

**CONSUMING WILDLIFE - MANAGING DEMAND FOR PRODUCTS IN THE WILDLIFE TRADE****Research Article**

Reference group influences and campaign exposure effects on rhino horn demand: Qualitative insights from Vietnam

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Abstract

1. While considerable effort is invested in rhino horn demand reduction campaigns, it is unclear to what extent users are exposed to and accept the messages in these ads.
2. We investigate recall as an indicator of exposure and the influence of different reference groups by conducting 50 semi-structured interviews with self-reported rhino horn users in Hanoi using an interpretative thematic analysis.
3. The decision to buy or use rhino horn was almost exclusively influenced by peers with perceived expertise using rhino horn, whereas commonly used deliverers of such campaigns—traditional medicine practitioners, doctors, government officials, business leaders and celebrities—had very little influence.
4. Campaign exposure was relatively high, but campaign influence low as consumers considered recent demand reduction campaigns and the reference groups delivering the message as well as the implementing organizations unreliable and driven by profit.
5. Willingness to sign a pledge to refrain from buying, using or gifting rhino horn encouraged by employers or association was relatively high. However, the majority of respondents stated they would not comply with this pledge.
6. Case studies of users or their next of kin having experienced negative or no effect of rhino horn were suggested possibly effective in reducing demand by consumers themselves.
7. To increase the acceptance of demand reduction campaigns, organizations could consider forgoing their own branding to reduce distrust in the target audience.
8. We highlight the importance of conducting formative research using both quantitative and qualitative methods based on interviews with actual rhino horn users. While qualitative studies of motivations by confirmed users entail the risk that they retrospectively explain motivations in order to appear internally consistent with their usage of the product, it provides valuable insight into their self-image and thereby options for affecting their behaviour.

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KEYWORDS

behaviour modification, demand reduction, formative research, peer pressure, rhino horn, wildlife trade

1 | INTRODUCTION

The consumption of illicit wildlife products has led to the decimation of numerous wildlife populations and even the extinction of some species and represents a significant threat to biodiversity (CITES, 2018; Nijman, 2009). Consumer demand is considered the main driver of the transnational illegal wildlife trade (UNEP-Interpol, 2016), often facilitated by networks of organized crime syndicates, poachers, and corrupt officials (Arvidsson & Niessen, 2015; Drury, 2009, 2011). The operation of these groups contributes to destabilizing national security and hampers economic growth in source countries (Douglas & Alie, 2014). Wildlife trade, in general, can also pose a significant threat to public health on a global scale, with the outbreak of the novel coronavirus in China as a recent example (Mahase, 2020). Increasingly sophisticated technologies are used to bypass legal regulations and supply endangered species and wildlife products to consumers (White, 2017), and the illegal rhino horn trade is considered among the most structured criminal activities (Ayling, 2013; Milliken, 2014). The recent rhino poaching crisis started in 2008 with more than 1,000 rhinos killed each year in South Africa between 2013 and 2017 (Save the Rhino International [SRI], 2019). Despite a slight decrease from 2015 to 2018, at least two rhinos are still poached every single day (SRI, 2019).

Vietnam is a major source of demand for rhino horn (Milliken & Shaw, 2012) which has been used in Vietnamese traditional medicine for centuries with perceived benefits in treating high fever, convulsions, hangovers and for body detoxification (Milliken & Shaw, 2012; Nowell, 2012). Currently, body detoxification and hangover treatment by high-income men in urban areas of Hanoi and Ho Chi Minh City are the most prevalent uses for rhino horn (Truong, Dang, & Hall, 2015). Rhino horn is also used to display success and wealth and as a gift to initiate business relations and gain political favours ('t Sas-Rolfes, 2012; Dang & Nielsen, 2018; Truong et al., 2015). Hence, rhino horn has multiple uses, but in this study, the word 'use' is used exclusively to refer to consumptive use (i.e. drinking rhino horn powder) unless otherwise stated.

The motivations for using rhino horn are changing, and Dang and Nielsen (2018) revealed how the perceived value of rhino horn is shifting from utilitarian to hedonic values describing a ritualized way of using rhino horn to comfort terminally ill relatives. Utilitarian value relates to the direct, tangible benefits of rhino horn (e.g. treating diseases) while hedonic value relates to the indirect, non-tangible benefits, which derive from the status-conferring function of rhino horn, its rarity, preciousness, symbolic and emotional appeal (Dang & Nielsen, 2018). Dang and Nielsen (2018) also indicated that both values influence use, and that it is difficult to clearly distinguish between these two motivations for use. Much of the current use of rhino horn

takes place in business networks and clubs where rhino horn powder is shared as part of consumers' search for an extended self, to confirm group identities and for delineation with others (Truong et al., 2015). In this study, we primarily focused on the utilitarian value, which influences the use of rhino horn in business and social networks.

1.1 | Reference group influences

In Vietnam, individuals are strongly motivated to display success through luxury consumption (Nguyen & Vo, 2020). Demand for rhino horn is closely aligned with its status conferring function (Ayling, 2013; Dang & Nielsen, 2018). Drury (2009) showed that consumers were under such pressure to conform to group identity, that is, utilitarian referents, that they consumed wild meat and rhino horn powder even though they did not want to. Despite the illegal nature of trade in rhino horn, drinking rhino horn powder to reduce hangover, detoxify the body and sharing this product to confer social status and to strengthen business relations lead to no stigma and are often seen as a normative and socially acceptable behaviour (Dang & Nielsen, 2018; Milliken & Shaw, 2012; Truong et al., 2015). However, very little information is available about which reference group rhino horn consumers primarily consult and conform to in their decision to purchase or use rhino horn. This information is important for the informed design of demand reduction campaigns that often use reference groups to deliver the campaign message.

Reference groups as a social marketing concept (Kotler, 1984) are important in forming consumers attitudes, norms and values (Kemper, 1968; Park & Lessig, 1977). A reference group is broadly defined as 'an actual or imaginary institution, individual or group conceived as having significant relevance upon an individual's evaluations, aspirations or behaviour' (Lessig & Park, 1978, p. 1). Reference groups can drive the consumption of status-conferring luxury products (Lea, Webley, & Walker, 1995) such as rhino horn (Dang & Nielsen, 2018; Truong et al., 2015). Demand for rhino horn might increase due to a higher number of buyers as described in the 'bandwagon effect' (Leibenstein, 1950). Such demand may derive from a desire to identify with a particular reference group (Truong, Dang, & Hall, 2015; Vigneron & Johnson, 2004) or to adopt values of others (Lessig & Park, 1978). Park and Lessig (1977) identified three categories of reference groups: (a) informational; (b) utilitarian; and (c) value-expressive reference group, who influence consumers differently. Informational reference groups are typically individuals with perceived expertise consulted when a consumer wanting to make a purchase is facing uncertainty or lack of relevant experience. The consumer may make inference by observing endorsements, interacting with group members or getting feedback on a product or service (Hsu, Kang, & Lam, 2006;

Kim & Qu, 2016). The informational reference group does not impose norms or values on consumers directly but is consulted based on perceived knowledge. With respect to rhino horn use, an informational reference group might include traditional medicine practitioners, family members or friends with experience having used rhino horn. Studies show that rhino horn use and purchase often are facilitated by close personal relations (Dang & Nielsen, 2018).

