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RESEARCH ARTICLE

Characterizing social conflict over wolf reintroduction in Colorado: A theoretical model of intergroup conflict

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Abstract

1. *Context*: Wolf restoration is a highly divisive issue in the American West, with stakeholder conflict driven by value and identity-based disagreements. Research suggests that such conflicts require reconciliation to repair intergroup relations before negotiations to address the issue can begin, yet, in the conservation and natural resource management fields, stakeholder processes about divisive issues typically focus only on negotiations. There is a gap in the literature on how to identify and target the drivers of value and identity-based conflicts.
2. *Approach*: We interviewed stakeholders highly engaged in the issue of proposed wolf reintroduction in Colorado to gain insight on the drivers of the conflict and to inform reconciliation interventions. We pulled from conflict and peace-building theories to frame our analysis, specifically suggestions that conflict is fueled by four categories of perceptions, including perceptions of: the group one is in conflict with, one's own social group, the relationship between groups, and the nature of the conflict.
3. *Key Findings*: We found that all interviewees discussed perceptions that can fuel conflict within each of these four categories. However, interviewees who identified as 3rd parties to the conflict primarily discussed the relationships between those in conflict and engaged in thoughtful perspective-taking, an activity that can help reduce conflict. Conversely, both those strongly in support of reintroduction and strongly opposed to reintroduction most commonly described negative perceptions about individuals they are in conflict with and positive perceptions about themselves and their social group. For example, when discussing others, both groups described each other as acting in unjust and unfair ways, as being incapable of or unwilling to change, and as misinformed. When describing positive perceptions of themselves, both those in support and those in opposition viewed their own goals as just and themselves as victims of outgroup members' actions.
4. *Synthesis and applications*: Based on our findings, we suggest various reconciliation interventions that may assist wildlife managers in reducing the conflict about wolf reintroduction in Colorado. These recommendations may also be applicable to wildlife managers working on other issues with high stakeholder conflict.

KEYWORDS
carnivore conservation, human-wildlife conflict, peace-building, reconciliation, social conflict, social psychology, wolf restoration

1 | INTRODUCTION

Human–wildlife conflicts are one of the most widespread global intractable conflicts (Dickman, 2010; Nie, 2004; Redpath et al., 2015). Negative impacts to human endeavours, such as depredation, crop raiding and wildlife damage, are often cited as the catalyst for human–wildlife conflicts (Redpath et al., 2015). Increasingly, research shows that social disputes, such as value clashes (Manfredo et al., 2017), power relations or identity-based conflicts (Madden & McQuinn, 2014), are more influential in driving conflict with wildlife (Dickman, 2010). For example, in a broad review of 100 publications on case studies of human–wildlife conflicts, Redpath et al. (2015) identified that 97 of the described conflicts were, at their root, between people; namely, between wildlife conservation advocates and those defending livelihood-based interests. Further, research suggests that such conflicts are often symbolic of threats to deeper human needs such as security, identity and freedom (Krange & Skogen, 2011; Slagle et al., 2019) and are exacerbated by broader discordance over race, health, politics and economic disparities (d'Estree et al., 2002).

Large carnivore restoration and management is especially contentious (Bruskotter, 2013; Bruskotter et al., 2017; van Eeden et al., 2018). Intergroup conflict (i.e. conflict between different groups) over how to manage carnivores can impede management objectives and long-lasting success of initiatives (Dickman, 2010), prevent stakeholder cooperation (Madden & McQuinn, 2014) and lead to prolonged and costly litigation (Orr et al., 2008). In the past, intergroup conflict over carnivore management has resulted in ballot initiatives to halt mountain lion hunting in California, Oregon and Washington (Nie, 2004) and to reintroduce wolves (Niemiec et al., 2020) and reform black bear hunting practices in Colorado (Loker & Decker, 1995).

Intergroup conflict about carnivore management may also result in lethal control and at times retaliatory killings of carnivores (van Eeden et al., 2020). This direct impact, paired with habitat loss and fragmentation, urban sprawl and reduced prey populations, has led to widespread declines in carnivore populations (Bruskotter et al., 2017; Crooks et al., 2011; van Eeden et al., 2018). Thus, pursuing human–carnivore coexistence necessitates managing intergroup conflict (Venumière-Lefebvre et al., 2022). Despite this need, Venumière-Lefebvre et al. (2022) identified, in a systematic review of 366 papers on human–carnivore coexistence, that only 30.9% of articles explicitly explored intergroup conflict.

Within the conservation and natural resource management literature, there has been a growth in the use of stakeholder engagement processes to address intergroup conflicts. Such processes typically emphasize negotiation about the surface level dispute to reach a settlement or agreement. An example is the Environmental Conflict Resolution framework which typically plays out in the adversarial arena where a third-party mediator facilitates negotiations (Orr et al., 2008). Such frameworks approach conflict as transaction, where actors negotiate for the primary purpose of having as much of their needs, concerns and values represented in the solution as possible, even to the detriment of the others. These types of negotiation processes do not address the value and identity-based components that are often at the root of intergroup conflicts over wildlife (Zimmerman et al., 2020). Further, moving into negotiations before repairing intergroup relations and building trust can exacerbate the conflict (Zimmerman et al., 2020). The pervasiveness of processes that focus on negotiation and settlements may be one reason why complete long-lasting wildlife conflict resolution is rare (Dickman, 2010; Zimmerman et al., 2020).

Interventions to mediate identity-based intergroup conflicts should be designed to target the value and identity-based drivers of the conflict before negotiations (Madden & McQuinn, 2014; Zimmerman et al., 2020). For example, Hurst et al. (2019) suggest using interventions early on that build on moral foundation theory (i.e. sharing ingroup's moral values with outgroup members) and self-affirmation theory (i.e. affirming the ingroups' self-integrity) to mitigate conflicts fueled by identity threats. Such processes, termed reconciliation, focus on social learning and allow for deliberation about the nature of the conflict and relevant values to foster the empathy needed to repair intergroup relations (Daniels & Walker, 2001). Despite calls for these more intensive reconciliatory processes to address intergroup conflict about wildlife (Madden & McQuinn, 2014; Zimmerman et al., 2020), there is a gap in the conservation and natural resource management literature detailing how to identify the drivers of identity-based conflicts and how to develop interventions to target those drivers.

