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Research Article

Media Framing of Financial Mechanisms for Resolving Human–Predator Conflict in Namibia

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The decline in carnivore populations is largely exacerbated by lethal methods used to reduce livestock depredation. Financial mechanisms are designed to limit lethal control by reducing the cost of depredation. The media can affect how the general public feel about issues like financial mechanisms but no study has been undertaken to understand the framing of this topic. This article filled this gap by using content analysis of newspapers to analyze economic incentives designed to mitigate human–carnivore conflict in Namibia. Forty-six percent of the articles were framed positively toward incentives, 24% ambivalently, 19% negatively, and 11% neutrally. Compensation was commonly framed positively whereas community-based conservation, trophy hunting, and tourism were framed ambivalently. Incentives were framed more negatively where perceived costs outweighed benefits. These results can help conservationists plan more effective communication interventions and anticipate issues that can affect the success of mitigation strategies.

Keywords carnivore conservation, compensation, economic incentives, human–wildlife conflict, trophy hunting

Introduction

Human–wildlife conflict occurs when the needs of humans are negatively affected by the needs or behavior of wildlife, or vice versa (Madden, 2004). This conflict poses one of the greatest threats to large carnivores globally (Inskip & Zimmermann, 2009). In southern Africa, where many humans live below the poverty line, carnivores can severely affect the economic stability of households as these species predate upon valuable livestock, which can cause financial ruin if there is no alternative income available (Rust & Marker, 2014).

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Techniques that reduce the likelihood of carnivore predation on livestock range from the lethal to non-lethal (reviewed in Linnell, Smith, Odden, Swenson, & Kaczensky, 1996). Lethal techniques can provide short-term relief from depredation but their widespread application is not always conducive to sustainable management of threatened carnivore species (Treves & Naughton-Treves, 2005), thus effective non-lethal alternatives are often sought out (Sillero-Zubiri & Laurenson, 2001). For example, financial mechanisms aim to reduce the financial burden that carnivores place on livestock farmers (Dickman, Macdonald, & Macdonald, 2011). Compensation—one type of financial incentive—directly pays farmers for livestock reportedly killed by carnivores (Ogada, Woodroffe, Oguge, & Frank, 2003), whereas photographic tourism—a different financial incentive—could provide income to locals by tourists paying to see wild carnivores (Stander, Ilau, Jui, Dabe, & Dabe, 1997). Regardless of the mechanism, the goal is to increase the value of carnivores so that they are worth more alive than dead to the people who live alongside them (Dickman et al., 2011; Nelson, 2009).

Although global carnivore conservation efforts follow broadly similar methods, specific applications vary depending on local circumstances. Namibia, for example, has increasing carnivore populations (NACSO, 2013), partly because the country has a large geographic area under wildlife conservation (NACSO, 2013). As such, a variety of different financial mechanisms are employed to increase the benefits of living with carnivores while decreasing their costs (Table 1).

Although not strictly a financial incentive itself, the Namibian conservancy model provides benefits to communities through income derived from trophy hunting, culling, and photographic tourism (Nature Conservation Amendment Act, 1996). Conservancies

Table 1
Financial mechanisms used in Namibia to mitigate human–carnivore conflict

Financial mechanism	Description of financial mechanism
Compensation	Monetary payments made if livestock is proven to be killed by a carnivore (Esterhuizen, 2004)
Conservancies	Neighboring landholders share costs of carnivore prevention and benefit from carnivores through provision of property rights (NACSO, 2013)
Eco-labels	Farmers receive a price premium on meat that is farmed in a predator-friendly manner (Marker, Mills, & Macdonald, 2003)
Insurance	Small premiums are paid by farmers to insure their livestock against depredation; if depredation occurs, full payment will be given on the condition that measures were taken to reduce chance of depredation (Kasaona, 2006)
Tourism	Income received from tourists who pay to view carnivores (Stander et al., 1997)
Trophy hunting	Income received from trophy hunters who kill carnivores (Marker et al., 2003)
Other financial incentives	Grants and loans are provided to farmers to offset the costs of farming in a landscape shared with carnivores

are legally defined protected areas where residents are conferred property rights over the wildlife on their land and are thus able to utilize natural resources consumptively and non-consumptively. Conservancy members can continue agricultural practices but can also build lodges for tourists and/or hunters, both of which can potentially provide income for local communities. Conservancy members also receive compensation payments for damage caused by wildlife (Kasaona, 2006). Although conservancies have been successful at providing benefits to local communities, these benefits are sometimes not distributed equitably (Rust & Marker, 2013).