The utilitarian reference group includes individuals or groups that mediate rewards or punishment (Park & Lessig, 1977). Hence, consumers make purchasing decisions in response to pressure from their utilitarian referents (Farrow, Grolleau, & Ibanez, 2017; Kelman, 1961). Consumers are often motivated to meet the expectations of these referents for reasons not linked directly to the consumption in question (Bearden & Etzel, 1982). With respect to rhino horn use, the utilitarian reference group can include family members, peers and business associates. Individuals may, for instance, against own convictions, accept rhino horn powder offered by others in a party context to conform to the group's expectations (Dang & Nielsen, 2018; Drury, 2009). Prior studies have indicated that utilitarian referents exert significant pressure on an individual's demand for rhino horn (Dang & Nielsen, 2018; Drury, 2009; Truong et al., 2015).

The value-expressive reference group arises from individuals' need or desire to be associated with positive referents and disassociated with negative ones (Park & Lessig, 1977). Bearden and Etzel (1982) identified two forms of this association. One is the desire to resemble value-expressive referents. The other is an attachment or liking for the group. Lessig and Park (1978) argued that consumers used value-expressive reference groups to express themselves and/or promote their egos to the outside world. More independent consumers differentiate themselves from others by making their own choices as a way of showing their personality and uniqueness (Dommer, Swaminathan, & Ahluwalia, 2013). Concerning rhino horn use value-expressive reference groups may include rich or famous business people and celebrities and a number of campaigns have attempted to use such groups to deliver messages aimed to reduce demand for rhino horn.

1.2 | Demand reduction campaigns

The effectiveness of conservation strategies depends on influencing consumers' attitudes and behaviours (Balmford & Cowling, 2006; Hilborn & Ludwig, 1993). In Vietnam, various conservation organizations have implemented campaigns using different reference groups to attempt to influence the demand for rhino horn (Olmedo, Sharif, & Milner-Gulland, 2018; Smith, 2018). Several campaigns used informational referents, including traditional medicine practitioners and doctors to deliver messages about the efficacy of rhino horn (WildAct, 2014a; WildAid, 2016). Other campaigns invoked utilitarian referents such as government leaders, peers, business associates, wives and children (ENV, 2019a; HSI & CITES, 2016; TRAFFIC, 2017; WildAct, 2014b; WildAid, 2016). For instance, HSI and CITES (2016) distributed cartoons about a baby rhino aiming to influence

school children to dissuade their parents from using rhino horn. Conservation organizations have also built campaigns around successful business people, religious leaders, sports stars and celebrities as examples of value-expressive reference groups (ENV, 2019b; TRAFFIC, 2017; WildAid, 2016).

Rhino horn demand reduction campaigns range from raising general public awareness to attempting to change the behaviour of a specific target audience using more strategic and evidence-based approaches such as social marketing (Veríssimo & Wan, 2019). Identifying a clear target audience is a critical step in the design of an effective campaign (Olmedo et al., 2018). To this point, marketing principles are helpful as marketing campaigns typically centre around a target audience, their socio-demographic characteristics, beliefs, attitudes and behaviours (Smith & Strand, 2009). Social marketing was first coined by Kotler and Zaltman (1971) and defined as 'the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify or abandon a behaviour for the benefit of individuals, groups and society as a whole' (Kotler, Roberto, & Lee, 2002). Given its success in promoting pro-social behaviours in a number of fields such as public health, family planning and road safety (Fox & Kotler, 1980; Gordon, McDermott, Stead, & Angus, 2006; MacFadyen, Stead, & Hastings, 1999; Rothschild, Mastin, & Miller, 2006; Smith, 2006), social marketing has received increasing interest from conservationists as an effective framework in guiding demand reduction campaigns (Greenfield & Veríssimo, 2019). In 2014 TRAFFIC, for instance, launched the Chi campaign targeting urban, middle-class males aged from 35 to 55 (TRAFFIC, 2017). The campaign was based on insights about rhino horn consumers collected through formative research (Offord-Woolley, 2017). Behaviour change models and the social marketing approach were employed to change consumers' motivations against buying or using this product (Olmedo et al., 2018). In this campaign, the 'Chi' brand was built on its cultural significance in Vietnam, meaning 'strength comes from within'. 'The messaging promotes the idea that success, masculinity and good fortune come from an individual's internal strength of character, rather than being acquired externally from a piece of horn' (Offord-Woolley, 2017). The campaign has moved on to phase three with two new public service announcements developed in collaboration with the Vietnamese business community and disseminated through different communication channels.

Pledge endorsement is among the most popular contemporary strategies to reduce rhino horn demand based on the influence of reference groups (Olmedo et al., 2018). TRAFFIC, for instance, organized a range of workshops and events, as part of the Chi campaign, where business owners were encouraged to sign a pledge to fight illegal wildlife consumption (TRAFFIC, 2017). In 2016, WildAid published a pledge by 100 top Vietnamese CEOs and more than 250 other business leaders to never buy or use rhino horn (WildAid, 2016). HSI and CITES reported 200,000 pledges signed by members of women's associations (Olmedo et al., 2018). However, the effectiveness of these campaigns is largely unclear due to the lack of measurable objectives and a clear target audience complicating impact evaluation (Dang & Nielsen, 2018; Olmedo et al., 2018). Failure to identify the specific value placed on

rhino horn may also undermine demand reduction campaigns (Dang & Nielsen, 2018). Ensuring successful demand reduction campaigns requires that designs build on insights about the behaviour of the target audience as well as the social, cultural and physical factors of the target behaviour (Nuno et al., 2018; Truong & Dang, 2017; Veríssimo, Vieira, Monteiro, Hancock, & Nuno, 2020). Truong and Dang (2017) revealed that formative research to build such insights was insufficient in the implementation of social marketing campaigns in Vietnam. Olmedo et al. (2018) found that only four of eight demand reduction interventions had conducted formative pre-implementation research. Greenfield and Veríssimo (2019) identified substantial gaps in the design of demand reduction campaigns and highlighted the need for consumer studies to be conducted by independent researchers to build reliable insights into the target audience. Three implementing organizations have published campaign evaluations claiming significant achievements (HSI & CITES, 2016; TRAFFIC, 2017; WildAid, AWF, & CHANGE, 2017). However, these evaluations have been criticized for lack of scientific rigour in the methods adopted, including design bias inhibiting pre- and post-campaign comparisons, and lack of transparency in the analytical process (t Sas-Rolfes, Challender, Hinsley, Veríssimo, & Milner-Gulland, 2019; Robertson, 2014; Veríssimo & Wan, 2019). Determining the impact of such campaigns is complex, and there are few independent evaluations (Olmedo et al., 2018). To achieve any impact, it is furthermore necessary to ensure that the consumers are exposed to the campaign.

