



# Behavioural characteristics of sighthounds: an exploratory investigation

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**Abstract:** Animal behaviour is a result of genetic, epigenetic and environmental factors, with much interest in understanding their relative contribution to dog behaviour. The role of breed/functional type remains controversial, with studies reporting effects ranging from negligible to substantial. One limitation could be that only one breed per type is included in most studies, disregarding possible within-type differences. This preliminary study aimed to assess possible interbreed differences within sighthounds and to describe behavioural variation, thereby facilitating insight into the design of future studies to explore the underlying causes of such differences. An online survey, including sections of the C-BARQ (aggressive, predatory, attachment/affection behaviours), and rating for 7 adjectives, yielded a convenience sample of 768 hounds belonging to 10 breeds plus Lurchers. The variation within and among breeds was described and exploratory Kruskal Wallis tests were run on predatory/attachment/affection behaviours on nine breeds. Sighthounds exhibited a very low level of aggressive behaviour, with little variation among breeds, combined with high predatory drive and a fair level of attachment/affection. Breeds differed in chasing cats and birds (both  $p < 0.001$ ), with Saluki (and Cirneco for birds) showing the behaviours more and the Piccolo Levriero Italiano less than most other breeds. Also shadowing the owner and soliciting interactions differed (both  $p < 0.001$ ) with Piccolo Levriero Italiano and, to a lesser extent, Irish Wolfhound and Cirneco, showing the behaviours more often than most other breeds. The present findings can provide preliminary guidance on some behavioural parameters likely to contribute to informative results in future studies targeting sighthounds.

**Key Words:** dog, human-animal interactions, predatory behaviour, shadowing.

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## Introduction

It is widely accepted, and validated empirically, that all animal behaviour is a result of both genetic and environmental/epigenetic factors (Duffy et al., 2008; Jensen, 2025), with their relative contribution varying according to the species and behavioural context. Understanding how genetic and environmental/epigenetic factors interact in shaping behaviour can be both a fascinating scientific topic and have practical value (Wilsson, 2016). Although modern dog breeds were mainly standardised in the last centuries, dog breeds are, in fact, the result of artificial selection for different tasks over a long history of artificial selection. Such canine diversification makes them an important model for investigating the genetic and epigenetic origins of behavioural diversity (Dutrow et al., 2022), in addition to advancing our understanding of mammalian biology, disease, and the processes underlying domestication (Meadows et al., 2023). It is, therefore, unsurprising that several studies have addressed both epigenetic influence on behaviour (e.g., Cimarelli et al., 2019; Guardini et al., 2016), and behavioural differences among breeds, using different inclusion criteria and methodological approaches (Pongrácz and Dobos, 2025). Although several behavioural traits exhibited moderate heritability, the effect of genetics, particularly

breed or breed type on canine behaviour remains controversial, with studies reporting effects ranging from negligible to substantial (e.g., Asp et al., 2015; Clarke et al., 2019; Junttila et al., 2022; MacLean et al., 2019; Mehrkam and Wynne, 2014; Morrill et al., 2022; Svartberg, 2006). One possible source of variability across studies may stem from how dog breeds are selected, defined and categorized. There are many international and national Kennel Clubs, which apply systems for breed recognition and categorization. For example, sighthounds are a type of dolichocephalic hounds that hunt prey by identifying it primarily by sight (not scent) and pursue it at speed (Urošević et al., 2025). This dog type can be traced back to ancient civilization (Bartel et al., 2007; Bennet and Timm, 2021), and evidence suggests that their physiological and behavioural characteristics differ somewhat from those of other dogs (Elliott et al., 2010; Zaldivar-López et al., 2011). According to the Fédération Cynologique Internationale (FCI), the world's largest kennel club as defined by number of member countries, sighthounds are classified in Group 10, and include 13 fully recognised breeds (Afghan Hound, Azawakh, Borzoi, Chart Polski, Galgo Español, Greyhound, Irish Wolfhound, Magyar Agar, Piccolo Levriero Italiano, Saluki, Scottish Deerhound, Sloughi, Whippet) and two provisionally recognised breeds (Kazakh Tazy and Silken Windsprite). The UK KC and the American KC (AKC) only recognise some of these breeds and do not assign them to a dedicated Sighthound group. Instead, they are placed in a general "Hound" group alongside breeds with distinct hunting strategies (except for the Piccolo Levriero Italiano, which is in the "Toy" group). The United KC (UKC), classifies Sighthounds into group 3, "Sighthound and Pariah Dog" (in the Sighthound type), a category that also includes dog breeds that do not primarily hunt by sight and speed (e.g., Cirneco dell'Etna and Rhodesian Ridgeback). This conforms to a common practice in the canine world to use, either formally or informally, the term Sighthounds, for breeds or types of dogs that do not exclusively hunt by speed and sight. The UKC is also the only major registry that officially recognises the Silken Windhound (a modern breed which hunts by sight and speed), which is not recognised by the FCI, the UK KC or the AKC. In addition, several other Sighthound breeds are only recognised by local/national KCs, such as the Xian Hound (Cina KC), the Taigan (VDH), the Kanni/Chippiparai (KC of India), or they exist as non-recognised traditional breeds/landrace types (e.g., the Levriero Meridionale, the Anadolu Sultan Tazısı, the Lurcher and the Kritikos Lagonikos). Overall, Sighthounds are not widely owned dogs, with some breeds considered very rare. This contributes to another methodological limitation often found in studies investigating the effect of breed on behaviour: studies often select only one breed, the most convenient, for each group, potentially biasing the results (Pongrácz and Dobos, 2025). Moreover, this approach, typically involving the Greyhound as the sole representative of Sighthounds, prevents the assessment of behavioural variability within the group itself, potentially overlooking critical differences.

