Pet owners often see dogs as soulmates and value them more than human lives

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Abstract

Dogs have ascended to core family members in American households. Across three studies, we show that modern dogs now occupy roles historically reserved for close human relationships and often receive greater moral concern than people. Approximately three out of four dog owners view their dogs as primary sources of emotional support and companionship, and this "soulmate" bond is associated with a tendency to prefer and prioritize dogs over people. Childless dog owners are especially likely to view their dog as a soulmate, and national and county-level analyses further reveal that declining birth rates are strongly associated with increased pet-related spending. This suggests that dogs may fulfill caregiving roles once reserved for children and close kin. To assess the implications of this shift, we presented dog owners with moral dilemmas pitting the welfare of dogs against humans. Owners who viewed their dogs as soulmates were more likely to feed, fund, and save the life of a dog over a person. More than half of dog owners chose to save their dog over a human stranger, one in five chose to save an unfamiliar puppy over a person, and one in four chose to give money to a puppy in need over a child in need. The moral elevation of dogs may reflect—and potentially contribute to—declines in human social connection.

Significance Statement

Americans are becoming more emotionally reliant on their pets and choosing their company and affection over people. Many now treat their dogs not just as companions but as emotional soulmates—preferring their company to that of people and even prioritizing their lives over those of human strangers. This dependence is captured in not only social and moral but also fiscal patterns; record-high spending on pets is strongly linked to a drop in birth rates at both the

county and national levels. Seeing one's dog as a "soulmate" is especially common among childless owners, further suggesting that dogs may be filling caregiving roles traditionally occupied by children. Our findings suggest that soulmate-level bonds with dogs are associated with reduced moral concern for people and may be tied to broader declines in social connection.

Introduction

"She said she thinks of Millie [her dog] as a person — and a soul mate — not a pet." [1]

Dogs have been "man's best friend" for millennia, but the modern preoccupation with canine relationships would likely confuse our ancestors. Historically, relationships with pets were secondary to those with people [2], but today, many view their dog as their closest relationship [3]. Nearly half of Americans co-sleep with their "fur babies," [4], multiple millionaires have left their fortunes to their dogs [5], and the pet industry has nearly doubled in growth every year for the last decade [6].

Pets—especially dogs—have transitioned from helpful working companions to emotional surrogates for many owners [7–10]. Some may even view their dog as a "soulmate," not in the romantic sense, but as someone "with whom one has a unique deep connection based on mutual understanding and acceptance" [11]. Some pet owners describe their bond with their dog as *more* emotionally fulfilling than relationships with other people [12,13].

Examining human-canine relationships over time can help us understand why dogs now fulfill such a deep emotional role. Initially, dogs were working animals—assisting in hunts, herding livestock, and guarding property [14,15]. Though people certainly loved them, they were valued primarily for functional utility [16,17]. As industrialization reduced the need for working animals and increased social isolation, dogs transitioned from workers to beloved companions [16,18,19]. The Victorian era accelerated this shift and popularized small breeds with neotenous features (e.g., round faces, large eyes) that amplified their cuteness and vulnerability [12,20]. As dogs came to be valued for their cuteness, they also moved indoors and were treated as family

members, leading owners to feel more morally obligated towards them [14,21]. Today, as labor becomes more automated and society grows safer, dogs are seldom needed as workers or protectors and now mainly provide companionship and emotional support—often filling modern gaps in human relationships [3].

For many, dogs are analogous to children. In 2001, 83% of Americans referred to themselves as the "mommy or daddy" of their pet, up from 55% just six years previous [22]. Many millennials are adopting pets instead of having children, and much of Gen Z plans to follow suit [23–26]. Childless households are responsible for about 70% of pet-related purchases and report stronger emotional bonds with their dogs than parents [22,27,28]. This trend is so pronounced that Pope Francis publicly criticized couples who choose pets over children, warning that it "takes away our humanity" [29]. While many forgo parenthood due to economic pressure or future uncertainty [30], for some, dogs are not merely substitutes for children—they're preferred. Dogs are considered easier and more emotionally reliable than people, in part because they "don't nag, never talk back and are always in a good mood" [31].

While dogs may seem easier than human relationships, favoring them could come at the cost of human connection [12]. Research suggests that social connection can be zero-sum; forming deep bonds with some often results in less concern for others [32]. Reflecting this phenomenon, owners strongly bonded to their pets often socialize less, opting instead to stay home with their pets [33–35].

Increased attachment to dogs may also have ethical consequences. Animals, especially dogs, are frequently cast as helpless victims and receive greater concern than vulnerable humans [36–38]. Many report feeling more distress for dogs than for adult people, and dog owners in particular often prioritize their pet over a human stranger in life-or-death scenarios [39,40].

These patterns raise important questions about the broader moral and societal implications of treating pets as emotional superiors to people.

The Present Research

Past work has shown that we treat pets like people [32] and sometimes prefer them over human relationships [8,10]. Here, we examine the prevalence and intensity of this trend and investigate the moral implications of viewing one's pet—specifically dogs, the most common pet in the U.S.—as a soulmate [35].

We begin by examining national and county-level data linking declining birth rates to rising pet expenditures, suggesting that pets may serve as substitutes for children (Study 1). We then show that many pet owners view their dogs as soulmates—leading them to coddle their dogs, prefer their companionship over that of people, and prioritize canine lives over human lives (Studies 2 and 3). These tendencies are especially pronounced among people without children, further supporting the idea that pets fulfill unmet caregiving needs (Study 2). Soulmate-like bonds help explain why dog owners are more likely than non-owners to endorse these behaviors and beliefs (Study 3). Together, our findings suggest that the tendency to view dogs as soulmates is widespread and coincides with reduced emotional investment and moral concern for people.

Our preregistrations, data, and analyses are available at https://osf.io/d94b8/. All studies were approved by the University of North Carolina at Chapel Hill Office of Human Research Ethics (IRB #20-2635). We conducted all analyses with R version 4.4.2.

Study 1: Pet Spending Increases as Birth Rates Decline

We began by testing our prediction that dogs are replacing human connection by analyzing cross-temporal and cross-county evidence for a trade-off between childrearing and pet spending. Specifically, we examined: (1) whether pet expenditures increase during periods of

lower national birth rates, and (2) whether counties with lower birth rates allocate more resources to their pets. A strong inverse relationship between birth rates and pet spending—while only correlational—would suggest that dogs may fulfill caregiving roles traditionally associated with children.

Results
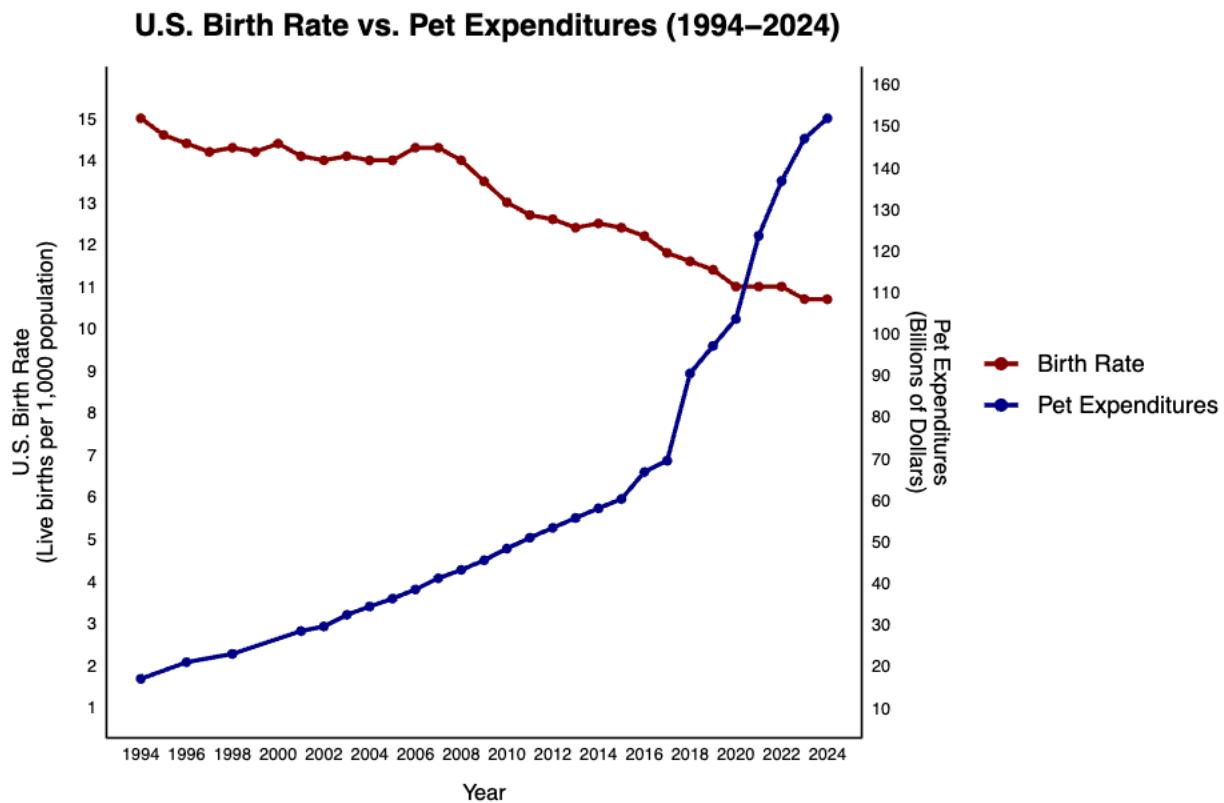
Figure 1. U.S. birth rate vs. pet expenditures over time (1994–2024). The dual-axis line graph shows opposing trends in U.S. birth rates and national pet expenditures. From 1994 to 2024, the U.S. birth rate (left y-axis, red) shows a gradual decline, while pet-related spending (right y-axis, blue) steadily increases, surpassing $100 billion by 2020. This relationship remains significant while adjusting for inflation and controlling for national GDP, total population, and median age, and replicates using fertility rate as the predictor of pet expenditures.