Measuring exposure among its target audience is a critical step in determining the success of a campaign (Hornik, 1997). Sly, Heald, and Ray (2001) argued that to be effective, an advertisement needs to evoke a cognitive reaction from individual members of the target audience. While exposure is an important indicator, it is the underlying theory of change or behavioural model, whether clearly stated or not, that determines how the campaign works (Hornik, 1991). For instance, TRAFFIC's Chi campaign is developed based on Rogers' Diffusion of Innovation theory (Olmedo et al., 2018). This theory posits that the first to adopt an innovation, that is, a new behaviour such as not using rhino horn, are 'innovators' (Rogers, 1994). TRAFFIC identified business leaders as innovators to influence the audience, consisting of peers, junior executives, mid-level managers (TRAFFIC, 2017). HSI did not specify any theory or model of change for their campaign but, through the distribution of the 'I am a little rhino' booklet to school children, they aimed to create social diffusion to indirectly influence rhino horn consumers (HSI & CITES, 2016).

Despite the considerable effort invested in behaviour modification campaigns to reduce demand (Greenfield & Veríssimo, 2019; Olmedo et al., 2018), little information is available about how these campaigns are perceived by rhino horn consumers and the extent to which the social influence of the selected reference groups making the information transfer (i.e. delivering the message) encourages acceptance and compliance with the message (De Lange, Milner-Gulland, & Keane, 2019). Here we, therefore, examine: (a) the extent to which rhino horn consumers are exposed to demand reduction campaigns, (b) the self-reported effect of these campaigns, as well as pledges, on behaviours and (c) the influence of different reference

groups on consumers' self-declared motivation or desire to buy or use rhino horn. In doing so, we highlight the importance of qualitative market research methods in studying the consumer demand for illegal luxury products from endangered wildlife species.

2 | METHODS

This study applied a qualitative interpretive approach (Yin, 2015) considered well suited to gain deep insights into first-hand end-user experiences with the consumption of wildlife products (Newing, Eagle, Puri, & Watson, 2010). We conducted semi-structured interviews with a sample of 50 self-reported rhino horn users in Hanoi in June and July 2019. Participants were selected as the available and willing respondents in a sample of 30 rhino horn users from a previous study (see Dang & Nielsen, 2018) and the sample was expanded through snowballing (Newing et al., 2010).

Interview guides were developed based on insights from previous studies on demand reduction campaigns (Greenfield & Veríssimo, 2019; Olmedo et al., 2018; Sharif, 2014; TRAFFIC, 2017), reference group influences (Bearden & Etzel, 1982; Hsu et al., 2006; Lessig & Park, 1978), rhino horn consumers (Dang & Nielsen, 2018; Truong et al., 2015) and based on consultation with representatives of implementing organizations. Information was collected on socio-demographic characteristics of respondents and their knowledge and behaviour concerning rhino horn use.

We then measured campaign exposure based on recall and recognition measures (Beaudoin, Stephenson, & Agha, 2016). Measuring recall, we used both unaided and aided methods (Beaudoin et al., 2016). We began by asking respondents, 'Have you recently seen or heard about any rhino horn campaigns or ads in Vietnam?' (unaided recall). If respondents answered 'yes', we asked them to provide details about the person(s) appearing in each campaign and the campaign's message or main content (unaided confirmed recall). If respondents answered 'no', we provided them with cues about a campaign or ad using a specific reference group (aided recall). For instance, we asked, 'Have you recently seen or heard about a campaign or ad in which a traditional medicine expert advised people not to use rhino horn?' Respondents with aided recall were also asked to describe the campaign they recalled (aided confirmed recall). Measuring recognition, we showed respondents a specific ad with words of its text hidden and asked whether they had previously seen this ad (recognition). For respondents who reported recognition, we asked them to repeat the hidden words (confirmed recognition). The five measurement approaches used are summarized in Table 1. Following each measure, we used Likert scale questions to measure stated campaign influence on their self-declared motivations or desire to buy or use rhino horn. We also asked all respondents if they would sign a pledge to never buy, use or gift rhino horn, showing them the pledge used in TRAFFIC's Chi campaign. Furthermore, if they would sign such a pledge, we asked how likely it was that they would break it by buying or using rhino horn.

TABLE 1 Measurement typologies for campaign exposure

Measurement type	Question(s)	Respondents	Positive outcome
Unaided recall	Have you recently seen, read or heard about any rhino horn campaign or ad?	All respondents	If the respondent answered 'yes'
Aided recall	<ul style="list-style-type: none"> • Informational referents: Have you seen, read or heard about any campaign or ad that shows a doctor or traditional medicine practitioner talking about rhino horn? • Utilitarian referents: Have you seen, read or heard about any campaign or ad that shows family members, friends or colleagues talking about rhino horn? • Value-expressive referents: Have you seen, read or heard about any campaign or ad that shows famous business owners, celebrities or sports stars talking about rhino horn? 	Respondents without unaided recall	If the respondent answered 'yes'
Confirmed recall (Unaided and aided)	Who appeared in the campaign/ad? What was the main content/message of the campaign/ad?	Respondents with unaided recall and aided recall	If the respondent correctly provided details about the person(s) appearing and the main content/message
Recognition	Have you ever seen this ad?	Respondents without unaided and aided recall	If the respondent answered 'yes'
Confirm recognition	Can you complete this message?	Respondents with confirmed recognition	If the respondent properly completed at least one message

TABLE 2 Campaign ads and description

Ads	Referents	Messages (translated)	Meanings
Ad 1 (Chi campaign)	Anonymous business colleagues	Be Aware! Wise men know the truth. They use natural means to keep their body free of toxins. Vitality comes from lifestyle, not from a piece of horn	'The Chi campaign promotes the notion that success, masculinity and good luck flow from an individual's internal strength of character and refutes the view that these traits come from a piece of horn' (TRAFFIC, 2014)
Ad 2 (Chi campaign)	Anonymous business colleagues (including two posters)	Not using wildlife products is the key to success (Left poster) Gifts from wildlife products do not make you being more respected (Right poster)	This campaign was launched at the international departure lounge of Noi Bai Airport, promoting the concept that 'respect and success come from a person's inner strength or Chi and not from a piece of rhino horn' (TRAFFIC, 2016)
Ad 3 (Chi campaign)	Tran Bao Son, famous actor and businessman (two posters)	Gain prosperity through inner strength—Invite hardship using rhino horn	This message promotes the concept that 'success, masculinity and good fortune come from an individual's strength of character and not externally from a piece of horn. It encourages wealthy businessmen to demonstrate their Chi by becoming leaders in corporate social responsibility and in wildlife protection' (TRAFFIC, 2017)
Ad 4 (Nail biter's campaign)	Thu Minh and Tran Thanh, celebrities (two posters)	Rhino horn is mainly composed of keratin, like fingernails	'Rhino horn has nothing your own nails don't have' (WildAid, 2016)
Ad 5 (Be Smart campaign)	Phan Anh, celebrity	Wise people do not believe that rhino horn is a panacea	This campaign aimed to 'debunk the myths about rhino horn's curative properties and to discourage viewers from believing such rumours' (WildAid, 2016)

Selecting focus campaigns for this study, we combined online searches and information from the literature. A list of campaigns implemented in the period 2014–2019 was developed based on Olmedo et al. (2018), adding further campaigns found through an internet search. We also consulted with representatives from the Vietnamese CITES Management Authority and conservation organizations in Vietnam. We then selected two campaigns based on the following criteria: (a) using reference group influences, (b) having conducted a formative research or baseline study and an end of project evaluation, and (c) disseminating images and evidence-based

messages. Only two campaigns were based on behaviour change models or theories of change (Olmedo et al., 2018), and we selected TRAFFIC's Chi campaign as the more recent. The campaign implemented by WildAid and CHANGE consisted of several ads and short campaigns (including 'Nail Biters' and 'Be Smart') that met the criteria but were not explicitly based on any theory (WildAid, 2018). We selected the campaign by WildAid and CHANGE to enable comparison between a theory-based and a non-theory-based campaign. We compiled images and associated messages of five ads from these two campaigns and incorporated them in the interview guide. As

some ads had the same message but used different backgrounds or persons, we combined similar ads into one and showed all ads to the respondents (Table 2). After measuring campaign exposure, we asked respondents to rank different reference groups based on the self-declared level of influence on their motivations towards buying or using rhino horn.