1.1 | Statement of purpose

To address this gap, we developed a theoretical model of intergroup conflict, adapted from reconciliation theories in the conflict and peace-building literature, which have been applied to religious and political conflicts (Bar-Tal, 2000, 2007; Čehajić-Clancy et al., 2016). Studies of such conflicts have identified a wide range of social-psychological factors that can drive conflict and, thus, should be targeted in a reconciliation intervention (Bar-Tal, 2007; Čehajić-Clancy et al., 2016). Reconciliation is a psychological process wherein actors partake in cognitive activities to reframe

perceptions related to the conflict context (Bar-Tal, 2000). However, these have rarely been examined in the wildlife or conservation context.

The theories used in our theoretical model suggest that there are four primary *categories of perceptions* that drive conflicts (Figure 1; Bar-Tal, 2000, 2007; Čehajić-Clancy et al., 2016). These include perceptions of (1) *intergroup relations*, or the history, current state and future of the relationship between those entrenched in conflict; (2) *the outgroup*, or groups comprised of those with attitudes, values and norms differing from your own; (3) *the ingroup*, which is a collective of like-minded individuals with whom you share membership and (4) *the nature of the conflict*, which relates to beliefs about how the conflict started and if it can end. When using 'perceptions', we follow Bennett's (2016) definition that perceptions 'refer to the way an individual observes, understands, interprets, and evaluates a referent object, action, experience, individual, policy, or outcome' (p. 585). Therefore, these four categories of perceptions encompass the variety of specific values, beliefs, attitudes, norms and views that act as social-psychological drivers of conflict, which we term *specific perceptions*.

To test this model, we applied it to the case study of wolf reintroduction in Colorado for which intergroup conflict is high. Our first objective was to characterize the social-psychological drivers of this specific intergroup conflict. In the short term, this research may assist wildlife managers throughout Colorado to develop conflict-reducing processes that target the identified drivers. The second objective was to examine the extent to which theories on the social-psychological drivers of conflicts from other fields apply to the context of wildlife-related conflict. Examining the extent to which these drivers apply in this new context could help identify novel interventions to manage environmental conflicts.

Our specific research questions are as follows:

1. To what extent do various categories of perceptions of intergroup conflict, adapted from conflict and peace-building theories, apply to stakeholders' narratives of the conflict about proposed wolf reintroduction in Colorado?
2. To what extent does the prevalence of different categories of perceptions and specific perceptions within these categories vary across stakeholders who have different positions within the conflict?

1.2 | Theoretical model of intergroup conflict

To identify specific perceptions that drive conflict within the four primary categories of perceptions, we relied on two theories that detail social-psychological interventions for conflict reconciliation. The first theory is Bar-Tal's (2007) *sociopsychological infrastructure of intractable conflicts* (SIIC) which proposes that those societies entrenched in national, multi-generational conflicts construct a collective conflict narrative as a way for individuals to understand and cope with the conflict. *Sociopsychological infrastructure of intractable conflicts* suggests that reconciliation necessitates deconstructing each group's conflict narrative and identifying and altering the specific perceptions that fuel the conflict.

The second theory we utilized is Čehajić-Clancy et al.'s (2016) *emotion regulation perspective* (ERP). Emotion regulation targets specific perceptions to influence individuals' emotional experiences and expressions (i.e. which emotions they have and when they have them). Reconciliation is achieved by targeting the specific perceptions that fuel hatred, anger, guilt, hope and empathy, the emotions most pertinent in conflicts, to increase positive outgroup emotions and decrease

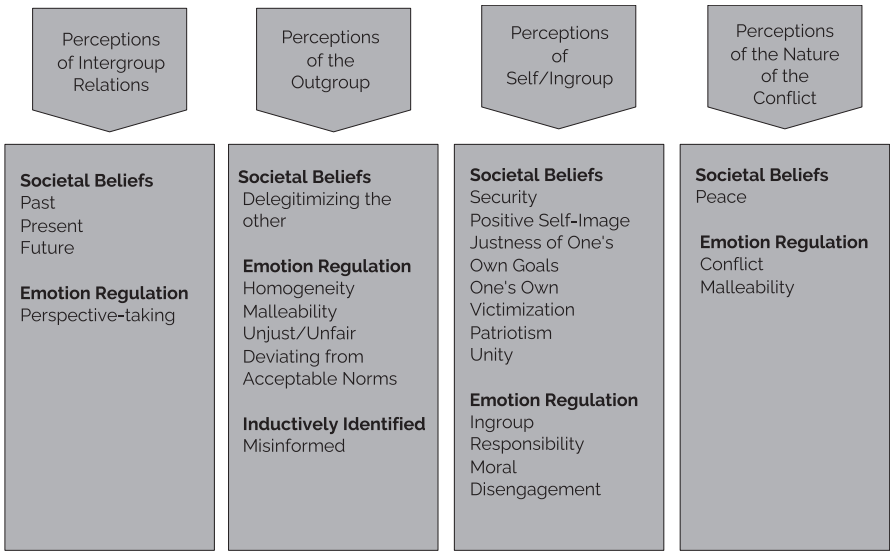

FIGURE 1 The four primary categories of perceptions, with the specific perceptions from the two theories we adapted from (Bar-Tal, 2007; Čehajić-Clancy et al., 2016) grouped within the categories, in our theoretical model of intergroup conflict.

negative ones. For example, individuals typically perceive members of outgroups as homogenous, or as all having the same goals, opinions and attributes. This can result in the perception that all outgroup members are inherently bad, thereby perpetuating feelings of anger and hatred. Thus, to decrease anger and hatred the intervention should increase perceptions of outgroup member variability.