National Level

As predicted, national spending on pets was strongly and negatively related to the national birth rate at a correlation of r = -.93, b = -27.09, β = -0.94, SE = 0.07, $t(25)$ = -12.70, p < .001, 95% CI [-1.09, -0.78]. In other words, during years in which fewer babies were born in the U.S., people spent more money on pets. We next controlled for the health of the economy (represented as GDP), total population, and median age as potential confounding variables and found that the birth rate remained a significant and strong predictor of pet expenditures, b = -13.38, β = -0.46, SE = 0.08, $t(22)$ = -6.01, p < .001, 95% CI [-0.62, -0.30], even after adjusting for inflation, b = -4.72, β = -0.57, SE = 1.12, $t(22)$ = -4.22, p < .001, 95% CI [-0.85, -0.29]. The relationship also replicated using fertility rate as the predictor, b = -8.22, β = -0.86, $t(25)$ = -11.13, p < .001, 95% CI [-1.02, -0.70]. These findings suggest that people invest more in their pets when fewer babies are born.
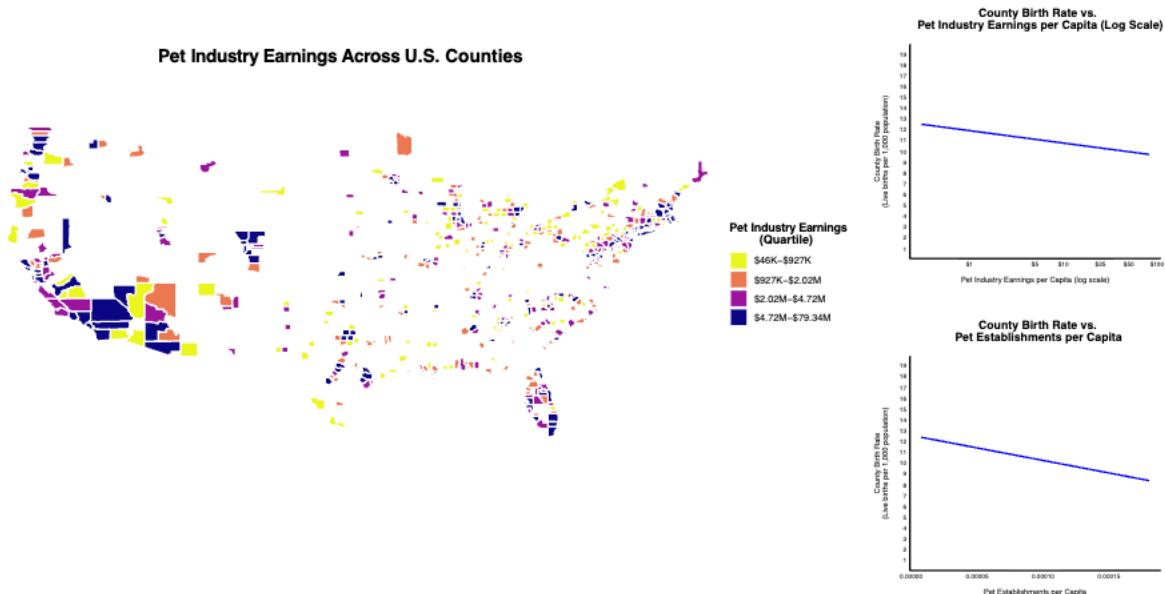

Figure 2. U.S. county-level relationship between pet industry earnings and birth rates. Left: Counties are colored by quartiles of total pet industry payroll, ranging from under $927,000

(yellow) to over $4.7 million (dark purple). Right: Scatterplots show that counties with lower birth rates tend to have higher pet industry earnings per capita (top) and more pet establishments per capita (bottom). Blue lines represent linear regression fits with 95% confidence intervals. These relationships remains significant while controlling for county per capita GDP, and using fertility rate as the predictor of pet earnings.

County Level

We next tested whether counties with lower birth rates spend more on pets. Across 562 U.S. counties, pet stores earned significantly more in counties with lower birth rates. Specifically, lower birth rates predicted higher pet industry earnings, $b = -0.001$, $\beta = -0.15$, $SE = 0.04$, $t(561) = -3.70$, $p < .001$, 95% CI [-0.23, -0.07]. In addition, counties with lower birth rates had a higher number of pet-related businesses, $b < .001$, $\beta = -0.37$, $SE = 0.04$, $t(561) = -9.45$, $p < .001$, 95% CI [-0.45, -0.29]. These relationships remained significant after controlling for county per capita GDP (pet industry earnings: $b < -0.001$, $\beta = -0.17$, $SE = 0.04$, $t(556) = -4.26$, $p < .001$, 95% CI [-0.25, -0.09]; number of pet-related businesses: $b < .001$, $\beta = -0.38$, $SE = 0.04$, $t(556) = -9.80$, $p < .001$, 95% CI -0.46, -0.30]).

These findings replicated using county fertility rate as the predictor. Counties with lower fertility rates showed significantly higher pet industry earnings, $b < -0.001$, $\beta = -0.21$, $SE = 0.04$, $t(561) = -5.15$, $p < .001$, 95% CI [-0.29, -0.13], and more pet establishments, $b < -0.001$, $\beta = -0.28$, $SE = 0.04$, $t(561) = -6.88$, $p < .001$, 95% CI [-0.36, -0.20]. These results suggest that regions with fewer births and lower fertility levels tend to spend more on pets—reflected both in total earnings and number of establishments—consistent with the idea that pets may somewhat function as substitutes for children.

Brief Discussion: Study 1

Our findings show that declining birth rates coincide with increased investment in pets, both over time and across regions. At both the national and county levels, lower U.S. birth rates were strongly and robustly associated with higher pet expenditures. These correlational results are consistent with a caregiving trade-off, suggesting that pets may be taking the place of children [3]—and perhaps even substituting for human care and connection more broadly.

Study 2: Dogs as Soulmates

After finding cross-temporal and cross-sectional evidence that pets may fulfill caregiving needs in place of children, we next examined the broader emotional connection people report with dogs. How much do people see their "fur babies" as emotional soulmates? We tested this question and examined potential outcomes associated with seeing one's dog as a soulmate, including 1) coddling behaviors (e.g., sharing a bed or dressing them up), 2) preferring one's dog over people, and, most extremely, 3) prioritizing dog lives over human lives. Building on Study 1, we also tested whether these associations—between soulmate bonds and coddling behaviors, preference for dogs, and moral prioritization of dogs—would be stronger among childfree people than owners with children. Full scale items and the results of measures not featured in the main analyses, such as mind perception and speciesism, are described in the Supplement.

