMOVED

Variable:	Unique nesses	Factor					
		1	2	3	4	5	6
Appealing & attractive to me	0.236	0.750		0.209	0.167	0.168	0.303
Give me sensory pleasure	0.272	0.775	0.254	0.205		0.112	
Make me feel safe and secure	0.503	0.516	0.232	0.198	0.162	0.277	0.185
Help me feel part of a connected group	0.005	0.206	0.359	0.208	0.871	0.111	0.101
Help enhance my relationship with those I am close to	0.388	0.345	0.499	0.331	0.329	0.159	
Help express my identity	0.355	0.330	0.644	0.246	0.134	0.172	0.117
Helps me appreciate my heritage and where I am from	0.393		0.674	0.130	0.256	0.150	0.196
Improves the quality of my life with their performance	0.333	0.281	0.350	0.570	0.204		0.300
Helps make my daily life easier	0.005	0.295	0.212	0.873	0.163	0.257	
Majority of those in my business circle think this is a prestigious gift	0.326	0.302	0.278	0.188		0.307	0.605
Most people in my community believe buying this is a good thing	0.062	0.287	0.254	0.252	0.120	0.813	0.230

	Factor1	Factor2	Factor3	Factor4	Factor 5	Factor 6
Factor name:	Pleasure	Identity	Enabling	Connected	Community	Gift
SS loadings	2.050	1.682	1.541	1.103	1.037	0.707
Proportion Variable	0.186	0.153	0.140	0.100	0.094	0.064
Cumulative Variable	0.186	0.339	0.479	0.580	0.674	0.738

The chi square statistic is 12.2 on 4 degrees of freedom.

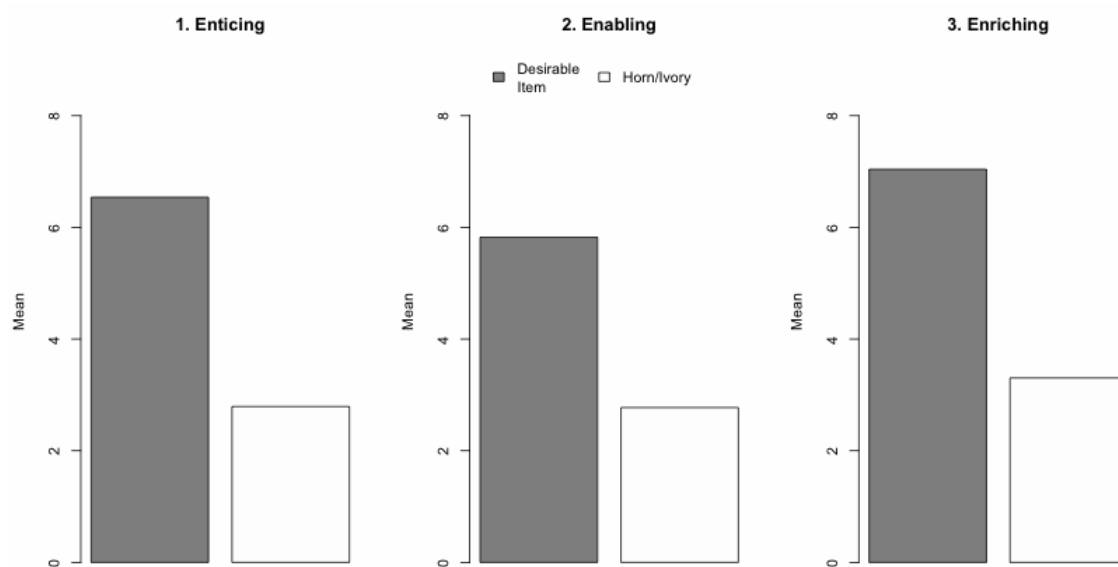
The p-value is 0.0159

- 8) Welch's 2 sample T-tests comparing difference in mean between most desirable items and illegal wildlife products for various variables

Independent Variable:	Dependent variable:		t	Df	P-value
	Most Desirable (mean)	Ivory/Horn (mean)			
Enticing	6.539	2.791	23.219	686.943	< 2.2e-16***
Enabling	5.823	2.773	18.485	702.445	< 2.2e-16***
Enriching	7.040	3.303	21.943	664.582	< 2.2e-16***

Significance values: * '0.1', ** '0.05', *** '0.01'

- 9) Comparison of means between desirable Items and Horn/Ivory Products for the three AA components, where 9= Strongly Agree, 1=Strongly Disagree, 5 = Neutral