As seen in Figure 1, *perceptions of intergroup relations* includes perceptions of past, present and future intergroup relations from SIIC and if and how individuals engage in perspective-taking from ERP. Gutenbrunner and Wagner (2016) define perspective-taking as '…cognitively adopting the opponent's perspective and perceiving the conflict situation with the other's eyes' (p. 298). *Perceptions of the outgroup* includes delegitimizing the other (i.e. a reference to 'othering', a 'self-other identification and distantiation' psychological process; Brons, 2015, p. 70) from SIIC and, from ERP, the outgroup is unjust and unfair; the outgroup is deviating from acceptable norms; outgroup homogeneity (i.e. outgroup members perceived as all the same; related to the concept of 'stereotyping') and outgroup malleability (i.e. outgroup members perceived as capable of changing). *Perceptions of the self and the ingroup* include six specific perceptions from SIIC: justness of one's own goals, security, positive self-image, victimization, patriotism and unity. Additionally, from ERP, this category includes perceptions of ingroup responsibility and moral disengagement (i.e. convincing oneself that ethical standards do not apply to oneself in this context).

Finally, we included one specific perception from each of the two theories in *perceptions of the nature of the conflict*. We included what peace looks like from each group's perspective (SIIC) and whether individuals believe the conflict is malleable (ERP). To note, *the nature of the conflict* also includes perceptions of the issues being disputed by both parties (i.e. the 'substance'; Madden & McQuinn, 2014). However, perceptions of the issues surrounding wolf restoration are not within the purview of this paper. Here we focus specifically on inter and intragroup perspectives as our unique contribution to the extensive body of literature that describes the substance of conflict about wolves (e.g. see Niemiec et al., 2020, 2022; van Eeden et al., 2018).

1.3 | Case study: Wolf restoration in Colorado

Wolves once inhabited most of North America, but due to government-sponsored predator control programs, paired with diminishing habitat and prey populations, wolves were exterminated from most of their range in the lower 48 U.S. states (Bruskotter, 2013). Given the decrease in populations, wolves were listed under the Endangered Species Act (ESA), a law that gives federal protection to endangered species thus placing their management with the U.S. Fish and Wildlife Service, in 1974. Becoming a protected species, along with instances of natural migration and reintroductions in the late 20th and early 21st centuries, allowed wolves to repopulate the American West (Bruskotter, 2013). After the initial ESA listing, wolves across U.S. states have been delisted and relisted and public policy has seen what Bruskotter (2013) termed a 'pendulum swing' in management objectives, illustrating the polarized views of the U.S. populace have about wolves. Research suggests that wolves have become symbolic of identity-based social divides, such as urban versus rural values, and a surrogate of broader societal-level political and moral conflicts (Niemiec et al., 2020, 2022; Slagle et al., 2019). Wolf advocates often support their position with arguments of restoring ecological balance and environmental health, that wolf restoration is a moral imperative and that people should right past wrongs to wolves (Kellert et al., 1996; Niemiec et al., 2020; Niemiec et al., 2022). Conversely, those opposed to wolf restoration see wolves as a threat to rural livelihoods and identity, livestock, game species and people and as a tool of an overreaching government (Kellert et al., 1996; Niemiec et al., 2022).

Colorado is an exemplary case of this public policy debate about wolf restoration. Nearly 80 years after their extirpation, environmental organizations advocating for wolf reintroduction obtained enough signatures to introduce a ballot initiative (Proposition 114) to reintroduce wolves into the state. In November 2020, Proposition 114 passed with about 51% of the votes in support of reintroduction (Colorado Election Results, 2020) and on 18 December 2023, Colorado Parks and Wildlife (CPW), the state wildlife agency, began the reintroduction with 10 wolves placed in Grand and Summit Counties. During the signature gathering, in anticipation of the vote, we began research in 2019 to obtain baseline data on stakeholder perspectives towards reintroducing wolves into Colorado. Thus, the data analysed in the current paper were gathered before reintroduction passed and questions referenced the potential ballot initiative.

2 | METHODS

2.1 | Participant recruitment

We used purposive sampling to recruit stakeholders for our study. We first identified opinion leaders who had been involved in advocating for or against wolf reintroduction in the media. We then used snowball sampling by asking interviewees to share names of others from their ingroup. We sent recruitment emails, from October 2019 to January 2020, to 35 stakeholders, 22 of whom agreed to participate for a response rate of 62.9%. Before conducting the interview, we provided both written and verbal explanations of participants' rights in the study and received verbal consent from participants. Given the sensitive and political nature of the issue, participants preferred to not have written identifiers linking them to this study. One interview recording was lost due to technical issues and one respondent, who only provided written responses, chose not to answer questions about social conflict. Thus, 20 interviews are included in this analysis. All interviewees were 18 years or older and lived and worked in Colorado at the time of the interviews, except for two who were federal wolf biologists from other states. All procedures were approved by Colorado State University's Institutional Review Board (protocol #19-8942H).

2.2 | Interview guide development

The topics covered in our interview guide included participants' general perspectives on proposed wolf reintroduction, the use of ballot initiatives for wildlife management and thoughts about the stakeholder conflict. The interview questions pertaining to social conflict were designed to identify drivers of conflict as related to perceptions of intergroup relations, the outgroup, the ingroup and the nature of the conflict. The items analysed in this paper include variations of the following three questions: (1) *Can you tell me what you think about the idea of wolf reintroduction that is being discussed here in Colorado?* (2) *Can you tell me about the conflict about wolves and wolf reintroduction here in Colorado? Who is involved in this conflict?* and (3) *Do you know someone or a certain group with an opposite point of view on this issue that you would feel comfortable talking to about wolf management and recovery?* Depending upon the breadth and detail of participants' initial responses, we asked a variety of follow-up questions (see Table S1 for all possible interview questions). We received an expert review of our social conflict questions by Francine Madden, director of the Center for Conservation Peacebuilding, before conducting the interviews.