Results

Beliefs and Attitudes

Soulmate beliefs. We assessed the extent to which owners view their dog as a soulmate with items like "My dog is my main companion" and "My dog's love is purer than most people's love." As expected, pet owners generally endorsed these soulmate sentiments ($M = 5.54$, $SD = 1.11$) and scored significantly above the scale midpoint (4 = *Neutral*), $t(373) = 26.84$, $p < .001$,

95% CI [5.43, 5.65]. 73% of pet owners had an average score at or above a 5 (*Mildly agree*; see Figure 3). We next explored whether the soulmate belief was associated with coddling dogs, preferring them over people, and prioritizing canine lives over human ones.

Distribution of the Perception of Dogs as a Soulmate Among Pet Owners
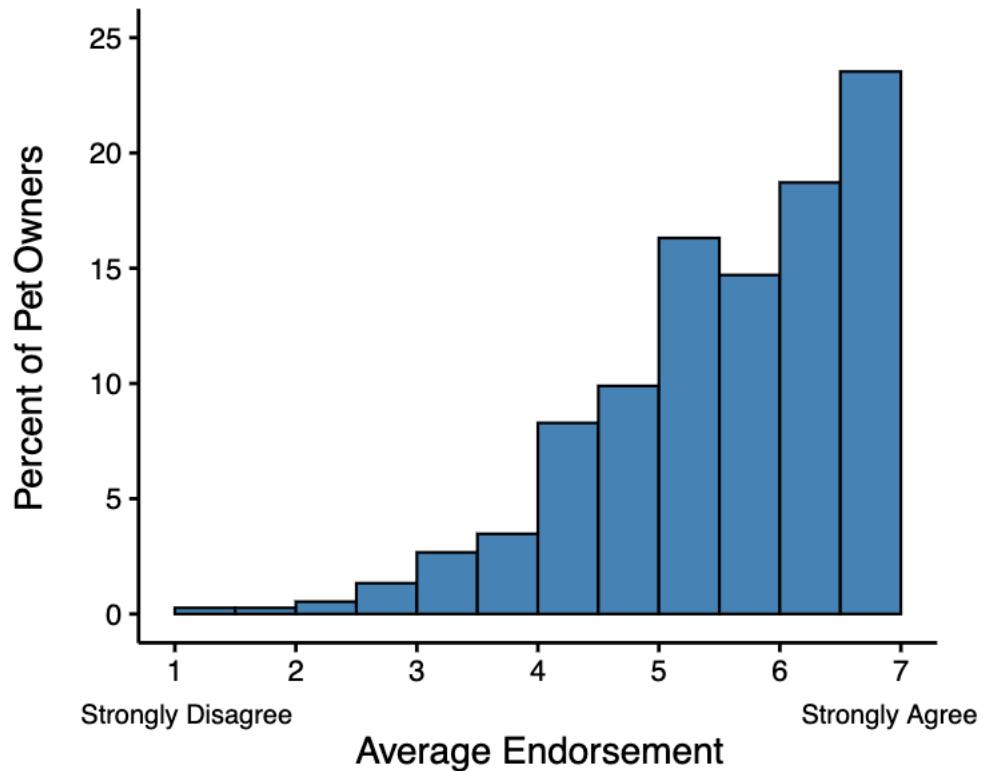
Figure 3. Distribution of the perception of dogs as soulmates among pet owners. This included describing their dog as their "main emotional support" and "main companion," and perceiving their dog's love as "purer" than that of people, among other items (see Supplement). 73% of pet owners had an average score at or above 5 (*Mildly agree*), indicating that almost three out of four pet owners endorse viewing their dog as a soulmate-level primary companion.

Coddling dogs. The more people saw their dog as a soulmate, the more they coddled their dog, seen as endorsement of behaviors such as using "baby talk" or allowing their dog to sleep in

their beds, $b = 0.59$, $\beta = .43$, $SE = 0.05$, $t(372) = 9.20$, $p < .001$, 95% CI [0.34, 0.52]. On a scale from "Never" to "All the time," 16.31% of participants had average scores above the midpoint.

Preferring One's Dog Over People. We next investigated whether people who viewed their dog as a soulmate (almost ¾ of owners) preferred their dog over people, measured with items assessing whether they chose to spend more time with their dog than with other people, and whether they favored their dog's companionship over that of friends. Those who viewed their dog as a soulmate more often preferred their dog's company over other people's, $b = 0.50$, $\beta = 0.75$, $SE = 0.03$, $t(372) = 21.60$, $p < .001$, 95% CI [0.69, 0.81]. The majority of dog owners–65.8%–scored above the midpoint of this scale.

Dogs versus People in Moral Dilemmas

Prioritizing the Well-being of Unfamiliar Dogs over People. Would people's preferences for dogs over humans extend to unfamiliar dogs, and in high-stakes situations? We next examined dog owners' responses to moral dilemmas that pitted the well-being of an unfamiliar dog against that of a human stranger.

Owners who reported a stronger soulmate connection with their own dog were more inclined to prioritize unfamiliar dogs over unfamiliar people. One in four dog owners (25%) chose to give $50 to a puppy in need over a child in need, and this decision was associated with the strength of their soulmate bond with their dog, $b = -0.05$, $\beta = -0.36$, $SE = 0.05$, $t(372) = -7.47$, $p < .001$, 95% CI [-0.46, -0.27]. Similarly, almost half of dog owners (43%) chose to feed a hungry puppy they did not know over a hungry stranger, and this tendency was also predicted by a stronger soulmate connection, $b = -0.04$, $\beta = -0.28$, $SE = 0.05$, $t(372) = -5.52$, $p < .001$, 95% CI [-0.37, -0.18].

Owners with a stronger soulmate bond were also more likely to donate to animal charities over those focused on people or the environment, $b = 0.93$, $\beta = 0.36$, $SE = 0.04$, $t(372) = 7.40$, $p < .001$, 95% CI [0.26, 0.45]. Owners allocated the largest share of their hypothetical $100 budget to a local animal shelter ($M = \$20.60$, $SD = \$23.10$), exceeding donations to a children's hospital ($M = \$16.40$, $SD = \$22.40$) and a local food bank ($M = \$14.60$, $SD = \$21.10$). 25% of owners gave more than half of their budget to animal-focused charities even though these were only 3 of 11 options.

Prioritizing the Lives of Unfamiliar Dogs over People. Owners with a stronger soulmate bond to their dog more often chose to save their dog's life over a human stranger's, $b = -2.53$, $\beta = -.22$, $SE = 0.05$, $t(372) = -6.09$, $p < .001$, 95% CI [-0.40, -0.20], with 56% of owners making this choice. But beyond one's own dog, owners with a stronger soulmate bond to their dog were more likely to save the life of an *unfamiliar* puppy over that of a human stranger, $b = -0.04$, $\beta = -.30$, $SE = 0.05$, $t(372) = -6.09$, $p < .001$, 95% CI [-0.40, -0.20]. One in five dog owners (20%) made this choice.