10) GLM showing how Brand AA Score associates with other factors

Independent variable:	Dependent variable: Brand AA Score		
	Ivory	Horn	Luxury
Enticing	0.332 (0.402)	-0.548 (1.933)	0.073 (0.551)
Enabling	-0.430 (0.672)	2.634 (2.034)	-0.003 (0.634)
Enriching	1.040 (0.733)	0.326 (2.155)	2.822*** (0.568)
Influence	-0.239 (0.287)	-0.718 (0.674)	0.236 (0.489)
Emotional Connection	0.182 (0.477)	0.500 (1.226)	0.942* (0.510)
Constant	-5.618*** (1.060)	-6.536*** (2.047)	-14.160*** (2.982)
Observations	288	35	338
Akaike Inf. Crit.	2,122.691	245.549	2,721.235

Significance values: * '0.1', ** '0.05', *** '0.01'

APPENDIX B.6

Emotional Territory Mapping

Binomial GLM to determine whether different sources influenced whether respondents associated specific words with illegal wildlife products (ivory & rhino horn). Figures show estimates and SE with 95% confidence intervals:

Independent Variable:	Dependent variable: Sources of influence Yes (1), No (0)					
	Campaigning Orgs	Work	Celebs & Advertising	Family & Friends	Government	Media
High Quality	-0.823* (0.488)	0.221 (0.513)	0.622 (0.495)	0.686* (0.407)	1.941*** (0.550)	0.747* (0.416)
Selfish	1.432*** (0.318)	-1.940** (0.908)	-0.325 (0.548)	-0.640 (0.438)	0.905* (0.503)	-0.075 (0.382)
Treat	-0.856 (0.756)	1.870*** (0.628)	0.536 (0.692)	0.659 (0.570)	-1.359 (1.185)	0.923 (0.579)
Unethical	0.716** (0.335)	-0.648 (0.798)	0.627 (0.495)	0.350 (0.414)	-0.085 (0.552)	-0.178 (0.408)
Indulgence	0.436 (0.364)	-0.135 (0.479)	0.119 (0.451)	-0.493 (0.403)	0.182 (0.543)	0.163 (0.370)
Overpriced	0.172 (0.295)	1.284*** (0.424)	0.556 (0.419)	0.809** (0.318)	0.476 (0.418)	0.784*** (0.303)
Rare	0.300 (0.261)	0.255 (0.384)	0.282 (0.371)	0.524* (0.285)	1.647*** (0.426)	1.049*** (0.277)
Luxury	0.002 (0.467)	1.425*** (0.473)	0.385 (0.512)	0.812** (0.414)	-0.592 (0.664)	0.417 (0.428)
Craftmanship	0.603 (0.406)	-0.446 (0.530)	-0.178 (0.507)	0.408 (0.397)	-1.696** (0.756)	-0.979** (0.461)
Sexy	-0.423 (0.922)	0.533 (0.757)	0.844 (0.800)	1.012 (0.689)	1.968** (1.000)	0.619 (0.735)
High Status	-0.356 (0.411)	0.308 (0.510)	1.052** (0.452)	-0.120 (0.411)	0.992* (0.512)	0.452 (0.390)
Exclusive	1.311*** (0.421)	-2.137*** (0.764)	-0.690 (0.569)	-0.808* (0.473)	-1.462* (0.755)	-0.859* (0.474)
Old Fashioned	0.180 (0.628)	2.524*** (0.857)	1.510** (0.745)	0.225 (0.820)	-0.555 (1.136)	1.009 (0.648)
Accessible	1.534 (1.188)	2.328* (1.371)	0.581 (1.288)	0.859 (1.100)	-14.994 (1,781.912)	0.186 (1.277)
Useless	0.469 (0.339)	-0.175 (0.683)	-0.227 (0.566)	-0.414 (0.463)	0.182 (0.521)	0.468 (0.373)
None	1.764** (0.793)	-13.812 (906.943)	-13.673 (906.943)	0.107 (1.107)	-13.819 (1,495.296)	-14.401 (906.943)
Constant	-1.476*** (0.213)	-2.754*** (0.343)	-2.893*** (0.333)	-1.898*** (0.243)	-3.747*** (0.449)	-2.165*** (0.256)
Observations	386	386	386	386	386	386
Akaike Inf. Crit.	460.717	255.516	276.810	397.041	238.044	403.520

Significance values: * '0.1', ** '0.05', *** '0.01'