As the use of financial incentives to reduce human–carnivore conflict is relatively prevalent throughout the country, the national media sometimes reports on their usage. Namibian newspapers cover both the financial incentives used and the benefits and disadvantages of implementing these tools to mitigate conflict. Assessing how the national media frame interventions to reduce carnivore conflict can help conservationists strategically plan communications and anticipate what kinds of issues people believe affect conservation interventions.

Conceptual Framework and Objectives

Media and Frames

A frame is "a way of packaging and positioning an issue so that it conveys a certain meaning" (Menashe & Siegel, 1998, p. 310); it can be thought of as a meta-message that guides the article in a particular direction (Tannen, 1993). Frames are important because people's decisions can be changed through minor alterations in the way that problems are framed (Tversky & Kahneman, 1982). Opinions can also be shaped by the way that the media conveys information on environmental issues, which, in turn, can shape further headlines (Jensen, 2003). The media has the power to transform attitudes towards biodiversity (although not always, see Gore, Siemer, Shanahan, Schuefele, & Decker, 2005), as well as the policies and campaigns aimed at wildlife conservation (Gore & Knuth, 2009; Messmer, Reiter, & West, 2001). A frame's valence refers to whether it is conveyed largely in a positive or negative manner; this valence can affect public support for policies (de Vreese & Boomgaarden, 2003). News articles often contain quotes from stakeholders involved in conversation. The people chosen to provide quotes for a story can also influence how the readers perceive the issue (Jacobson, Langin, Carlton, & Kaid, 2011). Because the media controls the themes it focuses on and the amount of coverage of news items, the media is an important actor involved in wildlife management.

Analysis of media frames about conservation challenges have been used to understand narrative on topics related to human–carnivore conflict. Previous research has examined how the media covers topics such as "problem animals," incidents of attacks by carnivores, and how media coverage shapes attitudes toward predators (Alexander & Quinn, 2012; Gore & Knuth, 2009; Houston, Bruskotter, & Fan, 2010). However, there has been no known published research conducted to date on the news coverage of financial mechanisms for influencing wildlife conservation. This is problematic because these schemes are widespread across the globe (Dickman et al., 2011) and the media may influence attitudes if articles are constantly framed positively or negatively, as has been shown in other disciplines (Brewer, Graf, & Willnat, 2003; Terkildsen & Schnell, 1997). Attitudes toward incentives are important to understand as they could reveal the types of mechanisms that are most acceptable and to whom, the schemes that are thought to be succeeding or failing and the reasons for this, and the stakeholder groups that are most positive or negative

toward each scheme. Information on how the media frame financial mechanisms could also assist wildlife managers efforts to communicate with stakeholders and the media on effective carnivore conservation methods (Siemer, Decker, & Shanahan, 2007), as well as improve outreach and management efforts (Jacobson et al., 2011).

Aim and Objectives

This article sought to understand how the media framed financial incentives to mitigate human–carnivore conflict in Namibia. The objectives were to determine (a) the types of financial mechanisms that were discussed in Namibian newspapers in relation to carnivore conservation, their relative frequencies and whether they were used alone or with other mitigation measures, (b) the valence of the articles, and (c) the stakeholder groups used as sources within the articles.