Across decisions involving money, food, and even life-or-death scenarios, dog owners who saw their own dog as a soulmate were consistently more likely to prioritize unfamiliar dogs over unfamiliar humans, even unfamiliar children.
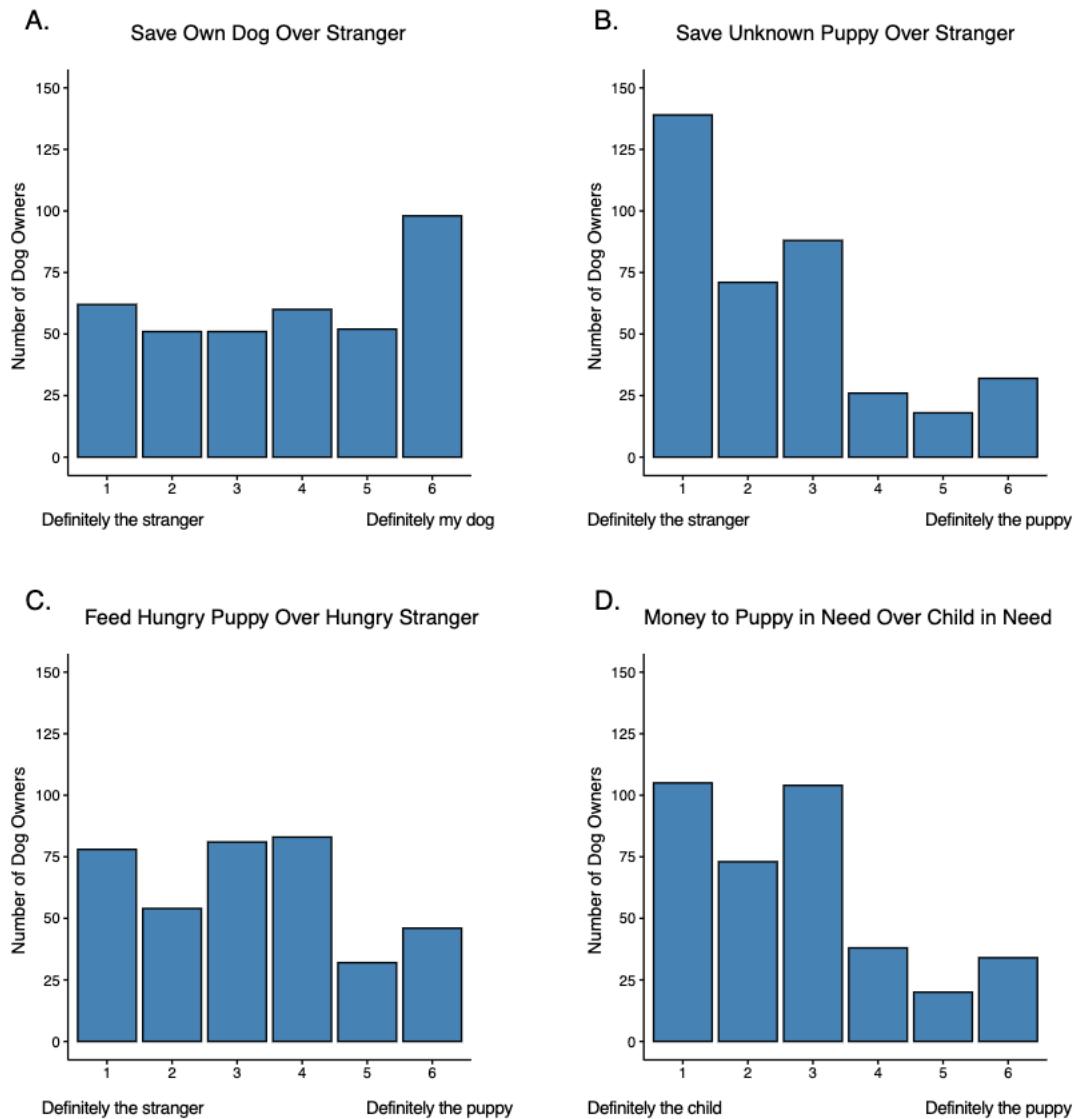
Figure 4. Moral tradeoffs between dogs and people among dog owners. Each panel displays dog owners' responses to moral dilemmas involving choices between the well-being of dogs versus people, reverse-coded and measured on a 6-point scale (1 = preference for human, 6 = preference for dog).

Dog Owners With- Versus Without-Children

Given the inverse relationship between birth rates and pet spending found in Study 1, we next tested whether dog owners without children were more likely to coddle, prefer, and prioritize dogs over people than dog owners with children. Childfree dog owners showed significantly greater tendencies to coddle, prefer, and prioritize dogs across nearly all main measures—trends that were mediated by the extent to which they viewed their dogs as emotional soulmates. For example, fewer than half of dog owners with children chose to save their dog over a human stranger (44%), compared with 73% of childless dog owners. Additionally, dog owners without children were more likely to say that their dog "takes the place of a baby" for them, $b = -1.54$, $\beta = -0.70$, $SE = 0.10$, $t(361) = -7.14$, $p < .001$, 95% CI [-0.90, -0.51]. Taken together, these findings provide further evidence that for many owners, dogs may be taking on the role of children. See Supplementary Tables 1 and 2 for full results.

Replication From Additional Study

We conducted a pilot study prior to Study 2 with 321 participants to refine our measures and examine associations with dog soulmate beliefs. All main effects were established: Pet owners who felt a stronger soulmate bond reported more coddling of their dogs, greater preference for donating to animal over human charities, and a higher likelihood of saving their own dog or an unknown puppy over a human stranger (we did not measure preference for one's dog over people or the other moral dilemmas included in Study 2). Owners without children reported stronger soulmate bonds and were more likely to choose their dog or an unknown puppy over a human stranger than owners with children, though there were no significant differences in donating to animal charities or coddling. Soulmate effects also replicated using an alternative

attachment measure, the Lexington Attachment to Pets Scale [33]. See Supplemental Materials for pilot details.

Brief Discussion: Study 2

We find that the majority of dog owners (73%) view their dog as an emotional soulmate—considering them their "main emotional support" and perceiving their love as "purer" than that of other people. Owners who held this view were more likely to engage in coddling behaviors, such as sharing a bed or allowing their dog to eat off their plate. Beyond these intimate behaviors, the soulmate bond was linked to broader social and moral preferences for dogs over people. Many owners with strong soulmate bonds preferred spending time with their dog over other people and were more likely to prioritize the well-being of dogs over that of people. Notably, this prioritization extended beyond their own pet: those who viewed their dog as a soulmate were more likely to prioritize *unfamiliar* dogs over human strangers. Most strikingly, one in five dog owners chose to save the life of an unknown puppy over a human stranger. These effects were especially pronounced among childfree dog owners, who were more likely than parents to view their dogs as soulmates and to see dogs as more deserving of protection. Taken together, these findings suggest that a substantial portion of American dog owners not only prefer dogs over people but, in many cases, value canine lives over human lives.

Study 3: Comparing Dog Owners with Non-Owners

Our previous study showed that a large proportion of American dog owners feel a soulmate connection with their dogs—a bond associated with a preference for dogs over people and a greater willingness to prioritize canine lives over human ones. But to what extent does this reflect a tendency amplified among dog owners due to their soulmate-like bond with their pets,

versus a broader cultural pattern of how Americans relate to dogs? In our next study, we investigated this question by comparing perceptions between dog owners and non-owners.

We predicted that dog owners would be more likely to view dogs as soulmates, and this perception would be associated with the same three key outcomes as in Study 2: (1) endorsement of coddling dogs, (2) preference for dogs over people, and (3) prioritization of dog lives over human lives—this time comparing dog owners with non-owners. We predicted that viewing dogs as soulmates would mediate the relationships between dog ownership and these tendencies. We additionally examined differences between owners and non-owners in broader concern for animals, including speciesism and meat consumption. Full scale items and results for these measures, as well as others not featured in the main analyses, are described in the Supplement.

Results

We tested whether dog owners were more likely to coddle, prefer, and prioritize dogs than non-owners. As predicted, dog owners ($M = 5.67$) felt a stronger soulmate connection (e.g., "Dogs are people's main emotional support") to dogs than non-owners ($M = 4.92$), $b = 7.48$, $\beta = 0.61$, $SE = 0.10$, $t(378) = 6.21$, $p < .001$, 95% CI [0.42, 0.81]. Dog owners ($M = 3.23$) were more likely to endorse coddling dogs (e.g., "Is it strange to push a dog in a stroller?") than non-owners ($M = 3.54$), $b = -4.36$, $\beta = -.26$, $SE = 0.10$, $t(378) = -2.59$, $p = .01$, 95% CI [-0.46, -0.05]. Owners ($M = 5.21$) also expressed greater understanding for preferring dogs over people (e.g., "Is it understandable to like your dog more than other people?") than non-owners ($M = 4.51$), $b = 3.51$, $\beta = 0.45$, $SE = 0.10$, $t(378) = 4.43$, $p < .001$, 95% CI [0.25, 0.65]. Dog owners donated more of their hypothetical funds to a local animal shelter than to any other charity ($M = 19.0$, $SD = 23.1$), whereas non-owners gave the most to a local food bank, followed by a children's hospital.