2.3 | Analysis

2.3.1 | Participant categorization

We categorized our interviewees into one of nine broader stakeholder groups (Table 1) which included: one rancher, three Colorado state employees from either CPW or Colorado Department of Agriculture, two academics/researchers, three federal wildlife biologists, four environmental NGO representatives, one CPW commissioner, three sportspersons or outfitters, one animal welfare NGO representative and two Tribal Nation representatives. We additionally classified participants into one of three subgroups related to their positions in the conflict about proposed wolf reintroduction. This includes those that clearly shared the position of supporting wolf reintroduction, those that clearly shared the position of opposing wolf reintroduction, and those that represented a middle-ground or third-party perspective. We define the middle-ground subgroup as those who described the potential benefits and consequences of restoring wolves at roughly equal rates, thus not clearly aligned with the support or opposition subgroups.

We used two approaches to classify participants into one of these three subgroups. First, we used their response to 'What do you know about the proposed ballot initiative for reintroducing wolves into Colorado? Do you support or oppose such an initiative?' to identify their self-reported stance on wolf reintroduction. Second, we assessed valence (i.e. the positive or negative appraisal that underpins affect; Shuman et al., 2013) of statements related to wolves, their reintroduction, their management and their potential impacts to people, other animals and Colorado. We assessed valence in four categories: positive, negative, mixed and neither (Kent et al., 2016). If approximately 70% or more of their relevant statements had a positive valence and tone, we included them in the subgroup of those that support reintroduction and, conversely, if 70% or more of their relevant statements had a negative valence and tone, we included

TABLE 1 Each interviewee, their position in the conflict and their stakeholder group.

Position	Interviewee	Stakeholder group
Middle-ground perspective	Interviewee 1	Colorado State Employee
	Interviewee 2	Academic
	Interviewee 3	Federal Biologist
	Interviewee 4	Academic
	Interviewee 5	Colorado State Employee
	Interviewee 6	Environmental NGO
	Interviewee 7	Sportsperson/Outfitter
	Interviewee 8	Sportsperson/Outfitter
	Interviewee 9	Tribal Government
	Interviewee 10	Federal Wildlife Manager
Those who support reintroduction	Interviewee 11	Environmental NGO
	Interviewee 12	Animal Welfare NGO
	Interviewee 13	Environmental NGO
	Interviewee 14	Tribal Government
	Interviewee 15	Environmental NGO
	Interviewee 16	Federal Biologist
Those who oppose reintroduction	Interviewee 17	Colorado State Employee
	Interviewee 18	Rancher
	Interviewee 19	CPW Commissioner
	Interviewee 20	Sportsperson/Outfitter

them in the subgroup of those that oppose reintroduction. Lastly, for those who either discussed relative statements with positive and negative valence at roughly equal rates, or for those who shared a neutral perspective avoiding a positive or negative tone altogether, we grouped them into the middle-ground perspective subgroup.

2.3.2 | Thematic content analysis

We used a combined deductive and inductive thematic content analysis approach. Thematic content analysis is a common qualitative analysis method that involves identifying meaningful topics, ideas, and patterns (Saldaña, 2016). A deductive approach involves analysing data using predetermined themes as identified from existing theories or frameworks, while an inductive approach identifies patterns that emerge from the data. Our deductive approach included using the categories of perceptions and specific perceptions from Bar-Tal (2000, 2007) and Čehajić-Clancy et al. (2016), in our adapted theoretical model. This included 19 specific perceptions across the four categories of perceptions with four in *perceptions of intergroup relations*, five in *perceptions of the outgroup*, eight in *perceptions of the ingroup and self*, and two in *perceptions of the nature of the conflict* (see Figure 1 in the statement of purpose section and the description of themes in the theoretical framework section). For full definitions of each theme, see our comprehensive codebook in the Supplementary Materials.

The analysis consisted of three phases and all interviews were coded by two coders. Phase one: two coders reviewed a random sample of eight interviews to explore the applicability of the deductively developed codebook, create context-specific definitions, and for inductive identification of any new themes (i.e. specific perceptions). In this phase, we identified one new theme, the outgroup is misinformed, within the category of *perceptions of the outgroup*. Phase two: we received an expert review by a scholar deeply familiar with stakeholder perspectives about the proposed wolf reintroduction in Colorado. The expert reviewed the codebook and three of the interviews that were coded in phase one. Upon review, clarifications were made to codebook definitions, however, no themes were added or removed. Phase three: coders completed the analysis in the NVivo software program, including a re-analysis of the interviews reviewed in phase one. The final phase coding included two steps performed for each interview. First, both coders independently coded each interview and, second, they came together to review coding and reach agreement.

Once completing the analysis, we counted our codes and explored their frequency per participant in each subgroup. The usefulness and legitimacy of quantifying qualitative data are debated in the scientific community. There is, however, general consensus that there can be advantages, given systematic and rigorous methods are employed (Maxwell, 2010). We took this approach to attain two particular advantages: to describe distributions of observations and to characterize the degree of diversity in perspectives amongst participants. Importantly, the findings of this approach cannot be generalized to a broader population or other contexts. Rather, this approach allows for internal generalizability, described by Maxwell (2010) as the ability to identify the degree to which each theme is representative of study participants and the characteristics of participants that describe each theme.

3 | RESULTS

3.1 | Perceptions across the full sample

Across the 20 interviews, we coded specific perceptions within the four categories of perceptions 275 times (Table 2). Across the 20 participants, *perceptions of the outgroup* were the most frequently coded category of perceptions (mentioned by 19 participants; accounting for 37.1% of coded perceptions). The second most frequently coded category was *perceptions of intergroup relations* (mentioned by 19 participants; accounting for 32% of coded perceptions), followed by *perceptions of the ingroup and self* (mentioned by 14 participants; accounting for 25.1% of coded perceptions), and lastly, *perceptions of the nature of the conflict* (mentioned by 10 participants; accounting for 5.8% of coded perceptions).