Methods

Sampling Frame

Content analysis of newspapers was used to achieve the above objectives. Five of the most popular Namibian newspapers with a total weekly readership of 173,000 were used in the content analysis: *Informante* (65,000 copies printed week), *The Namibian* (40,000 copies/week), *Namibian Economist* (7,000 copies/week), *Namibian Sun* (36,000 copies/week), and *New Era* (25,000 copies/week). These newspapers were chosen due to their wide readership (in comparison to other national newspapers that have readerships below 5,000 copies/week each), their use of English language (which is the national language of Namibia), and the ability to search their websites for archived articles.

Each of the newspapers' search engines was used to search for keywords in online articles (see Appendix for the full list of keywords used), which scanned the titles and content of each article. The search included articles written by journalists, as well as editorials and letters written by the general public to the editor. The newspapers listed articles on their websites from the date when newspapers began indexing articles online (which ranged from January 1, 2004 to January 1, 2010) until the date of the search. All search engines provided results from order of relevance to the key words used. Data collection took place between January–February 2013.

No sampling was used to select articles; all 122 articles identified through the searches were read and analyzed. Articles not specifically related to research objectives (e.g., not related to Namibia or not discussing carnivores) were excluded from analysis. Prior to searching for the defined keywords, a random sample ($n = 15$) of the articles were read and analyzed to assist with developing the protocol and codebook (Evans & FitzGerald, 2002).

Coding Protocol

Each article was read and coded for sections that referred to financial mechanisms to mitigate human–carnivore conflict. Rather than using automated computer programs, each article was read independently by two coders (Morris, 1994) to increase reliability and reduce bias.

First, information related to the research objectives were collected and saved onto a computer worksheet. To answer objective 1, the following data were recorded: title and main synopsis and incentive measures proposed/used; for objective 2, additional

information collected included the valence of article; finally, for objective 3, information was recorded on the stakeholder group(s) of the article's author or the interview respondents. Articles that noted more than one stakeholder group were also recorded. Articles sometimes conveyed both positive and negative valences: if each stakeholder group within the article expressed opposing attitudes towards incentives, valences were attributed to each stakeholder. If one stakeholder mentioned both positive and negative aspects, an ambivalent valence was coded. There were no instances of articles written by journalists where stakeholder groups were not interviewed or sourced. Stakeholders were categorized as: academics, carnivore conservation nongovernmental organizations (NGOs), community-based conservation NGOs, farmers, general public, government officials, or hunters.

Second, each article was systematically coded to ascribe numbers to variables (see below) that related to the research questions. Codes were mutually exclusive, exhaustive and applied consistently throughout the coding process. The two coders were trained in the coding protocol.

Codes were developed for four variables: (a) type of financial mechanism(s) discussed, (b) valence of each financial mechanism (i.e., positive, negative, neutral or ambivalent), (c) stakeholder group(s) that either wrote or were interviewed for the article, and (d) whether financial incentives were used alone or with other mitigation measures such as livestock guarding dogs or herders.

Compensation and insurance schemes were combined into one category because the compensation scheme previously offered to communal conservancy members of Namibia had changed to an insurance scheme in some areas (Bowen-Jones, 2012). When referring to either compensation or insurance schemes throughout the rest of this article, the term "compensation" was used for brevity. Financial incentive schemes that provided in-kind donations (e.g., replacement livestock, guarding dogs) were treated separately because they did not involve direct monetary transfer.

Third, inter-coder reliability of all variables was checked using Cohen's Kappa (K) (Cohen, 1960). When the reliability was $< .7$, articles were re-coded. Values $> .7$ demonstrate a strong level of reliability (Lombard, Snyder-Dutch, & Bracken, 2002). When K $< .07$, both coders discussed discrepancies, and independently recoded articles for those variables. After the second round of coding, the inter-coder reliability for all variables was $>.7$ and analysis proceeded.

Valence of Frame

Following Houston et al. (2010)'s approach for defining a frame's valence, financial mechanisms were deemed to have a positive valence where there was a clear positive message being given about the scheme by the stakeholder (e.g., "conservancies allow benefits to flow to those who are living with wildlife"); negative messages included phrases such as "no conservancy member has ever been paid compensation"; ambivalent messages included phrases such as "wildlife impacts people and their properties but also brings benefits." A neutral valence was assigned when no opinion given as to the positive or negative effects of a financial mechanism.