Dog owners were more likely to prioritize dogs in life-threatening situations than non-owners across all scenarios, though non-owners still did so frequently (see Figure 5). For example, when asked whether they would save the life of a dog or a stranger, 57% of owners saved their favorite dog compared to 33% of non-owners, $b = -0.87$, $\beta = -0.49$, $SE = 0.10$, $t(378) = -4.88$, $p < .001$, 95% CI [-0.69, -0.29], and 28% of owners saved an unfamiliar puppy compared to 17% of non-owners, $b = -0.38$, $\beta = -0.23$, $SE = 0.10$, $t(378) = -2.29$, $p = .02$, 95% CI [-0.44, -0.03]. As predicted, viewing dogs as soulmates mediated all observed significant relationships. These findings suggest that seeing dogs as soulmates plays a central role in explaining why dog owners have a higher tendency to prioritize dogs over people, but that viewing dogs as soulmates also reflects a widespread pattern in the U.S. See Supplementary Tables 3 and 4 for full results.
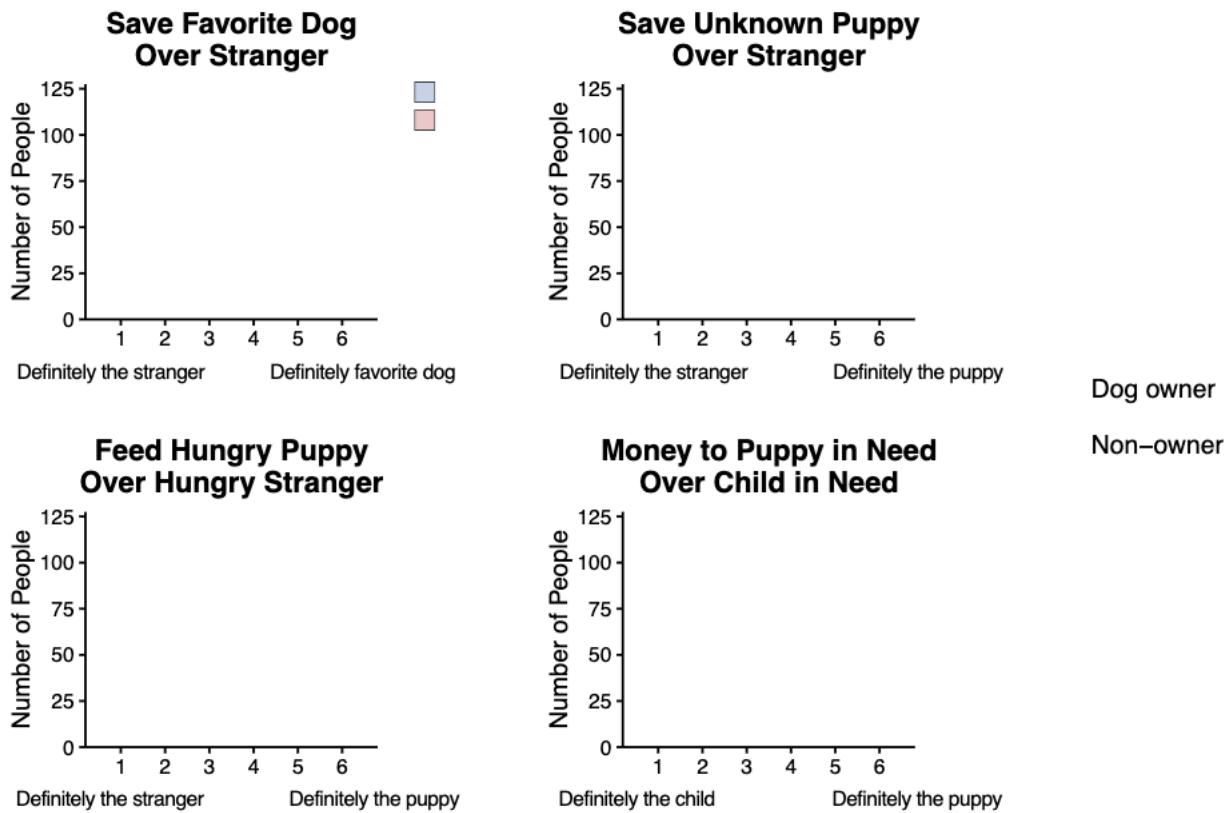
Figure 5. Moral tradeoffs between dogs and people among dog owners versus non-owners. Each panel displays responses to moral dilemmas involving choices between the well-being of dogs versus people, reverse-coded and measured on a 6-point scale (1 = preference for human, 6 = preference for dog).

Discussion of Study 3

We found that dog owners were more likely than non-owners to view dogs as soulmates, which in turn explained their greater tendency to endorse coddling behaviors, prefer dogs over people, and prioritize dogs' lives over humans' in high-stakes scenarios. Despite this elevated concern for dogs, owners did not report lower speciesism or reduced meat consumption compared to non-owners, suggesting their elevated moral concern did not necessarily extend to animals more broadly (see Supplemental Materials). While these findings are correlational, they

suggest that close emotional bonds with dogs shape moral judgments and lead to a preference for dogs over people. At the same time, non-owners were still relatively high across all measures, suggesting that seeing dogs as soulmates—while amplified among dog owners—is a broad view in the U.S.

General Discussion

Can dogs' status as "man's best friend" threaten human relationships? Historically, dogs evolved from working animals [16] to household companions [15], to core family members [41]. Our findings suggest that dogs are now often viewed as soulmates and valued above human lives.

Seventy-three percent of dog owners endorsed viewing their dog like a soulmate, perceiving their dog as their "main companion" with love "purer than most people's." This tendency was linked to preferring their dog's companionship over that of people and prioritizing dogs over human well-being. Not only did over half of dog owners choose to save their own dog over a human stranger (replicating Topolski et al., 2013 [39]), but many also prioritized *unfamiliar* dogs over people. One in five owners chose to save an unfamiliar puppy over a human stranger, and one in four allocated money to a puppy in need over a child in need. While dog owners surpassed non-owners in these tendencies, non-owners still prioritized dogs at high rates, suggesting that seeing dogs as central companions is a broad cultural phenomenon in the U.S. These findings build on prior work showing that people feel high empathy for dogs [37] by demonstrating that such feelings can manifest in moral decisions that favor them over people.

Dogs may often serve as replacements for children. Birth rates and pet expenditures in the United States show a strong inverse relationship over time ($r = -.93$), a pattern also observed across U.S. counties. Further, in Study 2, childless dog owners were more likely to coddle their

dogs, prefer their companionship, and value dog lives over human lives than owners with children. Although many parental-status relationships did not replicate in Study 3—likely due to lower statistical power, with only half the sample consisting of dog owners—most replicated in a higher-powered pilot study (see Supplemental Materials). These findings suggest that "fur babies" may provide an alternative outlet for caregiving instincts traditionally directed toward children [3].

Broader Implications

Soulmate-level attachment to dogs highlights the flexibility of human social cognition. Consistent with people's strong tendency to anthropomorphize dogs [42], dog owners commonly engaged in behaviors with their dogs reserved for close human relationships like co-sleeping and kissing [43] and attributed more agency to dogs than non-owners (see Supplemental Materials). This reveals that human bonding is highly adaptable, with deep affection readily extended beyond our species.

One potential explanation for the intensity of modern dog-human bonds is the companion-dog cultural runaway theory, which suggests that humans' innate caregiving instincts—originally shaped for childrearing—are increasingly redirected toward dogs in the absence of traditional social support systems [3]. Supporting this, dog owners who lived alone and without children felt stronger soulmate bonds with their dogs. As social fragmentation limits opportunities for strong communal ties, dogs may come to occupy many of the relational roles once filled by children, partners, and close kin.

Dogs are well-suited to fulfill unmet social needs because they serve as social superstimuli. Just as sugary foods and video games exaggerate reward, domesticated dogs display amplified social signals that people are strongly drawn to. Their baby-like features tap

into *Kindchenschema* (baby schema), which elicits caregiving behavior [12]. Over time, cultural and biological evolution have intensified these traits. For instance, the popularity of short-snouted "lapdogs" encourages owners to perceive them as literal fur-babies [12]. Compared to human relationships, we find that the majority of owners view their dog's unconditional affection as "purer" or less fraught. Like other superstimuli, dogs offer emotional rewards with minimal risk of rejection or conflict [44]. However, this intimacy unfolds in a context of total dependency, where dogs cannot challenge or reject the bond. While relationships with dogs are deeply rewarding, this imbalance shows they are not true replacements for the richness of more symmetrical human relationships.

The elevation of dogs to soulmates may contribute to a self-reinforcing loop. As people turn to dogs for connection in an increasingly isolating society, these deepening bonds may further displace human relationships [12]. Our findings show a sustained rise in investment in dogs over the past three decades, suggesting that perceptions of dogs as soulmates are not only widespread but may be growing. Pet companionship offers many benefits, like emotional support, health benefits, and even facilitating human interaction [48–50]. However, soulmate-level bonds with dogs may discourage the effort and emotional risk-taking required to build and sustain close human connections, and can shift attention and resources away from people. We found that dog owners—unlike non-owners—donated more to a hypothetical animal shelter than to a children's hospital or food bank, patterns that can carry costs for human welfare. As dogs provide social fulfillment in a world that lacks the strong communities our ancestors relied on, we find that they appear to reduce the motivation to maintain strong relationships with people and often surpass people in moral concern.