3.1.1 | Perceptions of the outgroup

Nineteen participants shared a specific perception within this category at least once (Table S2). Twelve shared beliefs that the outgroup is acting in unjust and unfair ways, for example, suggesting the outgroup's goals and actions are selfish. Additionally, 12 participants shared thoughts regarding outgroup homogeneity, suggesting outgroup members share the same negative traits and goals, specifically those that conflict with their own. Similarly, 11 participants discussed outgroup malleability. There was a mix of perspectives on whether outgroup members were capable of or willing to change their beliefs, goals, and behaviours related to the proposed wolf reintroduction. Specific perceptions that were discussed by fewer than half of the sample included: (1) beliefs that the outgroup is misinformed (i.e. our inductively identified specific perception) and therefore using incorrect information to frame their beliefs; (2) beliefs that delegitimized outgroup members such as accusations that they are lying to achieve their goals, that they are uneducated and selfish and (3) beliefs that outgroup members are deviating from acceptable norms related to their conduct, such as using ballot initiatives to make decisions about wildlife (i.e. ballot box biology).

3.1.2 | Perceptions of intergroup relations

Nineteen participants shared a specific perception within this category at least once (Table S2). Perspective-taking was most common (described by 15 participants) and included: (1) engagement in perspective-taking where participants contemplated the outgroup's perspectives, the motivations behind their actions or the rationale behind their positionality and (2) objective discussion about the

TABLE 2 A comparison of the frequency of categories of perceptions and specific perceptions across the full sample and the three positionality subgroups out of the 275 total specific perceptions coded. The numbers represent the number of times each specific perception was coded during analysis.

Category of perceptions and specific perceptions	Full sample ($n = 275$)	Middle ground subgroup ($n = 90$)	Support subgroup ($n = 107$)	Opposition subgroup ($n = 78$)
Perceptions of the outgroup	102 (37.1%)	29 (32.2%)	41 (38.3%)	32 (41.0%)
Unjust and unfair	26	6	9	11
Outgroup homogeneity	19	6	7	6
Outgroup malleability	20	9	9	2
Misinformed	15	4	8	3
Delegitimizing the other	19	4	7	8
Deviating norms	3	0	1	2
Perceptions of intergroup relations (IGR)	88 (32.0%)	47 (52.2%)	23 (21.5%)	18 (23.1%)
Perspective-taking	31	19	8	4
Past IGR	25	11	7	7
Future IGR	18	8	6	4
Present IGR	14	9	2	3
Perceptions of the ingroup and self	69 (25.1%)	7 (7.7%)	37 (34.6%)	25 (32.1%)
One's own victimization	18	4	6	8
Positive self–image	17	0	12	5
Justness of one's own goals	15	0	10	5
Moral disengagement	3	2	0	1
Security	3	1	0	2
Unity	5	0	3	2
Patriotism	3	0	1	2
Ingroup responsibility	5	0	5	0
Perceptions of the nature of the conflict	16 (5.8%)	7 (7.7%)	6 (5.6%)	3 (3.8%)
Peace	12	6	4	2
Conflict malleability	4	1	2	1

benefits of perspective-taking as a tool to help repair intergroup relations (IGR). Fifteen participants discussed how the groups in conflict interacted prior to the ballot initiative to reintroduce wolves (i.e. past IGR) and 12 participants deliberated on future IGR. Discussions of future IGR covered (1) beliefs about potential impacts on relationships as a result of wolf reintroduction and (2) contemplation of what might help repair future intergroup relations. Eight participants described intergroup relations at the time of the interviews (i.e. present IGR) by either describing their own personal experiences interacting with outgroup members, with a mix of good and bad interactions, or by sharing their beliefs about the quality of relationships amongst those groups in conflict.

3.1.3 | Perceptions of the ingroup and self

Fourteen participants shared a specific perception within this category at least once (Table S2). One's own victimization was the most common specific perception (discussed by 10 participants), where participants described themselves as victims of the outgroup's goals and actions, such as not being allowed to participate in decision-making about wolves, which some described as a reason for pursuing the ballot initiative, or having to deal with negative impacts of wolves including depredations on livestock. Eight participants described a positive self-image, such as being the most educated on the issue or being morally superior to outgroup members. Seven participants discussed the justness of their and their group's goals, such as doing what is best for Colorado's ecosystems or protecting the safety of people and livestock. Perceptions related to security, unity and moral disengagement were described by three participants each. Discussions of security focused on protecting livelihoods, humans and pets. Discussions of unity focused on moving past any potential conflicts amongst like-minded organizations and coming together to achieve common goals related to the proposed reintroduction. Moral disengagement included discussions where participants disengaged from the conflict and associated responsibility, typically

lacking self-criticism while placing full blame on outgroup members. Two participants described perceptions related to patriotism, which in this context related to the belief that they are doing what is best for Colorado. Finally, only one individual described any responsibility in contributing to, and needing to help resolve, the conflict (i.e. ingroup responsibility).

3.1.4 | Perceptions of the nature of the conflict

Ten participants shared a perception within this category at least once (Table S2). Eight participants discussed their perceptions of peace by describing what would help resolve the conflict. Some, for example, suggested the conflict would only end for them if wolves were not reintroduced. Several others shared the perspective that peace could only be achieved through compromise and collaboration among groups with opposing views. Four participants shared thoughts on conflict malleability, discussing whether and how the conflict can change or end. Those who believed the conflict is malleable suggested it can only end through compromise and collaboration (i.e. the only way peace can be achieved).