Interviews lasted 30–45 min and were conducted in Vietnamese by the first author with 7 years' experience interviewing consumers of various illegal wildlife products and an assistant (both Vietnamese) in locations selected by respondents. Written consent was granted by some respondents, while others provided only verbal consent, but everyone was told explicitly that participation was voluntary and that they could withdraw from the interview at any point in time. A voice recorder was used when accepted by respondents, and written notes were consistently recorded. The records were transcribed and translated into English by the first author. Names and any information enabling identification were removed from the interview notes and transcripts before analysis to protect respondents' anonymity. Data were then subjected to an interpretative thematic data analysis based on defined themes in the interview guide (Corbin & Strauss, 2015; Yin, 2015). This study has passed ethical evaluation processes by the Research Ethics Committee for SCIENCE and SUND at the University of Copenhagen (Ref. 504-0069/19-5000) and the Ethical Review Board at the Hanoi University of Public Health (Ref. 461/2019/YTCC-HD3).

3 | RESULTS

3.1 | Sample characteristics

In total, 52 interviews were conducted, but two interviews were incomplete and therefore dropped. All respondents were males aged 34–80 years (Table 3). Most respondents reported being married. Forty-nine had a bachelor's degree or higher education. About one-third were government officials. More than half were business owners, self-employed or in senior positions in private companies. The average individual monthly income was VND45 million (US\$2,000), while the national average individual monthly income was only VND3.76 million (US\$176) in 2018 (GSOV, 2018). Using quotes from interviews, we use the interview number as an anonymous ID and reference to each respondent.

3.2 | Campaign exposure

3.2.1 | Recall

Asked whether they had seen, read or heard about any rhino horn campaign or ad, 31 of the 50 respondents could recall an ad without cues (unaided recall). However, when asked to recall campaigns using one of the three reference groups to make the information transfer (aided recall), the level of recall was lower. Only eight respondents recalled campaigns featuring informational referents and 17 recalled

TABLE 3 Socio-demographic characteristics of respondents

	Total (n = 50)	
	N	%
Mean age	52	-
Marital status		
Divorced/separated/widowed	4	8.00
Single (never been married)	0	0.00
Married	46	92.00
Education		
High school	1	2.00
University/College	37	74.00
Master	11	22.00
PhD	1	2.00
Occupation		
Government official	18	36.00
Real estate investor	1	2.00
Self-employed (no employee)	7	14.00
Business owner	13	26.00
Employed manager	7	14.00
Traditional medicine practitioner	1	2.00
Teacher	1	2.00
Others	2	4.00
Monthly average income (million VND)	45	-

campaigns featuring value-expressive referents. No respondents recalled any campaign featuring utilitarian referents. Of the 31 respondents with unaided recall, only 14 could provide details about the type of referents and the main content of these campaigns (unaided confirmed recall). The most frequently mentioned referents were celebrities while the best recalled messages were: 'Rhino horn is not medicine', 'Rhino horn is like human nails', 'Rhino horn has no medicinal efficacy', and 'Rhino horn is not a panacea'. No one recalled theory-based campaigns such as TRAFFIC's Chi initiative.

3.2.2 | Recognition

When respondents were shown the five selected ads from the two campaigns, only 10 recognized any of them. Of these 10 respondents, only two could properly complete the message in Ad 4 and four completed the message in Ad 5 (confirmed recognition, Table 2). None of the respondents recognized the 'Be Aware' ad (Ad 1). Two respondents reported that they had seen Ad 2, and one recognized the ad featuring Tran Bao Son (Ad 3), but neither of them could remember any of the hidden words. One respondent stated, 'I have waited for my international flights at the departure lounge of Noi Bai Airport a couple of times in the past few years, but I did not notice these ads' (ID5, employed manager). Another respondent explained, 'I might have passed by but did not read the content of these ads.'

When I was at the airport, I just wanted to wait for my flight. [...] These ads were placed on the wall leading to the waiting lounge. Most people therefore only pass by but rarely stop and spend time reading it. [...] The messages in these ads are meaningless to me' (ID6, government official).

3.3 | Campaign effects

3.3.1 | Chi campaign

When asked to provide feedback on the ads, most respondents thought that the first three ads in TRAFFIC's Chi initiative were unclear and confusing. One respondent, for instance, stated, 'The message (see Figure 1) is long. People will not read the whole message. The most important content about rhino horn is at the end of the message. People will not read this part. People will look at the image and only

read the first one or two lines. [...] This sentence also sounds very philosophical ('Good health comes from a healthy lifestyle, not from a piece of horn'). It is a headache for me to read such a philosophy. To understand this message, it requires people to think deeply, but people often do not want to. Like me, I only think about my job or my life, not this philosophy. The message needs to be clear' (ID6, government official).

Although one respondent considered 'Be Aware' a strong keyword (ID8, government official), others responded mostly to the image rather than the message. Some respondents were confused by Ad 1 as they did not find any relation with rhino horn. 'There are two guys whispering something—maybe a secret—but the message is long and unrelated to rhinos' (ID26, business owner). Another respondent noted, 'The message only mentions "horn" in general but does not specify which type of horn. For such an ad, images are more important than words, but I don't see rhino horn in this ad' (ID5, employed manager).

Respondents found Ad 2 (see Figure 2) easier to understand than Ad 1, but the majority disagreed with the messages. 'It is nonsense,

FIGURE 1 Ad 1, TRAFFIC's Chi campaign, Phase 1. The message translated to English is: 'Be aware! Wise men know the truth. They use natural means to keep their body free of toxins. Vitality comes from lifestyle, not from a piece of horn' (Permission to reproduce this ad has been granted by TRAFFIC)



FIGURE 2 Ad 2, TRAFFIC's Chi campaign, Phase 1, Noi Bai International Airport. The message on the left poster translated to English is 'Not using wildlife products is the key to success'. The message on the right poster translated to English is 'Gifts from wildlife products do not make you more respected' (Permission to reproduce this ad has been granted by TRAFFIC)



especially the left poster. The first phrase of the message—not using wildlife products—does not relate to the second phrase—key to success' (RH5, employed manager). Another respondent agreed with this comment stating: 'In the left poster, there is no relation between the image and the message. The message is meaningless. It is easier to understand the second poster, but the gift looks very beautiful, and there are no reasons why you should not accept it' (ID3, teacher).