Limitations and Future Directions

A limitation of this work is that our results are correlational and leave open questions about why many dog owners prioritize dogs over people. These bonds may reflect a broader expansion of moral concern toward animals, as owners who viewed their dog as a soulmate reported lower speciesism. However, dog ownership did not predict reduced speciesism or meat consumption, and prior work suggests that pets occupy a uniquely elevated moral status [45–47]. Dogs likely became especially valued companions in the context of increased social isolation, a possibility that future research should explore [3]. Our work also does not address other types of pets, such as cats, which may evoke different attachment and moral patterns. Finally, our sample is limited to participants in the United States, and future research is needed to examine how these patterns vary in different cultural contexts, where attitudes toward dogs vary widely [3].

Conclusion

Dogs have long been companions, but our findings suggest a shift in their role to "soulmates," primary companions often valued above people. A substantial number of U.S. dog owners place dogs on an emotional pedestal, reporting that the love they receive from dogs surpasses that from people. Even people who do not own dogs frequently endorsed such views, suggesting that seeing dogs as soulmates is widespread. Although dog companionship is linked to many benefits [48–50], we find that increased reliance on dogs for emotional fulfillment comes at the cost of diminished moral concern for people. The common preference for dogs over human relationships may reflect broader trends of social withdrawal and the erosion of community ties.

Materials and Methods

Preregistrations, data, and code are available on Open Science Framework at https://osf.io/d94b8/. Study procedures were approved by the University of North Carolina at Chapel Hill Office of Human Research Ethics (#20-2635).

Study 1

In Study 1, we collected measures of pet expenditures and birth rate from the following publicly available sources.

Pet Spending

We examined data on national pet expenditures over time from the American Pet Products Association's National Pet Owners Survey, and U.S. GDP, population, and median age statistics from the World Bank. National pet expenditure data were available from 1994 to 2024, with missing values for 1995, 1997, 1999, and 2000. The APPA conducts their annual survey with a nationally representative sample and reports total pet industry expenditures as a measure of total U.S. spending on pet food, supplies, over-the-counter medicine, veterinary care, grooming, and boarding [51]. We adjusted for inflation using the Consumer Price Index (CPI) provided by the U.S. Bureau of Labor Statistics, obtained from the Federal Reserve Bank of St. Louis's FRED database.

We examined pet industry activity using county-level data from the U.S. Census Bureau's County Business Patterns, focusing on the pet care sector (NAICS 812910; excludes veterinary expenses). Two primary indicators were used: annual payroll, which reflects total wages paid to employees in pet care establishments, and the number of pet-related establishments in each county. These measures capture the economic footprint of the pet care industry. To account for population differences across counties, both payroll and establishment

counts were adjusted by population size to generate per capita measures, allowing for meaningful comparisons across regions. We collected data on county-level GDP from the U.S. Bureau of Economic Analysis.

Birth Rate and Population

We obtained national birth and fertility rates over time and county-level birth and fertility rates, along with county population estimates, from the National Center for Health Statistics and the CDC's Natality Records (2016-2021). Birth rates are defined as the number of live births per 1,000 people. Fertility rates are defined as the number of live births per 1,000 women of childbearing age.

Studies 2 and 3

Separate participant pools were recruited for Studies 2 and 3. They followed the same procedure and measures, except that Study 3 included both dog owners and non-owners, with the wording of the measures adapted to be applicable to both groups.

Participants

A total of 780 participants were recruited for Studies 2 and 3. Study 2 recruited dog owners through Amazon Mechanical Turk (mTurk). Participants who failed the attention check were excluded, resulting in a final sample of 374 dog owners between the ages of 20 and 78 (M = 41.57, SD = 12.28). 193 participants were women, 179 were men, 1 was transgender, and 1 was non-binary. 6.4% of participants were Black, 5.3% were Latino/a/x, 80.2% were White, 5.1% were Asian, .5% were Native American or Alaska Native, 2.1% were multiracial, and .2% did not specify their race. Most participants had one dog (M = 1.48, SD = 0.86). On average, participants had a medium sized dog (M = 4.01, SD = 1.63, range = 1–7).

Study 3 recruited participants from mTurk. Those who failed the attention check were excluded, resulting in a final sample of 380 participants between the ages of 19 and 72 ($M =$ 40.26, $SD = 11.77$). 201 of the participants were men, 175 were women, 1 was intersex, 1 was gender non-conforming, and 2 did not specify their gender. 10.0% of participants were Black, 8.9% were Latino/a/x, 71.1% were White, 7.1% were Asian, 2.4% were multiracial, and .5% did not specify their race. 212 of the participants owned dogs and 168 did not own any dogs. Most dog owners had one dog ($M = 1.33$, $SD = 0.68$).

Procedure

Participants in Study 2 and 3 completed an online survey with the same measures. Study 2 recruited only dog owners, who were asked to think of their favorite dog when responding. In contrast, Study 3 asked participants to report soulmate beliefs for dogs in general and to evaluate the general understandability of various views and behaviors (e.g., coddling one's dog, preferring one's dog over people), so that the questions were also relevant for non-owners. The moral dilemma questions were the only exception as they were phrased identically in both studies, aside from the item about saving one's own dog versus a stranger, which in Study 3 specified the participant's "favorite" dog.

All main measures were developed for this study and showed excellent reliability (see Supplementary Information). First, participants completed items assessing the extent to which they viewed their dogs as soulmates (e.g., "My dog is my main emotional support"; "My dog is my main companion"). Next, they completed measures of dog humanization, including how frequently they engaged in coddling behaviors (e.g., "How often do you carry [your dog] around?"; "How often do you let [your dog] eat directly from your plate?") and how much "mind" they attributed to their dog—namely, agency and emotional capacity (Gray & Young,

2011). They then completed a scale measuring preference for their dog over people (e.g., "I prefer spending time with my dog over most people"). Finally, participants responded to a series of moral dilemmas that assessed the extent to which they prioritized their dog over humans (e.g., allocating money, food, or life-saving efforts between a dog and a person, including strangers and children). Full scales and item wording are available in the Supplementary Information.

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Supplementary Information

Supplementary Methods

Studies 2 and 3 Scales

We developed the following scales for Studies 2 and 3. In Study 3, the wording was adapted to be applicable to both dog owners and non-owners. The Soulmate Bond scale referred to dogs in general rather than one's own dog (e.g., "Dogs are people's main emotional support."). The remaining scales assessed the perceived understandability of various dog owner beliefs and behaviors (e.g., "How understandable is the following dog owner behavior? Turning down plans to hang out with your dog."). Below, we present the items as they were worded for Study 2, which included only dog owners.

Soulmate Bond Scale

Please rate your agreement with the following statements.

1 (*Strongly disagree*) to 7 (*Strongly agree*)

- My dog knows me better than most people do.

- My dog cares about me more than most people do.

- My dog is there for me when others aren't.

- My dog is my main emotional support.

- My dog's love is purer than most people's love.

- My dog is my main companion.

- I can be myself with my dog more than I can with most people.

- I feel that my dog is a part of my family.

- I think my dog is just a dog.

- I'm proud to be a dog parent.

The scale achieved excellent reliability in Study 1 ($\alpha = 0.90$) and Study 2 ($\alpha = 0.92$).

Pet Coddling

How often do you do the following things with your dog?

1 (*Never*) to 7 (*All the time*)

- Let them lick your face

- Dress them up in cute clothes

- Let them eat directly from your plate

- Let them sleep on your bed

- Push them in a stroller

- Throw them parties

- "Baby talk" to them

- Do photoshoots with them

- Make or buy them fancy treats

- Kiss them on the mouth

- Spoil them with toys

- Sneak them into places they're not supposed to be

- Take them inside restaurants

- Carry them around

The scale achieved excellent reliability in Study 1 ($\alpha = 0.88$) and Study 2 ($\alpha = 0.90$).

Prioritizing Dogs Over People

Please rate your agreement with the following statements.

1 (*Strongly disagree*) to 7 (*Strongly agree*)

Sometimes I turn down plans in order to hang out with my dog.

A lot of my social interaction is with my dog.

I spend more time with my dog than with other people.

My dog means more to me than any of my friends.

I like my dog more than I like most people.