Data Analysis

Chi-square was used to determine whether there was a significant difference between the frequency of positive, negative, neutral or ambivalent valences of each financial incentive. Significance was set at $p < .05$. Qualitative data analysis was also used to contextualize the findings. A grounded theory approach was used to search for common themes in the

data (Glaser & Strauss, 1967). Quotes from the articles were used to capture the essence of each theme, which helped explain and contextualize the results obtained (Auerbach & Silverstein, 2003).

Results

Types of Financial Incentives

The most common incentive measure reported in the 122 articles was compensation, followed by trophy hunting (Table 2). Financial mechanisms were most often mentioned as a single mitigation technique without reference to other measures (72%). This was followed with a combination of livestock husbandry changes to reduce depredation, monitoring of carnivores and training of farmers on how to protect livestock (24%) and then with social assistance such as help with school fees (4%).

Stakeholder Groups

The majority of articles were either written by individuals working for NGOs, or were journalists who interviewed individuals from NGOs (Table 3). Academics were rarely used as information sources within the articles.

Framing of Incentives

A total of 56 (46%) articles had a positive valence, 29 (24%) were ambivalent, 23 (19%) were negative, and 14 (11%) articles had a neutral valence. The frequency of articles with a positive valence of compensation was significantly greater ($p < .001$) than the frequency of articles with a mixed, negative, or neutral valence (Table 4), whereas significantly ($p = .037$) more articles on conservancies were written ambivalently. The frequency of eco-labels, loans, and grants mentioned in articles were too small to conduct statistical tests on, although articles that included these financial mechanisms spoke positively of them.

Table 2
Frequency and percentage of carnivore conservation financial incentive types reported in Namibian newspapers

Incentive type	Frequency (%)
Compensation	52 (30)
Trophy hunting	38 (22)
Tourism	36 (20)
Conservancies	27 (15)
Eco-labels	6 (3)
Other[1]	5 (3)
Diversifying incomes[2]	4 (2)
Grants	4 (2)
Fines	3 (2)

[1]Includes taxes, loans, or property rights.
[2]Includes growing crops or opening businesses to provide additional income.

Table 3
Frequency and percentage of stakeholder groups used as sources in Namibian newspaper articles on financial mechanisms to mitigate human-carnivore conflict

Stakeholder group of respondent	Frequency (%)
Conservancy NGO	46 (38)
Government officials	27 (22)
NGO supporting carnivores	21 (17)
Farmers or farming organizations	10 (8)
Hunter or hunting organization	6 (5)
General public	6 (5)
Academic	3 (2)
Tourism operator	3 (2)

Table 4
Frequency (percentage in brackets) of valence of financial mechanisms reported in Namibian newspapers for mitigating carnivore conflict

Mechanism	Positive	Ambivalent	Negative	Neutral	p value, $df = 3$
Compensation	20 (61)*	4 (12)	5 (15)	4 (12)	$p < .001^*$, $\chi^2 = 22.3$
Conservancy	7 (21)	15 (47)*	5 (16)	5 (16)	$p = .037^*$, $\chi^2 = 8.5$
Eco-label	5 (100)	0	0	0	n/a
Loan/grant	3 (67)	0	0	1 (33)	n/a
Tourism	5 (25)	6 (30)	5 (25)	4 (20)	$p = .940$, $\chi^2 = 0.4$
Trophy hunting	10 (42)	3 (12)	6 (25)	5 (21)	$p = .228$, $\chi^2 = 4.3$

*Significantly different.

Of the articles with a positive valence of compensation, 15 (75%) of stakeholders did not have experience of using this financial incentive to mitigate conflict, but rather spoke of the potential benefits. However, of the articles on compensation where the valence was negative, ambivalent, or neutral, 16 (89%) of stakeholders had experience of the incentive. One government official, for example, stated that compensation "is extremely expensive and difficult to verify and manage, much as it is difficult to assess and determine the value of losses." Valences were often negative toward compensation when it was not received; for example, after a number of uncompensated livestock attacks, "farmers . . . threatened to declare war on the lions." Even when compensation was received, stakeholders often complained of late or partial payments and corruption within the scheme.