3.2 | Comparison across subgroups

The middle-ground subgroup is the largest subgroup with 10 participants, yet this subgroup had the fewest specific perceptions coded ($n = 90$) with an average of 10 specific perspectives coded per person. Six participants were in strong support of reintroduction and had an average of 17 specific perceptions coded per person ($n = 107$). Four participants strongly opposed reintroduction and had an average of 19 specific perceptions coded per person ($n = 78$). Thus, those participants with a clear positionality towards the proposed wolf reintroduction described specific perceptions that relate to the conflict at a higher rate than more neutral participants and/or those who viewed themselves as third parties to the conflict. Overall, the most common categories of perceptions by subgroup differed from those observed across the full sample (Figure 2).

3.2.1 | Perceptions of the middle-ground subgroup

For the middle-ground subgroup, *perceptions of intergroup relations* included 52.2% of their specific perceptions coded (Table 2, Figure 2). This is followed by *perceptions of the outgroup* at 32.2%. By far, these participants engaged in the most perspective-taking, an activity critical for pursuing reconciliation, and discussion of past and future intergroup relations.

When perspective-taking, interviewee 3, a federal wildlife biologist, described what they perceived to be the primary drivers of conflict from the point of view of two main groups:

> I think there is a lot of belief from the environmental and animal rights community that wolves have an inherent right to be on the landscape and I don't think rural communities share that perspective… agricultural communities especially feel like they're getting something forced down their throats.

Interviewee 8, a sportsperson, took the perspective of environmentalist and animal welfare groups in Colorado to contemplate why they may have pursued a ballot initiative:

> There's been a 30 year or so effort… about how they could or should do this [reintroduction] and one of the contentions of the groups that are pushing this [the ballot initiative] is, you know, "we've been trying to do this for a long time… It's now or never and we don't really want a ballot initiative either but it's really the only thing we have left to do."

3.2.2 | Perceptions of those in support and those in opposition

Participants in the support and opposition subgroups described specific perceptions within the four categories at similar rates with similar patterns, illustrating that the conflict narratives of these groups mirror each other's (Table 2, Figure 2). For both subgroups, *perceptions of the outgroup* were the most common with 38.3% of the support subgroup's and 41.0% of the opposition subgroup's specific perceptions coded in this category. When describing outgroup members both subgroups shared similar perceptions of each other, such as describing each other as acting in unjust and unfair ways. For example, interviewee 20, an outfitter from the opposition subgroup, shared the belief that reintroduction would be unfair to landowners and consumptive stakeholders:

> I believe that it is their goal to decrease any sort of consumptive use in whatever form they possibly can. If you put wolves on the landscape you create a problem, if you put anything on the landscape that has over reaching government regulations it prohibits or restricts land owners or leasers, the oil and gas industry, the recreation industry, the off road vehicle industry, the hunting industry.

Interviewee 11, from an environmental NGO that supports reintroduction, used a personal experience with an outgroup member to illustrate how those who oppose reintroduction have acted unfairly:

> I spoke very politely about the importance of wolves to Colorado [at a CPW commission meeting]…I had [name redacted for anonymity] talk to me in the hall afterwards and so unprofessional and inappropriate

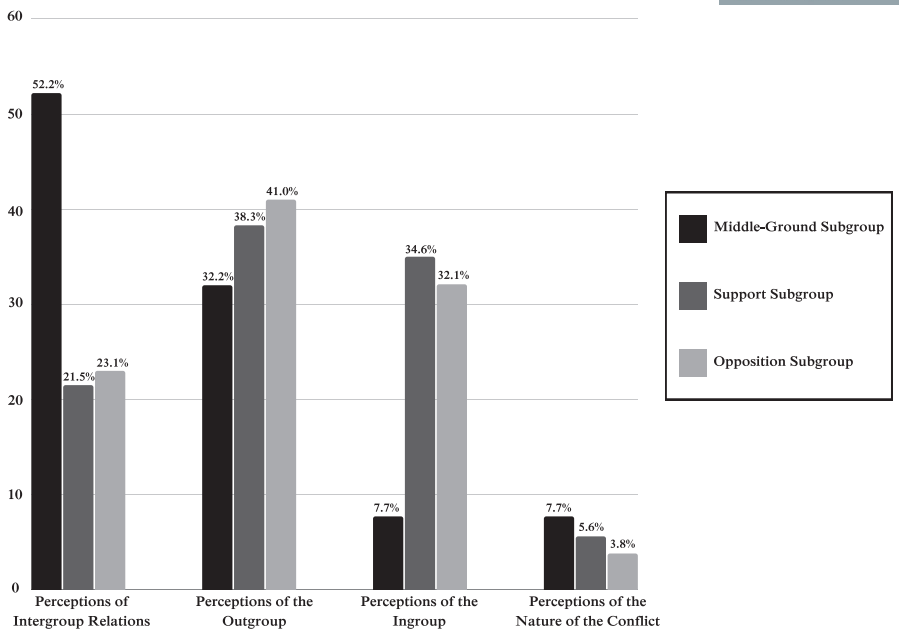

FIGURE 2 A comparison of the most common categories of perceptions across subgroups. Each bar represents one of the three subgroups, the four categories of perceptions are along the *x* axis, and the percentage of themes coded within each category for each subgroup is represented on the *y* axis.

> almost raising his voice at me and getting angry about my organization and I can guarantee you I was nothing but polite.

For the support subgroup, beliefs of outgroup malleability, the outgroup being misinformed, and outgroup homogeneity were the next most frequent. For the opposition subgroup, the next most frequent perceptions included beliefs that delegitimize outgroup members and that the outgroup is homogenous.

Interviewee 16, a federal wildlife biologist who supports reintroduction, did not believe outgroup members would change (i.e. outgroup malleability):

> You grow up thinking with a particular world view and that world view will include wolves in it or it won't and it's that black and white, those world views don't change.

In a final example of outgroup perceptions, when describing outgroup members as homogenous, interviewee 17, a Colorado state employee in the opposition subgroup, shared the assumption that those who support reintroduction are all individuals who would not interact with or be impacted by wolves and are all urbanites:

> ...they're not going to be impacted one way or the other. They don't hunt, they're not going to have to pay for it, they don't raise livestock, and they might not even leave their own city.