Most respondents found Ad 3 (see Figure 3), featuring two posters with the same message and person but different backgrounds, even more difficult to understand. Some thought the main message 'Vuong Tu Chi, Lui Vi Sung' sounded Chinese. 'This guy is Bao Son, but I don't know who Vuong Tu Chi is. I don't like these words. It sounds Chinese. [...] It is nonsense' (ID5, employed manager). The general consensus was that Ad 3 was very confusing and not related to rhino horn. 'First, this ad looks weird. People need to think hard to understand it. In Vietnam, the message must be clear. For example, in this ad, I don't understand what horn they are talking about' (ID11, employed manager).

3.3.2 | Nail Biters and Be Smart campaigns

Of the 50 respondents, five remembered the Nail Biters campaign (unaided recall), but only two could properly complete the hidden message in the campaign ad (see Figure 4). In general, respondents found the message easy to understand. However, several respondents critiqued the message. For instance, 'I don't know what keratin is. People will not understand why rhino horn is similar to fingernails. Rhino horn is very hard while fingernails are softer' (ID11, employed manager). Eleven respondents stated that these ads were unsuitable or had no influence on them. Another respondent explained, 'Rhino horn is like fingernails. But beside keratin, rhino horn also contains other substances. And these substances bring about the effect of rhino horn' (ID13, self-employed).

When shown the ad of the Be Smart campaign, five respondents recognized it, but only four remembered the hidden keywords (rhino horn; see Figure 5). Notably, respondents provided



FIGURE 3 Ad 3, TRAFFIC's Chi campaign, Phase 2. The message translated to English is 'Gain prosperity through inner strength—Invite hardship using rhino horn. The success of men comes from their efforts and strength of will. They know their prosperity comes from themselves, not from a piece of horn' (Permission to reproduce this ad has been granted by TRAFFIC)

FIGURE 4 Ad 4, Nail Biters campaign, WildAid. The message translated to English is 'Rhino horn is mainly composed of keratin, like finger nails' (Permission to reproduce this ad has been granted by WildAid)



FIGURE 5 Ad 5, Be Smart campaign, WildAid. The message translated to English is 'Wise people do not believe that rhino horn is a panacea' (Permission to reproduce this ad has been granted by WildAid)



inconsistent feedbacks to this ad. Some thought that Ad 5 was impressive, readable and more meaningful than the previous ads because the ad advised people not to use rhino horn due to lack of effects. However, several respondents found the ad insulting. 'We all know that nothing is a panacea, not only rhino horn. This guy does not need to teach us' (ID12, self-employed). Another respondent agreed, 'It is implied that I am not clever if I do not understand this. It sounds a bit insulting' (ID35, retired government official).

3.4 | Perceived influence

Respondents reported that all these campaigns, in general, had very little or no influence on their motivation or desire to buy or use rhino horn. Explanations for the limited impact centred around lack of

trust in the messages and the ad agents of social influence (i.e. those delivering the message). 'If someone talks about rhino horn as part of a campaign, I know that he is just performing. It is not what he really believes. He needs to follow the campaign script. He is not telling the truth. Even if you invited Mr Binh, Director of the Vietnam Military Medical Academy, to talk about rhino horn, no one would believe him. That's because they know he is performing. He is talking for money' (ID9, self-employed). Others referred to lack of scientific evidence presented for the claims made by the campaigns. 'I think that these campaigns are sometimes not for the purpose of communication. [...] They [i.e. NGO's] just implement these campaigns as part of funded projects. They have the money to do it. Meanwhile, they might keep rhino horn at home for their own use. [...] I don't believe in campaigns. There must be scientific evidence' (ID8, government official). Twenty-eight respondents explicitly requested scientific

evidence proving the lack of effectiveness of rhino horn based on clinical trials and laboratory experiments.

3.5 | Attitude towards signing the pledge

Pledge endorsement (i.e. persuading people to sign a pledge to never buy, use or gift rhino horn) is a popular strategy in attempts to change the behaviour of rhino horn users. However, none of the respondents had been asked to do so. We asked the respondent to state their willingness to sign such a pledge on a Likert scale if asked by their employers, business associations or peers. Of the 50 respondents, 33 stated they would likely sign such a pledge. However, 32 of the 33 respondents that were willing to sign a pledge also stated that they would likely break the pledge by buying or using rhino horn (Figure 6).

One respondent, for instance, noted, 'I lose nothing when signing a pledge. I use rhino horn at home. Who knows?' (ID11, employed manager). 'I can even take a photo with the pledge to show my

friends, but it will not influence my decision to use rhino horn at all. These are two completely different stories' (ID6, government official). Other respondents considered this activity 'window-dressing', and that, 'before asking me to sign a pledge, they should organize a talk show or screen a movie that can touch my heart or provide me with scientific evidence about rhino horn' (ID5, employed manager). A respondent, who was a university employed associate professor, explained: 'It depends on why I should show my support for not using rhino horn. They must provide me with good reasons when asking me to approve of something. There are some aspects that I support, but others I don't support. Otherwise, I just sign it off to follow others, but continue to use rhino horn at home. It doesn't cost me anything' (ID2, associate professor, employed manager).

3.6 | The role of referent groups

Most respondents stated consulting and being recommended using rhino horn by their friends, colleagues or business partners, who had previously used rhino horn. Ten respondents mentioned family members or relatives. Two respondents reported traditional medicine practitioners, but none had consulted doctors. As explained by a respondent: 'Doctors will never advise you to use rhino horn as they need to protect their western treatments and medications. [...] Vietnamese people rely on both western medicine and traditional medicine to treat diseases. But we don't ask doctors about such traditional medicines as tiger bone glue or rhino horn' (ID33, business owner).

The use of traditional medicine practitioners in campaigns was considered ambiguous. 'There are two groups of traditional medicine practitioners: one supporting rhino horn use and the other opposing it. [...] People only trust traditional medicine practitioners who have used or prescribed rhino horn to their patients' (ID6, government official). The other respondent doubted traditional medicine practitioners' expertise stating, 'Many of them have never used rhino horn themselves. They don't even possess a piece of rhino horn' (ID17, government official).

Statements from various respondents confirmed that individuals not in their family or networks, including government leaders, religious leaders, famous business owners, celebrities and sports stars, had little or no influence on their decision to buy or use rhino horn. 'I don't even believe in the minister of health because I know that what she said could be part of a conservation campaign. If there were no campaigns, I might believe her. However, individuals who appear in such campaigns want to convince you in order to accomplish their goals' (ID18, self-employed). Another respondent stated: 'When I intend to buy rhino horn, recommendations from my peers have the most influence on my decision. Nobody believes in individuals who appear in conservation campaigns talking about rhino horn. [...] If they (i.e. celebrities, famous business owners, government leaders) did not participate in these campaigns, I would listen to them if they shared their own experience using rhino horn. However, I will never listen to them if they participate in campaigns' (ID1, self-employed).