Conservancies were framed ambivalently as it was thought that although financial benefits were received, the protection of wildlife could also increase the numbers of predators on the land, leading to more instances of human–wildlife conflict. For instance, one article that started by discussing the benefits of conservancies then ended with "[t]he number of conflicts between people and wild animals has increased." As well as the negative aspects of conservancies, there were reported benefits. Conservationists quoted in the articles often mentioned the increases in carnivore populations as clear benefits of conservancies. For example, one carnivore conservationist mentioned that he "attributed the increase in the

number of desert lions to the creation of conservancies, as they have given people an appreciation of the value of the animals."

Photographic tourism received a mixed response from stakeholders. Conservationists were positive of its ability to mitigate human–wildlife conflict (e.g., "[c]rucial to the conservation of carnivores, according to Wild Dog Project, is the [p]romotion of species-based tourism concentrating on wild dogs . . . to reduce conflict on farmlands"), whereas local communities complained that income did not fully offset the costs of damage incurred. For example, several newspapers ran stories on an entire pride of lions that was reportedly killed due to instances of livestock depredation suffered by local farmers.

Trophy hunting was often discussed positively by trophy hunters ($n = 9$, 90%) and negatively by conservationists ($n = 5$, 83%). For example, one executive member of the national trophy hunting organization said that "the ability to utilise cheetahs sustainably, just like any other natural living resource, aids conservation efforts by giving landowners and communal conservancy members economic incentives to preserve, rather than reduce, the cheetah population." Carnivore conservationists, however, were concerned with the lack of benefits to both people and predators: "This practice has no community benefit and is destructive to the conservation of this keystone predator. . . . Trophy hunting as a means of alleviating human wildlife conflict is indiscriminate and therefore ineffective in dealing with an actual problem animal. . . . Financial benefits to the community through hyena trophy-hunting . . . is minimal."

A concern raised by 12 (10%) articles was the equitable sharing of benefits received from tourism and trophy hunting. For example, one article mentioned a large private game reserve owner who wished to turn Namibia into a wildlife park for international tourists. A letter to the editor, however, expressed severe concern to this: "is it not a mistake to allow [carnivores] to live within the same area as our people? . . . Is the grand plan to make the whole of Rural Namibia an amusement park by 2030?". The author was worried that tourism would only benefit tourism businesses rather than local communties living with predators.

Discussion

Namibian newspapers were used to illustrate the nature and extent to which the media can frame valences toward using financial mechanisms to mitigate human–carnivore conflict. Compensation, tourism, trophy hunting and conservancies were the most frequently discussed financial methods in the articles. Compensation was the most common incentive and was referred to more frequently in a positive manner than the other methods. Articles used in this article often highlighted the benefits of compensation to offset the costs of livestock depredation. However, government employees interviewed in the articles mentioned that the government was unwilling to accept responsibility for losses to carnivores by paying compensation to farmers, particularly because of the complexity of verifying damage. This concern questions the effectiveness of using compensation for wildlife conservation, which has also been noted by others (Nyhus, Osofsky, Ferraro, Madden, & Fischer, 2005). In communities that were meant to receive compensation but where payment was not paid, locals became frustrated at the scheme. This could result in widespread poaching of predators if communities do not receive what is perceived to be adequate reimbursement for damage to property, as has happened elsewhere in Africa (Hazzah et al., 2014).