Perceptions of the ingroup are the second most frequent category with 34.6% of the support subgroup's and 32.1% of the opposition subgroup's specific perceptions coded in this category (Table 2, Figure 2). Again, members from both subgroups discussed specific perceptions within this category at similar rates in similar ways, sharing the same conflict narrative. For the support subgroup, the most frequently discussed specific perceptions included positive self-image, justness of their goals and one's own victimization. For the opposition subgroup, participants most frequently discussed their victimization by outgroup members followed by positive self-image, and justness of their goals.

In an example of discussing justness of one's own goals, interviewee 14, a tribal government representative from the support subgroup, defended bringing wolves back to Colorado based on culture:

> We as tribal governments and people, we miss those animals... we have stories about them, they [wolves] have a role that they play in our tradition, our culture.

Interviewee 17, a Colorado state employee, justified their opposition by discussing how those with knowledge about and experience with natural resource management are opposed 'every agency and natural resource person I know... think that it's a bad idea to force any kind of reintroduction'. Additionally, in an example of one's own victimization, they shared 'as a hunter and a tax-payer, it also concerns me that one way or another I'll end up paying for it'.

Within *perceptions of the self and ingroup* only one participant in the support subgroup, interviewee 15 from an environmental NGO

expressed the belief of their ingroup's responsibility in contributing and needing to help resolve the social conflict. This is an important perception for repairing intergroup relations.

> The concern is with how it's [the proposed ballot initiative] messaged to the public. I believe that has created more social friction… than it has helped… I'm a wolf lover, there's no denying that, but I've learned that it does wolves no favors when you don't consider the social dynamics.

Finally, both subgroups often paired perceptions about the outgroup and ingroup in similar ways. For example, individuals from both subgroups viewed themselves as the most informed, believing their perspectives were based upon scientific data and facts (positive self-image) while describing outgroup members as being misinformed and, in some cases, as intentionally lying and spreading misinformation to sway the public. Similarly, members of both subgroups viewed themselves as being victims of outgroup members, whose goals were unjust and unfair, while viewing themselves as doing the right thing for Colorado and having just goals. For an example of pairing outgroup and ingroup perceptions, interviewee 13 from an environmental NGO, shared the positive self-image of being the most informed and the perspective that the outgroup is misinformed: 'they bring up anecdotal information from the northern Rockies and I present facts, I present the evidence'.

4 | DISCUSSION

Our findings illuminate social-psychological drivers of intergroup conflict, derived from theories on conflict and peace-building, about wolf reintroduction in Colorado. Intergroup conflict, and the resulting anger and hatred, can fuel hatred towards wolves and other carnivores, which can result in retaliatory killing and collective action to reduce protections for species. Thus, reducing intergroup conflict and improving intergroup relations may support coexistence by reducing hatred and negative actions towards carnivores (Venumière-Lefebvre et al., 2022; Zimmerman et al., 2020). When describing the conflict, participants in our study shared specific perceptions within our four categories, suggesting our adapted theoretical model is applicable to this conservation conflict. Those who presented a middle-ground perspective most frequently discussed perceptions within the category of intergroup relations. Those stakeholders who strongly supported or opposed reintroduction most commonly described perceptions of the outgroup and ingroup/self.

Half of our sample presented a middle-ground perspective despite aligning with various groups such as sportspersons and environmental NGOs. These participants showed a high capacity for perspective-taking, thoughtfully sharing their understanding of the conflict from the perspective of others and considering the history and future of intergroup relations. The propensity of this subgroup for perspective-taking has important implications. Perspective-taking is a foundational intervention utilized in reconciliation processes because it fosters empathy and reduces animosity towards outgroup members and, of particular relevance to wildlife conflicts, animals, vital first steps for repairing relations (Čehajić-Clancy et al., 2016; Galinsky, 2015; Sponarski et al., 2016).

Two examples of perspective-taking interventions include (1) controlled dialogue, wherein a skilled facilitator directs participants to take turns sharing their experience and then repeat back each other's perspectives and (2) role reversal, which is a role-playing intervention wherein the facilitator asks participants to pretend to be a member of the outgroup and attempt to share the outgroup's experience (Gutenbrunner & Wagner, 2016). Brown and Čehajić (2008) found, in the aftermath of the 1992–1995 violent conflict in Bosnia and Herzegovina, that Serbian adolescents who engaged in perspective-taking were more likely to support that their ingroup offer reparations, such as providing apologies and compensation, to Bosnian Muslim victims. To our knowledge, there is no research identifying how these 'middle-ground' stakeholders, who are part of the conflict situation but do not hold the extreme conflict narrative, contribute to intergroup reconciliation. Yet, these individuals could serve as important resources to conflict mediators by advocating for and modelling perspective-taking. Future research should explore how to identify these middle-ground stakeholders, how they can diffuse reconciliatory behaviours through their ingroup, and their potential for peer-to-peer mediation.

Participants that were demonstrably in support or opposition to reintroduction most commonly shared perceptions of the outgroup and ingroup/self and had conflict narratives that mirrored each other's. These participants described the outgroup as unjust and unfair, misinformed, homogenous and unmalleable. Conversely, they described their ingroup with a positive self-image and as victims of the outgroup's goals and actions, while justifying their own goals and actions. Our participants' pairing of their ingroup and outgroup perceptions reflects prior research suggesting individuals create positive self-images via favourable comparisons relative to outgroup members (Bohm et al., 2018). Moreover, social identity theory, which posits conflict occurs because actors perceive their values, beliefs, actions and identity as threatened and devalued by those of a different identity group, suggests that this outgroup and ingroup framing is typical of identity-based conflicts (Bohm et al., 2018; Deschamps & Brown, 1983; Hurst et al., 2019; Lute & Gore, 2014).