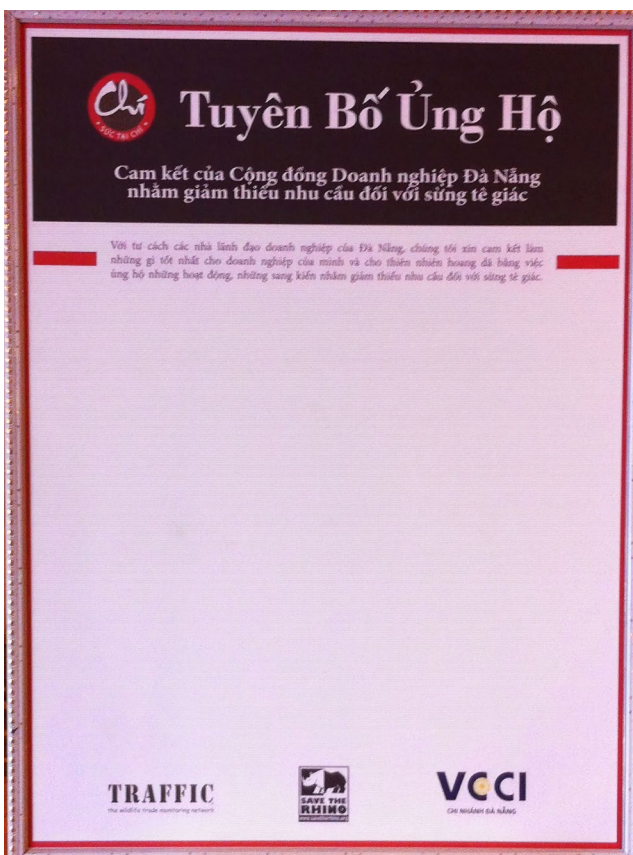


FIGURE 6 A pledge board, TRAFFIC's Chi campaign, Phase 1. The content translated to English is 'Declaration of support: Commitment from the Da Nang business community to reduce demand for rhino horn. We, the business leaders in Da Nang, are committed to doing what is good for our businesses and for wildlife by declaring our full support for initiatives to reduce the demand for rhino horn' (Permission to reproduce this pledge has been granted by TRAFFIC)

Most respondents showed a particularly negative attitude towards celebrities or sports stars in conservation campaigns, for instance, referring to them as 'entertaining figures who receive money to participate in campaigns and follow the guidance of implementing organizations' (ID16, business owner). One respondent stated, 'Although they talk against rhino horn use on television, they themselves use rhino horn at home. [...] If they have health problems, they will definitely use rhino horn or tiger bone glue' (ID11, self-employed). Messages about rhino horn delivered by singers and sports stars were generally considered unreliable. A respondent recalled campaigns featuring Thu Minh and Hong Nhung, two famous Vietnamese singers, and David Beckham, a retired British football player, saying 'Singers only know how to sing, and Beckham only knows how to play football. If your expertise is football, just play football. You can talk about protecting rhinos but why the hell do you talk against the benefits of rhino horn?' (ID45, self-employed). Most respondents asserted that conservation organizations only collaborate with celebrities because of their fame and popularity.

We concluded interviews by asking respondents about the level of influence of different groups (including doctors, traditional medicine practitioners, family members, friends, colleagues, business partners, government leaders, religious leaders, famous business owners, celebrities and sports stars) on their motivations to buy or use rhino horn. The majority stated only listening to family members and members of their immediate networks who had experience using rhino horn (i.e. informational referents). Only three stated that traditional medicine experts or doctors would influence their decision. No respondents mentioned individuals with no perceived experience (e.g. government leaders, religious leaders, famous business owners, celebrities) as having any influence on their decision to buy or use rhino horn.

4 | DISCUSSION AND CONCLUSION

Although consumer 'desire' is considered the major driving force of consumption in many contemporary societies (Belk, Ger, & Askegaard, 2003), the number of studies addressing the consumer end of the global wildlife trade is still limited. Our study contributes to the literature in several ways. First, measuring rhino horn users' exposure to demand reduction campaigns featuring reference groups, we shed light on the influence and perceived trustworthiness of different messengers. Second, assessing willingness to sign and adhere to pledge endorsement, we also highlight differences between public statements and private practices. Both aspects had implications for the effectiveness of different kinds of behaviour change messages and mechanisms. Third, we advance the use of a qualitative interpretive approach to gaining deep insights into rhino horn users' perceptions, beliefs and experiences concerning rhino horn use and demand reduction campaigns. Although qualitative methods are widely used in social science, they are still underutilized in conservation studies, especially of the illicit consumption of endangered wildlife products. In the following section, we discuss the key findings of this study.

4.1 | Campaign exposure and effect

Consumers' exposure to demand reduction campaigns has been measured in multiple ways and treated as evidence of success. This includes the number of likes and shares on Facebook, the number of pledges signed and the number of people reached via mass media channels, events and workshops (Olmedo et al., 2018). Although several organizations have evaluated their campaigns based on exposure, there is no evidence that those exposed have changed their behaviours. For example, WildAid (2016) reported that its campaigns with the participation of Buddhist leaders had directly reached 14,000 people and indirectly reached more than 80,000 through mass media channels. Similarly, the 'effective reach', one of the impact measurements of TRAFFIC's Chi initiative, was reported to be 27% ($n = 600$) and 57% ($n = 600$) among rhino horn consumers in 2016 and 2017 respectively. Offord-Woolley (2017) reported over 21 million Vietnamese people reached by this initiative, of which two million fitted the target audience profile.

Our results indicate a relatively high level of exposure to demand reduction campaigns, especially those featuring celebrities and framed by the medical subtheme (Smith, 2018). However, we find that these campaigns are unlikely to change the behaviours of rhino horn users for a number of reasons. First, while celebrities can be useful in promoting a campaign (Duthie, Verissimo, Keane, & Knight, 2017), this reference group seems to have very little or no influence on respondents in our study. Second, the campaign messages are considered an oversimplification lacking scientific evidence (Smith, 2018). Using the fingernails metaphor comparing rhino horn to human nails and attempting to discredit the medicinal efficacy of rhino horn appears unlikely to change this entrenched belief (Dang & Nielsen, 2018). Instead, it has resulted in outrage and angered both traditional medicine practitioners and rhino horn users in Vietnam (Patton, 2011; Smith, 2018).

Despite relatively high exposure, the level of confirmed recall and recognition remained very low casting into doubt claimed campaign impacts (Offord-Woolley, 2017; WildAid, 2016). The prevailing sentiment was that rhino horn users were indifferent towards these campaigns and prioritized other things in their lives than saving rhinos. Prior studies support this indicating that information about the conservation status of rhinos, that rhino poaching is organized by international criminal syndicates and about the legal sanctions under Vietnam's penal code mattered little to rhino horn consumers (Dang & Nielsen, 2018; Truong et al., 2015). Respondents mostly recalled mass media campaigns featuring celebrities with simple messages (e.g. WildAid's campaigns) because they mainly received the information passively and were unlikely to approach such information actively.