Stakeholders who were profiled in news media stories and who conveyed positive attitudes towards compensation only discussed this method as a potential tool to mitigate the

conflict but did not have previous experience of using it to resolve the issue due to lack of funding to initiate the scheme. The reported number of articles in this study that mentioned the positive aspects of compensation cannot therefore be used as proof that this financial incentive is effective at mitigating conflict. Other research has indicated that, after experience with compensation in Wisconsin, USA, farmers were no more tolerant of carnivores than those who did not receive compensation (Naughton-Treves, Grossberg, & Treves, 2003). Similar to critics elsewhere, the results herein support the literature on cautioning the use of compensation to mitigate conflict with carnivores (Nyhus et al., 2005). It may be beneficial for conservation academics to liaise with the media regarding the pros and cons of compensation schemes to ensure that the general public receive accurate information on this particular incentive.

Namibian conservancies in this article were most often framed with an ambivalent valence. For this incentive scheme to be successful at improving coexistence between carnivores and conservancy members, benefits of carnivores must offset their costs (Rust & Marker, 2013). Improving this situation might not only change the current ambivalent attitude toward conservancies, but could also increase tolerance to carnivores (Rust & Marker, 2013). This suggests that community-based conservation schemes that aim to provide income to local communities living with wildlife will only succeed if the income can offset the costs of living with wildlife (Emerton, 2001), which may prove difficult to achieve.

Money from photographic tourism was reported by carnivore conservation NGOs as a useful method to provide income to locals, which they thought could offset the costs of living with carnivores. However, similar to the problems with conservancies, communities interviewed in the articles often complained that the income was not sufficient to cover the costs of depredation. This is worrying as it could lead to an increase in lethal control of carnivores if these species are deemed more valuable dead rather than alive, as was shown in Tanzania and Kenya (Goldman, Roque de Pinho, & Perry, 2013). To ensure that lethal control is a less attractive option in such situations, it may be beneficial to provide additional support to areas with high levels of livestock depredation, such as subsidized fencing to protect livestock from attacks by carnivores (Karlsson & Sjöström, 2011).

Trophy hunters that were interviewed in the study's articles reported that trophy hunting could create a high-value product that reimbursed residents from damage-causing carnivores. Previous research has shown that achieving a similar profit from photographic tourism would be much more time-consuming and expensive, as photographic tourists require both a lodge and sufficient charismatic game to be attracted to visit the area (Lindsey, Alexander, Frank, Mathieson, & Romanach, 2006). Many areas of Namibia, however, do not have either of these and therefore trophy hunting provided the only viable income-generating avenue from wildlife (NACSO, 2013). Carnivore conservation NGOs in this article were concerned that trophy hunting of rare carnivores was not ecologically sustainable and instead thought that incentives to conserve carnivores must be created exclusively from photographic tourism. However, as mentioned previously, tourism may not fully outweigh the costs of depredation. It is advisable that tourism not be used as the sole financial mechanism to provide benefits to communities for carnivore presence where the income does not offset the costs.

Some newspaper articles reported that the main problem with incentive schemes was that money was only being distributed to a few individuals, rather than those who were most affected by carnivores. It is unclear as to who is benefitting from wildlife and whether this benefit distribution is equitable (Sachedina & Nelson, 2010). The governance of financial mechanisms must be addressed to ensure that corruption and elite capture is minimized

(Dickman et al., 2011). If these problems cannot be overcome, it is unlikely that financial mechanisms will reduce lethal control of carnivores.

Financial mechanisms were frequently discussed without mention of other mitigation techniques, such as educating the public on the value of carnivores or using barrier methods to prevent depredation. This may be one of the reasons for the ambivalent and negative attitudes towards these financial tools because depredation can often be reduced effectively through improvements to husbandry techniques (Ogada et al., 2003; Rust, Whitehouse-Tedd, & MacMillan, 2013; Woodroffe, Frank, Lindsey, Ole Ranah, & Romañach, 2006), which would automatically lessen the financial burden that carnivores place upon livestock farmers. Newspaper editors could be made aware of this to ensure that the public are not misguided into thinking that a single technique will reduce conflict sufficiently.