In a specific example, both subgroups described their ingroup as knowing the 'right' facts while describing outgroup members as ignorant or as purposely spreading misinformation. Given the proliferation of information available in modern society, it is very likely that both groups are 'informed' but are relying on different sources of information to support their positionality (i.e. confirmation bias or possibly cherry picking). Thus, implementing an intervention that addresses the conflict over information, such as joint-fact finding, a process of working collaboratively to identify trusted and agreed-upon information, can help to eliminate this facet of the conflict (Daniels

& Walker, 2001; McCreary et al., 2001). Hansen et al. (2022) detailed a joint fact-finding process in Denmark, the Wolf Dialogue Project (WDP), where citizens were brought together to develop recommendations for wolf management and to reduce the conflict surrounding the immigration of wolves from Germany. By offering a common goal that the WDP members could work towards (i.e. identifying trusted sources and information) trust and relationships were built.

The joint-fact finding WDP process is an example of asking conflicting individuals to work together towards a superordinate goal, or common goal; a highly effective reconciliation intervention (Galinsky, 2015). In Colorado many groups are coming together to implement non-lethal tools, such as fladry, livestock guardian dogs, and range riders, to proactively minimize wolf predation on livestock, ensuring fewer livestock and wolves are killed. This may be an ideal superordinate goal in Colorado because it supports both groups' goals without compromising their values. Research might explore the process by which individuals self-categorize into superordinate groups and how social outcomes of such collaborative groups, such as reduced conflict and increased trust, disseminate beyond these groups.

Given our finding that many participants viewed outgroup members as all the same and inherently unchangeable (i.e. outgroup homogeneity and malleability), and the similarity of these constructs to stereotyping, interventions meant to reduce stereotypes, and thus the homogenized view of each other, are warranted. FitzGerald et al. (2019) conducted a systematic review of interventions to reduce stereotypes and found that one of the most effective included exposure to counterstereotypic exemplars, termed in other literature as 'individuation paired with intergroup contact' (Galinsky, 2015). Such interventions illustrate that outgroup members are unique individuals with variable attributes, addressing the issue that stereotyping often occurs when individuals have little contact with outgroup members and therefore extrapolate the negative traits of a few individuals to an entire group (FitzGerald et al., 2019; Galinsky, 2015).

Applying moral foundation theory (MFT) to interventions may also support reconciliation given the theory's assertion that conflicts result, in part, from disagreements around what is right or wrong, which many of our participants debated, and its focus on value debates (Hurst et al., 2019; Hurst & Stern, 2020). Our participants deeply engaged with several value-based concerns this theory suggests inform decision-making, including care and harm of wolves, livestock, other wildlife and people; fairness and cheating around using ballot initiatives to make such decisions; and loyalty and betrayal to Colorado, Coloradans and wolves. Further, MFT posits that value concerns often vary across the political spectrum and that political identity shapes individuals' support and opposition to policies (Hurst & Stern, 2020). In fact, prior research identified that how Coloradans voted for reintroduction in the 2020 election aligned with which presidential candidate (Joe Biden or Donald Trump) they voted for, with individuals who voted in support of reintroduction being more likely to vote for President Biden (Ditmer et al., 2022).

Finally, the category of perceptions of the nature of the conflict was the least coded of our categories. Specifically, participants rarely discussed perceptions of peace and conflict malleability. This is important because believing that the conflict can improve and that peace can be achieved is critical for reconciliation (Bar-Tal, 2000, 2007). Another key perception missing from participant discussions was the belief in ingroup responsibility in contributing to and/or ending the conflict. All but one participant seemingly placed full blame of the conflict situation on the outgroup. It is common for individuals to cognitively defend themselves against the uncomfortable emotion of guilt by avoiding self-criticism and rejecting responsibility of any actions that may have caused harm (Čehajić-Clancy et al., 2016). Yet, guilt is a critical motivator for reducing conflict, repairing intergroup relations, and for offering reparations for any damages done to outgroup members (Brown & Čehajić, 2008). These findings suggest that to pursue reconciliation over wolf reintroduction in Colorado, individuals should explore what peace between groups would look like and consider how their actions have contributed to the conflict.

5 | CONCLUSION

In the context of proposed wolf reintroduction in Colorado, the application of our adapted theoretical model helped create a baseline characterization of social-psychological drivers of intergroup conflict, allowing for identification of reconciliation interventions. Additionally, the successful application suggests the model may be appropriate for analysing other conservation conflicts. Future research could employ this model to identify if our findings hold true across diverse stakeholder groups and environmental conflict contexts. Additionally, designing and experimentally testing interventions to target identified drivers of intergroup conflict about wolves is an important future research direction. Given our small sample size, our findings may not apply to other stakeholders who are in conflict about wolf restoration and management. Further, only one of our participants identified as a rancher. As this is one of the primary stakeholder groups involved in the conflict, and a group most likely to experience negative impacts by wolves, continued engagement with this group is needed. Nonetheless, our findings are strongly reflective of the theories from conflict and peace-building literature on intergroup perceptions.

AUTHOR CONTRIBUTIONS

Mireille N. Gonzalez and Rebecca Niemiec conceived the ideas and designed methodology. Mireille N. Gonzalez collected the data. Mireille N. Gonzalez and Taylor N. Heid analysed the data. Mireille N. Gonzalez and Rebecca Niemiec led the writing of the manuscript. All authors contributed critically to the drafts and gave final approval for publication.

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None.

CONFLICT OF INTEREST STATEMENT

The authors declare they have no competing interests.

DATA AVAILABILITY STATEMENT

The interview transcripts will not be made available because our ethical agreement clearly states we will never share participants' responses with anyone beyond the research team so as not to jeopardize the promise of confidentiality and anonymity.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Table S1. Primary interview questions related to characterizing the social conflict of wolves in Colorado, along with potential follow-up questions for each.

Table S2. A comparison of the percentages of participants who discussed each category of perceptions and specific perceptions across the full sample and the three positionality sub-groups.

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