The scale achieved excellent reliability in Study 1 (α = 0.87) and Study 2 (α = 0.92).

Moral Dilemmas

The scale for all scenarios was as follows: 1 (*Definitely the puppy/dog*) to 6 (*Definitely the stranger/child; reverse coded in histograms*)

- Moral scenario deciding between saving your dog or a stranger: "Imagine you are in a situation where you have to choose between saving the life of your dog, or the life of another person (a stranger). Which would you rescue?"

- Moral scenario deciding between helping a puppy or a stranger: "Imagine you had $50 to give to a child in need or a puppy in need. Which would you give the money to help?"

- Moral scenario deciding between feeding a puppy or a stranger: "Imagine you see a puppy and a human stranger on the street. Both are hungry but you can only feed one. Which would you feed?"

- Moral scenario deciding between saving a puppy or a stranger: "Imagine you are in a situation where you have to choose between saving the life of a puppy you don't know, or the life of another person (a stranger). Which would you rescue?"

- Charity donations — how much is donated to animal organizations relative to other charities. Charities included some of the most popular organizations, as well as animal-focused organizations: "Imagine you had $100 to donate. Given the following charities, distribute the $100 to the charities of your choice. Please make sure the total equals 100."

YMCA

American Society for the Prevention of Cruelty to Animals

Nature Conservancy

Local food bank

Local animal shelter

St. Jude Children's Hospital

American Red Cross

Habitat for Humanity International

Animal Welfare Institute

Feeding America

Salvation Army

Supplementary Tables

Supplementary Table 1.

Preference and Prioritization of Dogs of Childfree vs. Parenting Dog Owners

Variable	b	β	SE	$t(df)$	p	95% CIs
Soulmate Bond	-4.36	-.39	0.10	-3.82 (376)	.002	[-0.60, -0.19]
Dog Coddling Behaviors	-0.74	-.05	0.10	-0.47 (372)	.64	[-0.26, 0.16]
Time with Dogs Over People	-2.78	-.37	0.10	-3.62 (372)	< .001	[-0.58, -0.17]
Dog Takes Place of a Baby	-1.54	-.71	0.10	-7.14 (361)	< .001	[-0.90, -0.51]

Perceived Dog Agency	-0.10	-.02	0.10	-0.22 (372)	.83	[-0.23, 0.18]
Perceived Dog Experience	-0.14	-.19	0.10	-1.87 (372)	.06	[-0.40, 0.01]
Saving Life of Own Dog vs. Stranger	0.95	.52	0.10	5.13 (372)	< .001	[0.32, 0.72]
Donating to Animal vs. Human Charities	-7.37	-.26	0.10	-2.46 (372)	.01	[-0.46, -0.05]
Giving $50 to Puppy vs. Child	0.75	.24	0.05	4.77 (372)	< .001	[0.14, 0.34]
Feeding Hungry Puppy vs. Stranger	0.41	.25	0.10	2.45 (372)	.01	[0.05, 0.46]
Saving Life of Unknown Puppy vs. Stranger	0.38	.24	0.10	2.30 (372)	.02	[0.03, 0.44]
Speciesism	0.30	.22	0.15	2.07 (372)	.04	[0.01, 0.42]
Meat-Reduced Diet[1]	—	—	—	$X^2(1) = 1.19$	.28	—

Note. All values are from linear regression analyses.

[1]Meat-reduced diet is a chi-square test of independence.

Supplementary Table 2.

Mediation of Dog Preference and Prioritization by Soulmate Perceptions

Variable	b	95% CI	p
Preferring Dog Over People	-2.17	[-3.29, -1.02]	< .001
Donating to Animal vs. Human Charities	-3.92	[-6.23, -1.85]	< .001
Giving $50 to Puppy vs. Child	0.20	[0.09, 0.31]	< .001
Feeding Hungry Puppy vs. Stranger	0.17	[0.08, 0.29]	< .001
Saving Life of Favorite Dog vs. Stranger	0.27	[0.14, 0.43]	< .001
Saving Life of Unknown Dog vs. Stranger	0.18	[0.08, 0.28]	< .001

Supplementary Table 3.

Preference and Prioritization of Dogs: Owners vs. Non-Owners

Variable	b	β	SE	t(df)	p	95% CIs
Soulmate Bond	7.48	.61	0.10	6.21 (378)	< .001	[0.42, 0.81]
Preferring Dog Over People	3.51	.45	0.10	4.43 (378)	< .001	[0.25, 0.65]
Dog Coddling Behaviors	-4.36	-.26	0.10	-2.49 (378)	.01	[-0.46, -0.05]
Perceived Dog Agency	1.55	.31	0.10	3.01 (378)	.003	[0.11, 0.51]
Perceived Dog Experience	-0.03	-.03	0.10	-0.33 (378)	.74	[-0.24, 0.17]
Donating to Animal vs. Human Charities	12.58	.42	0.10	4.18 (378)	< .001	[0.22, 0.62]
Giving $50 to Puppy vs. Child	-0.46	-.29	0.10	-2.82 (378)	.005	[-0.49, -0.09]

Saving Life of Favorite Dog vs. Stranger	-0.87	-.49	0.10	-4.88 (378)	< .001	[-0.69, -0.29]
Feeding Hungry Puppy vs. Stranger	-0.67	-.39	0.10	-3.86 (378)	< .001	[-0.59, -0.19]
Saving Life of Unknown Puppy vs. Stranger	-0.38	-.23	0.10	-2.29 (378)	.02	[-0.44, -0.03]
Speciesism	-0.14	-.10	0.14	-0.99 (378)	.32	[-0.31, 0.10]
Meat-Reduced Diet[1]	—	—	—	$X^2(1) =$ 2.60	.11	—

Note. All values are from linear regression analyses.

[1]Meat-reduced diet is a chi-square test of independence.

Supplementary Table 4.

Mediation of Dog Preference and Prioritization by Soulmate Perceptions

Variable	*b*	95% CI	*p*
Preferring Dog Over People	2.84	[1.89, 3.84]	< .001
Donating to Animal vs. Human Charities	6.67	[4.11, 9.74]	< .001
Giving $50 to Puppy vs. Child	-0.19	[-0.32, -0.09]	< .001
Feeding Hungry Puppy vs. Hungry Stranger	-0.35	[-0.53, -0.21]	< .001
Saving Life of Favorite Dog vs. Stranger	-0.44	[-0.61, -0.29]	< .001

Saving Life of Unknown Dog vs. Stranger   -0.35   [-0.50, -0.21]   < .001

Supplementary Results

Study 2 Additional Analyses

In Study 2, we also examined how individual and relational factors related to owners' soulmate feelings towards their dogs (Supplementary Table 5). Additionally, we also examined whether soulmate perceptions affected owners' mind perception of their dogs and their feelings towards general animal welfare (Supplementary Table 6).

Individual Factors Predicting Soulmate Bond

Age was a significant negative predictor of our soulmate scale; as participant age increased, soulmate feelings decreased. Women also reported higher levels of soulmate feelings than men. Participants who considered religion to be more important in their lives were less likely to view their dog as a soulmate. There were no significant differences in soulmate beliefs by race or socioeconomic status.

Owners who lived alone were significantly more likely to see their dog as an emotional soulmate. Additionally, those who felt their dog was more of a soulmate reported greater identity fusion with their dog. Conversely, those who reported more external social support were slightly less likely to view their dog as a soulmate. Dog owners who see their dog as a soulmate were not more open to sacrificing a dog's quality of life to extend their life.

Supplementary Table 5.

Demographic Predictors of Soulmate Beliefs

Variable	b	β	SE	$t(df)$	p	95% CIs

Gender	2.34	.21	.10	2.05 (370)	.04	[0.01, 0.42]
Age	-0.01	-.11	0.05	-2.14 (372)	.03	[-0.21, -0.01]
Religion	-0.65	-.14	0.05	-2.75 (372)	.01	[-0.00, 0.01]
Race	—	—	—	F(3, 359) = 0.09	.97	—
Socioeconomic Status	-0.52	-.10	0.05	-1.90 (372)	.06	[-0.20, 0.003]
Political Beliefs	-0.41	-.09	0.05	-1.75 (372)	.08	[-0.19, 0.01]

Note. For gender and race, analyses are limited to groups with 10 or more participants. Race was analyzed using an ANOVA; No significant differences in soulmate scores were found between racial groups.