Academics were rarely sourced for interviews and infrequently wrote letters to the editor on this subject, whereas members of NGOs dominated authorship and interviews for the articles. It is advisable that conservation academics engage more often with the media on this topic to ensure unbiased, evidence-based knowledge of these financial mechanisms is reported. It may also prove useful for academics to write about other conservation incentive measures that have been successful in different countries, such as conservation payments in Sweden (Zabel & Holm-Muller, 2008). The use of compensation, trophy hunting, photographic tourism, and conservancies are well-known techniques in Namibia to mitigate this conflict, but there are other financial mechanisms that could be tested in this country. The media could play a role in assisting with creating awareness of their use in mitigating conflict (Gore & Knuth, 2009), although it must be stressed that the media is not very effective at changing the opinions of close-knit social groups that strongly disbelieve the newspaper's content (Moser, 2010).

This article reaffirms that content analysis is a useful but not perfect tool for understanding human dimensions of wildlife management; articles often have biased perspectives with hidden agendas that advocate for certain points of views. This is a common occurrence in the media (McCombs, 2013). The abundance of articles affiliated with carnivore conservation organizations—who were often vehemently opposed to any lethal control of carnivores—was in direct contrast with the views of trophy hunting organizations expressed in the articles, the latter of whom believed that creating financial markets from carnivores was the only way to save these species. These polarized views are indicative of the underlying principles each organization adhered to. Newspaper companies themselves may also have one-sided views about particular topics, which may skew their reporting of the issue (D'Alessio & Allen, 2000; Groseclose & Milyo, 2005). NGOs often rely on donor funding for their running costs and could promote certain activities that align with their donors' points of view. It is uncommon for NGOs to communicate project failures because of possible loss of donor support (Redford & Taber, 2000). As such, facts can become distorted into partial truths in the media and researchers must be cautious to use newspapers when their aim is to determine accurate reflections of reality.

There were a number of limitations to this study. As the literacy rate of Namibia is only 85% (IREX, 2013), not all citizens had access to information sourced in newspapers. Also newspapers were not widely accessible across the rural areas of Namibia where most of the country's carnivores were found. Together these limitations suggest that some citizens were not susceptible to the media's possible framing effects. Lastly, the results of this study may differ if content analysis was undertaken on other forms of media, such as radio or television. Further research is needed to determine whether this is the case.

In conclusion, this research has shown that financial incentives to mitigate human–carnivore conflict were more likely to be reported positively or ambivalently rather than

negatively. This may indicate that financial mechanisms such as compensation, trophy hunting, and tourism have a potential role to play in reducing this conflict for people globally. Compensation in particular was frequently mentioned in newspaper articles and also was often reported positively because of its potential for conflict to be resolved via financial reimbursement. However, there was a clear lack of evidence to justify these claims. This could suggest that newspapers were used as lobbying mediums by interest groups to push their own agenda. Thus it is important for conservation practitioners and academics to inform the media on fact-based findings related to wildlife conservation tools, which can then help shape public opinion. Other financial incentives such as photographic tourism and conservancies were framed more ambivalently, often because the benefits of these schemes did not outweigh the costs to communities. Results imply it would be prudent for conservationists to use caution when solely relying on these incentives to increase tolerance to carnivores if no other means are available to offset livestock depredation.

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Appendix: List of Keywords Used in Newspaper Search Engines

1. "wildlife conflict"
2. "livestock kill"
3. "wildlife incentive"
4. "manage carnivore"
5. "predator"
6. "wildlife OR carnivore tax"
7. "wildlife OR carnivore fine"
8. "wildlife OR carnivore poach"
9. "conservation OR wildlife subsid*"
10. "wildlife insurance OR compensation"
11. "eco label OR certification"
12. "tourism carnivore"
13. "hunting carnivore"
14. "livestock carnivore"
15. "leopard OR cheetah OR lion AND livestock"
16. "economic carnivore"
17. "carnivore incentive"
18. "financial carnivore"
19. "easement"
20. "conservation OR habitat bank"
21. "debt for nature"
22. "wildlife acquisition"
23. "habitat OR biodiversity auction"
24. "payment for ecosystem services"
25. "biodiversity offset"
26. "agri environment scheme