Our results suggest that TRAFFIC's Chi initiative, a theory-based campaign, is less likely to be effective, given the negative feedback and lack of confirmed recognition. The Chi initiative aims to make the target audience contemplate the ads (Thethaovanhua, 2014, in Vietnamese). This requires of cognitive efforts that rhino horn consumers were

unwilling to make or were directing to other tasks at the time of exposure (Kahneman, Slovic, & Tversky, 1982). While Ad 1 and Ad 3 without mentioning rhino horn confused respondents, the presence of a rhino horn in Ad 2 can have the adverse effect making consumers want it, and the image could, therefore, undermine the message. Notably, TRAFFIC's first survey conducted in 2012, providing insights about the core values of rhino horn users (TRAFFIC, 2017) was rejected by the Vietnamese CITES Management Authority. 'Some information in the report is not correct, unclear. Its conclusions were not objective. The survey did not employ good methods, possibly leading to misunderstandings and have a negative influence on our law enforcement efforts and the reputation of Vietnam on the global scale' (VAF, 2013, in Vietnamese). In fact, only 20 respondents of 600 in this survey were actual buyers or users of rhino horn. TRAFFIC (2017) stated that the Chi initiative has been evaluated through three consumer surveys in 2014, 2016 and 2017. These surveys were mostly focused on the target audience's behaviours and motivations. 'A significant sustained decline in self-reported rhino horn use was found between surveys in 2014, 2016 and 2017, from 27.5% to 6% and 7% respectively' (TRAFFIC, 2017). TRAFFIC used three indicators, including the Effective Reach, the Net Promotor Score and the Agreement Index, to evaluate the impact of the Chi initiative (TRAFFIC, 2017). Although TRAFFIC (2017) claimed positive results of the Chi initiative based on these indicators, its real impact could be questioned based on the sampling approach and the fact that no control group was used. Very small numbers of buyers and users of rhino horn were interviewed in these surveys. Of the 600 respondents in the 2016's survey, only 50 respondents were self-reported users of rhino horn. In the 2017's survey, only 60 respondents, of 600, were rhino horn users.

We suggest that formative research and surveys should be conducted with individuals demanding rhino horn, that is, individuals who believe in its benefits and show a willingness to buy. Studying these individuals will provide more useful insights for the design of demand reduction strategies than studying those not demanding and never having used rhino horn. Our results also provide important implications for the adjustment of ongoing campaigns, especially the Chi initiative (TRAFFIC, 2019b). The pledge-signing initiative was considered window dressing by respondents despite evidence that pledges are effective in changing behaviours (McKenzie-Mohr, 2011). McKenzie-Mohr (2011) argued that pledges or commitments only work voluntarily. In other words, individuals should not feel coerced into making a commitment. However, the signing of pledges not to buy or use rhino horn is mainly implemented as part of an event organized for members of an association or as part of company policy. Thus, individuals are, to some extent, typically under pressure to sign the pledge from their peers or superiors further up the company management ladder. Our results showed that most respondents were willing to sign such a pledge because they had nothing to lose but also that they acknowledged that they would very likely break the pledge. Furthermore, signing a pledge is on its own unlikely to change their beliefs about the benefits of rhino horn. We suggest that this initiative instead should be approached by asking individuals to write

a pledge and send it to an organization on a voluntary and discrete basis.

The proliferation of campaigns using numerous different messages and approaches increases the risk of confusing consumers (CITES representative, personal communication, 26 March 2019) and can lead to cognitive biases (Blanco, 2017). To avoid this, conservation organizations could instead collaborate on unified campaigns delivering simple and easy-to-understand messages. Our results corroborate the suggestion of Greenfield and Verissimo (2019) that cross-institution collaboration should be improved. The Vietnamese CITES Management Authority should play a central role in coordinating between the Vietnamese government, law enforcement agencies, conservation NGOs and donors to develop a national action plan to reduce demand for rhino horn. The involvement of researchers and scientists is furthermore critical to ensure that campaigns are based on evidence about consumer behaviour, and that impacts are appropriately evaluated. Consumer studies and impact evaluations should be conducted using rigorous methods and published in scientific journals to ensure transparency and that the research process can be verified and methods and conclusion challenged. Cross-institution collaboration under the coordination of the Vietnamese CITES Management Authority has the potential to leverage the strengths of each institution and improve the results of demand reduction campaigns. Although such a unified strategy detracts from individual institutions' ownership, freedom, branding and fundraising opportunity, such coordinated efforts could improve trust among consumers.

Our interviews indicate that case studies of users or their next of kin having experienced negative or no effect of rhino horn are likely to influence consumers more effectively than most other approaches. Several respondents, for instance, mentioned news broadcasts about a 2-year-old child being poisoned by drinking rhino horn powder to reduce high fever (Vietnam Television, 2019). Ethical concerns are, however, apparent if such instances are used actively in campaigns. Which strategies conservation organizations choose to pursue is also a trade-off between campaign effect and self-promotion. If they experience distrust among the users as this study suggests, campaigns that emphasize their organization (logo etc.) may not be the preferred means to achieve the desired effect of reduced consumption. Other means like supporting public dissemination of results of scientific studies or providing the requested scientific evidence (cf. above) may be more appropriate. 'The claims made that rhino horn has no medicinal qualities seem to be based on rather flimsy evidence, but that does not mean to say they are wrong' (Patton, 2011). Hence, further tests of the medicinal efficacy of rhino horn and controlled comparison with western pharmaceuticals may be a good investment. Our results suggest that the wit of rhino horn consumers should be acknowledged when developing initiatives to reduce demand for rhino horn. More nuanced approaches should be employed in demand reduction campaigns to enhance effectiveness and avoid misrepresentation and racism (Margulies, Wong, & Duffy, 2019). Informed campaign design requires formative

research using qualitative methods to gain insights into the target audience (Truong & Dang, 2017).

4.2 | Influence of different reference groups

This study provides important insights about the perceived trustworthiness and the influence of different reference groups. Our findings reveal that consumers mostly listen to informational referents (i.e. those peers who have experience using rhino horn). Advice about the use of rhino horn in Vietnam is mainly based on word of mouth. And trust in such relationships (i.e. their peers) largely determines the extent to which consumers follow the advice (TRAFFIC, 2019a). Although the informational reference group also includes traditional medicine practitioners and doctors, our findings show that the former plays a minor role while the latter has no influence. Hence, demand reduction campaigns using these two groups for information transfer might not achieve the expected outcomes.

The use of celebrities, as value-expressive referents, has been a popular strategy used by conservation organizations in their campaigns (Anderson, 2011; Brockington & Henson, 2015; Duthie et al., 2017). For instance, David Beckham and Prince William participated in the United for Wildlife's 'Whose Side Are You On' campaign targeting ivory and rhino horn demand (The Guardian, 2014). However, the effectiveness of celebrity endorsement has rarely been investigated (t Sas-Rolfes et al., 2019; Duthie et al., 2017). Our results suggest that celebrities might have very little or no influence on rhino horn users. Most of the respondents considered celebrities untrustworthy, given that celebrities were mainly entertainers without expertise in traditional medicine, and that celebrities were paid to speak on behalf of conservation NGOs. This finding corroborates prior studies showing that celebrity endorsement is a double-edged sword (Muda, Musa, & Putit, 2017). Duthie et al. (2017) indicated a lack of strategies in the use of celebrities in conservation campaigns and highlighted a trade-off between the target audience's willingness to engage and recall of conservation messages.