Mind Perception

Soulmate beliefs also correlated with attributing more "mind" or awareness to dogs, including viewing dogs as higher in emotional "feeling" ability (experience) and in ability to actively "do" (agency); but soulmate beliefs did not significantly relate to owners' perceptions of the mind of other people. Typically, people report seeing animals as high in emotion and "feeling" (experience) but low in ability and "doing" (agency) [53]. Our finding that owners who view their dog as a soulmate see them as more agentic suggest that they not only tend to treat their favorite dog like a person, but also view their dog as more mentally similar to a person.

General Animal Welfare

We explored whether dog owners who view their dogs as emotional soulmates might also express greater concern for animal welfare more broadly. We found that dog owners who saw

their dogs as soulmates were less likely to endorse speciesism—the belief that humans are superior to animals—but we did not find evidence that they would be more likely to eat a meat-reduced diet.

Supplementary Table 6.

Study 2 Regression Coefficients Predicted by Soulmate Perceptions

Variable	b	β	SE	$t(df)$	p	95% CIs
Identity Fusion with Dog	0.53	.039	0.04	12.08 (372)	< .001	[0.44, 0.62]
Social Support	-0.01	-.11	0.05	-2.08 (372)	.04	[-0.21, -0.01]
Extend Dog's Life Despite Discomfort	0.02	.04	0.05	0.72 (372)	.47	[-0.06, 0.14]
Mind Perception of People (Experience)	0.005	.09	0.05	1.68 (372)	.09	[-0.01, 0.19]
Mind Perception of People (Agency)	0.002	.03	0.05	0.62 (372)	.54	[-0.07, 0.13]
Mind Perception of Dogs (Experience)	0.01	.21	0.05	4.21 (372)	< .001	[0.11, 0.31]
Mind Perception of Dogs (Agency)	0.12	.29	0.05	5.86 (372)	< .001	[0.19, 0.39]
Speciesism	-0.05	-.37	0.01	-7.62 (372)	< .001	[-0.46, -0.27]

Meat-Reduced Diet	2.52	.23	0.22	1.05 (347)	.30	[-0.20, 0.65]
Size of Dog → Soulmate[1]	-0.43	-.04	0.03	-1.23 (372)	.22	[-0.10, 0.02]
Living Alone → Soulmate[1]	5.24	.47	0.13	3.63 (372)	< .001	[0.22, 0.73]

Note. All models predict responses to the soulmate scale except where indicated.

[1]Indicated variable predicting soulmate bond (dependent variable).

Study 3 Additional Analyses

We examined the same additional factors in Study 3, and replicated our results in the sample of dog owners. Additionally, we explored additional differences between dog owners and non-owners. Dog owners were not more likely to live alone, $b = -0.03$, $\beta = -.08$, $t(378) = -0.73$, $p = -0.73$, 95% CI [-0.28, 0.13], and did not report having more available social support (e.g., someone to rely on for instrumental or emotional support) than non-owners, $b = 0.29$, $\beta = .19$, $t(378) = 1.82$, $p = .070$, 95% CI [-0.01, 0.39]. As in Study 2, dog owners who lived alone reported a greater emotional reliance on their dog as a soulmate, $b = -2.88$, $\beta = -.24$, $t(378) = -2.13$, $p = .034$, 95% CI [-0.45, -0.02]. Owners were again not more open to sacrificing a dog's quality of life to extend their life, $b = 0.01$, $\beta = .04$, $t(378) = 0.70$, $p = .54$, 95% CI [-0.07, 0.13].

We also examined the relationship between parenthood status and the main measures among dog owners. Dog owners with children were more inclined to save their favorite dog over a human stranger, $b = 0.43$, $\beta = .24$, $t(378) = 2.32$, $p = .021$, 95% CI [0.06, 0.79], but parenthood status was not related to other measures. This may be due to the smaller sample of dog owners in this study (n = 212), while power analyses showed the effects from Study 1 required samples of n = 200–700 for 80% power. Supporting this, the majority of parenthood status effects replicated in our pilot study of 321 dog owners, described below.

Pilot Study

      We conducted a pilot study to explore the relationships between feelings toward pets and moral outcomes. This study allowed us to finalize our measures through factor analysis and test most of the relationships examined in the main studies.

Participants

      A total of 321 dog owners were recruited for the pilot study through Amazon Mechanical Turk ($M = 41.36$, $SD = 12.66$). 147 participants were women, 143 were men, 1 was transgender, and 1 was non-binary, 1 was gender non-conforming, and 1 did not specify their gender. 8.8% of participants were Latino/a/x, 5.1% were Black, 0.3% were Native American or Alaska Native, 5.1% were Asian or Pacific Islander, 78.1% were White, 1.7% were multiracial or biracial, and 1.0% did not specify their race.

Measures

      In addition to the main measures described for the main studies, we also included the Lexington Attachment to Pets Scale, empathy towards different beings in distress, intention to have children among childless participants, feelings of belongingness, and moral expansion. The only moral dilemma measures we included in the pilot were saving one's own dog vs a human stranger, and a puppy versus a human stranger. We also did not yet measure preferring one's dog over people. Below, we report (1) the main results with our developed soulmate bond scale (2) the main results replicated with the Lexington Attachment to Pets Scale (3) the main results as a function of whether participants had children.

Results

Main Relationships With Soulmate Bond to Dog

Variable	b	β	SE	$t(df)$	p	95% CIs

Dog Coddling Behaviors	0.71	0.56	0.04	13.55 (319)	< .001	[0.48, 0.65]
Perceived Dog Agency	0.07	0.28	0.05	5.18 (319)	< .001	[0.17, 0.38]
Perceived Dog Experience	0.63	0.34	0.05	6.43 (319)	< .001	[0.23, 0.44]
Donating to Animal vs. Human Charities	0.02	0.37	0.05	7.14 (319)	< .001	[0.27, 0.47]
Saving Life of One's Own Dog vs. Stranger	1.39	1.11	0.10	11.07 (319)	< .001	[0.91, 1.31]
Saving Life of Unknown Puppy vs. Stranger	0.80	0.64	0.12	5.38 (319)	< .001	[0.40, 0.87]
Speciesism	−0.32	−0.35	0.05	−6.71 (318)	< .001	[−0.46, −0.25]
Meat-reduced Diet	−0.16	−0.13	0.23	−0.54 (295)	0.59	[−0.59, 0.33]

Note. All values are from linear regression analyses.

Replication with the Lexington Attachment to Pets Scale

Variable	b	β	SE	$t(df)$	p	95% CIs
Dog Coddling Behaviors	14.08	0.60	0.94	15.01 (319)	< .001	[0.52, 0.68]
Perceived Dog Agency	1.86	0.37	0.26	7.13 (319)	< .001	[0.27, 0.47]
Perceived Dog Experience	13.29	0.38	1.80	7.38 (319)	< .001	[0.28, 0.48]

Variable	b	β	SE	t(df)	p	95% CIs
Donating to Animal vs. Human Charities	0.30	0.39	0.04	7.65 (319)	< .001	[0.29, 0.50]
Saving Life of One's Own Dog vs. Stranger	24.85	1.06	2.38	10.43 (319)	< .001	[0.86, 1.26]
Saving Life of Unknown Puppy vs. Stranger	14.96	0.64	2.78	5.38 (319)	< .001	[0.40, 0.87]
Speciesism	−6.83	−0.40	0.88	−7.75 (318)	< .001	[−0.50, −0.30]
Meat-Reduced Diet	−2.53	−0.11	5.53	−0.46 (295)	0.65	[−0.57, 0.36]

Note. All values are from linear regression analyses.

Results by Parental Status

Variable	b	β	SE	t(df)	p	95% CIs
Soulmate Bond Dog Coddling	-0.47	-0.19	0.14	-3.42 (319)	< .001	[-0.30, -0.08]
Behaviors Lexington Attachment to	-0.15	-0.07	0.12	-1.22 (319)	0.22	[-0.18, 0.04]
Pets Scale Saving Life of Own	-6.46	-0.14	2.6	-2.48 (319)	0.01	[-0.25, -0.03]
Dog vs. Stranger				$X^2(1) = 9.23$	0.002	

Donating to Animal

vs. Human Charities -4.03   -0.13   3.45   -1.17 (319)   0.24   [-0.35, 0.09]

Saving Life of

Unknown Puppy

vs. Stranger $X^2(1) = 4.81$ 0.03

Note. All values are from linear regression analyses.

[1]chi-square test of independence.