Conservation organizations also urged famous business leaders, another value-expressive reference group, to become 'champions' of wildlife protection, speaking against rhino horn use in their personal lives, communities and business networks (TRAFFIC, 2016; WildAid, 2018). For instance, Hoang Khai, a famous Vietnamese businessman, owner of the Khaisilk brand, joined Tran Bao Son, a Vietnamese actor-cum-businessman, in the Chi campaign promoting the idea that success, masculinity and good fortune come from an individual's inner strength and character and not from external factors like rhino horn (TRAFFIC, 2016). However, our results suggest that the success of the Chi initiative has been limited. Some respondents argued that they would listen to these business owners only if they did not participate in conservation campaigns and if these business owners were their personal acquaintances. Like celebrity endorsement, business leaders endorsement can become a double-edged sword. After appearing in the Chi campaign (TRAFFIC, 2016), Hoang

Khai, for instance, faced a criminal probe on counterfeit silk products (Vietnam Investment Review, 2017).

Recognizing the shortcomings of using value-expressive referents, especially celebrities, as deliverers of demand reduction messages, conservation organizations have increasingly attempted to leverage the influence of utilitarian referents, especially business associates, to change rhino horn consumer behaviour (TRAFFIC, 2017; WildAid, 2018). For instance, TRAFFIC's Chi initiative targeted the business sector, umbrella organizations and the government to dissuade rhino horn use among business leaders and colleagues through the incorporation of wildlife protection policies into a corporate social responsibility (CSR) toolkit. Pledge endorsement is another example of using the influence of utilitarian referents. However, this initiative has certain drawbacks, as discussed above. Our results reveal the difference between public statements and private practices. Under the pressure of utilitarian referents and especially in public, consumers tend to follow others to save 'face' (Ahuvia & Wong, 1998), whereas they are very likely to behave differently in private settings. This difference should be carefully considered when designing demand reduction strategies, especially as rhino horn is often used at home.

4.3 | Behaviour change messaging

Different kinds of messaging have been used in rhino horn demand reduction campaigns in Vietnam (Dang & Nielsen, 2018; Olmedo et al., 2018). Conservation messages focused on the plight of rhinos were popular in the past but appeared unable to change the behaviour of rhino horn users (Dang & Nielsen, 2018; Truong et al., 2015). Several organizations have, therefore, changed strategies using other types of messages (Smith, 2018). Smith (2018) identified two different but inter-related subthemes often used to frame campaign messages—the medical subtheme and the success subtheme. The former was adopted in both of WildAid's campaigns while the latter was used to develop TRAFFIC's Chi initiative (Smith, 2018). Medical messages such as those used in the 'Be Smart' campaign and the 'Nail Biters' campaign focus on criticizing the use of rhino horn based on the lack of scientific evidence for its effect in treating diseases. Although these messages may generate better recall among consumers, they are unlikely to change their behaviours. Most importantly, studies indicate that respondents either believe in the medical benefits of rhino horn because of their own experience or those of their peers or that they are willing to try all options to heal their ailment or that of their family or relatives (Dang & Nielsen, 2018). In other words, they have tried rhino horn and experienced some benefits. This finding resonates with Nowell (2012) and Patton (2011), who have identified a number of problems in the medical subtheme.

Recognizing these problems, TRAFFIC (2017) has shifted to the success subtheme, which focuses on another aspect of the demand—the use of rhino horn to gain success. TRAFFIC's Chi initiative promoted the idea that a man's success comes from his inner strength or Chi, not from using rhino horn to display wealth or gifting

this product to gain favour from business relationships (Offord-Woolley, 2017). The success subtheme also suggested an alternative to rhino horn with respect to body detoxification, which includes a healthy lifestyle and the use of natural means (Ad 1). However, most respondents in our study found these messages difficult to understand or simply did not want to spend their time and cognitive resources understanding these messages. While changing lifestyle takes time and the suggested natural means sound generic, these messages are unlikely to change their deeply rooted belief in the medical effect of rhino horn. Our results resonate with Greenfield and Verissimo's (2019) finding that the Chi initiative has not fully adhered to the key principles of social marketing. Dang and Nielsen (2018) indicated that the two dimensions of value in using rhino horn—utilitarian value and hedonic value, are often intertwined and difficult to address separately. Changing the belief that rhino horn has major medicinal properties that can cure hangovers and various other minor ailments, as well as terminal diseases, is crucial to reducing demand (Dang & Nielsen, 2018). However, this cannot be achieved by claims alone or by relying on an oversimplification of the limited available evidence (Patton, 2011; Smith, 2018). The consumers are in most cases, highly educated people in senior positions in the business sector and the government and are as such perfectly capable of checking the proof of such claims. They themselves insist on more evidence obtained through studies using rigorous scientific methods. We suggest that medical messages should be prioritized in demand reduction campaigns but that these should build on strong scientific evidence. It is also important that societal factors influencing the use of rhino horn are addressed when designing campaigns (Singer, 1990).

4.4 | Limitations

This study is one of few to adopt a qualitative approach to examine self-reported rhino horn consumers norms, beliefs and exposure and stated response to demand reduction campaigns. Given the large number of rhino horn campaigns implemented in Vietnam in the past 5 years, we did not aim to conduct a formal review of all campaigns. We instead tried to build insights into the exposure of rhino horn users to behaviour modification campaigns with and without an underlying behaviour change model or theory of change and on the influence of different reference groups on their motivation to buy and use rhino horn. However, some limitations of this study must be acknowledged. First, it is not possible to assess whether any specific campaign has changed the behaviour of rhino horn users. Change, if any, may derive from the combined effect of different campaigns. Second, our study evaluated respondents self-reported influence of the campaign, and we, therefore, cannot draw conclusions about any actual change in their use of rhino horn. Third, the approach is vulnerable to 'ex-post rationalizing' whereby respondents retrospectively explain motivations in order to appear internally consistent with their usage of the product. In this case, this could involve criticizing and diminishing the perceived influence of campaigns

(Sigelman & Kugler, 2003). Despite this risk qualitative studies of motivations by confirmed rhino horn users provide valuable insight into their self-image and thereby possibilities for affecting their behaviour. And lastly, our sampling approach did not ensure a representative sample of the consumer population. Although conducting interviews with rhino horn users is challenging due to the illegal nature of their behaviours, we call for more studies on larger samples to understand consumers' preferences and trade-offs with respect to different attributes of their choice to buy or use this product. We highlight the importance of studying the impact of demand reduction campaigns on actual rhino horn buyers, users and intenders using rigorous methods. Such studies are critical for the adaptation of ongoing campaigns and to inform future initiatives.

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CONFLICTS OF INTEREST

The first author was involved in the first phase of TRAFFIC's Chi initiative and is affiliated with Social Marketing Initiatives (a group of independent consultants with no contractual relationships or consultancy services with TRAFFIC or WildAid).

AUTHORS' CONTRIBUTIONS

H.N.D.V. conceived the idea; H.N.D.V., M.R.N. and J.B.J. jointly designed the study; H.N.D.V. collected the data, analysed and wrote the first draft of the manuscript. All authors reviewed, edited and gave final approval for publication.

DATA AVAILABILITY STATEMENT

The data are archived at Mendeley Data at <https://doi.org/10.17632/vjtxybrc28.1> (Dang Vu, 2020).

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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