Given the ongoing scientific interest in the relative contribution of genetic predisposition and environmental influences on dog behaviour, this pilot study aimed to contribute to the description of intra- and inter-breed variability in selected behavioural measures within a specific functional group: Sighthounds.

For the exploratory purposes of this study, we also included breeds or types whose classification as Sighthounds is considered contentious, as they do not originate from traditional sight-based hunting roles but are nonetheless commonly referred to as "Sighthounds" within the Anglo-Saxon canine community.

## Materials and methodology

An online questionnaire was created as part of a larger international study investigating how different methodologies influence the results when assessing breed effects on dog behaviour (Walsh et al., 2025). For the purposes of the present analysis, variables of interest included demo-

graphic information and selected sections of the C-BARQ relating to aggressive behaviour, predatory tendencies, and attachment or affection (Duffy and Serpell, 2012; Hsu and Serpell, 2003), plus rating for 7 adjectives (adaptable, reliable, active, independent, trainable, insecure, challenging/difficult). Ethical approval for the study was granted by the Academic Ethics Review Committee of Jiangnan University (n: JHDXLL24—082). The questionnaire was distributed through breed clubs, Facebook pages, personal contacts, and social media. Data were analysed using SPSS statistical software (SPSS ver. 27, IBM, Armonk, NY, USA).

Given the exploratory nature of the present paper, all Sighthound breeds/types with at least 15 valid answers were included in the descriptive statistics. Breeds with more than 30 responses were included in the inferential exploratory Kruskal Wallis tests followed by Bonferroni corrected pairwise comparisons to investigate possible differences among breeds. Moreover, as rescue dogs are likely to have undergone stressful experiences that may alter behaviour, rescue (R) and non-rescue (NR) individuals within each breed were treated as different categories. When sample size permitted, U-Mann Whitney tests were conducted to compare between the R and NR dogs within the same breed. If no significant differences were found in any of the target variables, R and NR dogs were pooled together at “breed” level, if significant differences were present and sample size allowed R and NR dogs were retained as separate analytic groups. Categories containing fewer than six individuals were excluded from the analysis. Longdogs/Lurchers, which are a very heterogeneous group, were only included in the descriptive statistics without differentiating between rescue and non-rescue dogs. To reduce the likelihood of spurious outcomes attributable to extremely sparse data, only variables which did not have any combination of breed\*score = 1 individual (i.e., there were always at least two individual for every level of the target variable in every breed) were analysed using Kruskal Wallis tests. All inferential statistics were two tailed and alpha was set as = 0.05.

## Results and discussion

Of the 44 Sighthound breeds/(Landrace) types represented in the survey, nine recognised breeds (Borzoi, Cirneco dell’Etna, Greyhound, Irish Wolfhound, Piccolo Levriero Italiano, Saluki, Silken Windhound, *Galgos Español*, Whippet) and a type (Longdog/Lurcher: i.e., crosses between two different Sighthound breeds or between a Sighthound and a non-Sighthound breed) obtained more than 30 answers, whereas one breed (Azawakh) obtained between 15 and 30 answers (i.e., 17 answers). The answers included in the present study were obtained in thirty-two countries across six continents (Africa, Asia, Australia, Europe, North America, and South America), the most represented of which was Europe.

After dividing dogs into rescue (R) vs non-rescue (NR) subgroups, several categories contained fewer than six individuals and were removed from the analysis: three rescue Borzois, four rescue Cirneco dell’Etna, three non-rescue *Galgos Español*, and three rescue Whippets.

Among Greyhounds, 20 were classified as NR and 70 as R, whereas among Salukis, 20 were NR and 14 R. No significant behavioural differences were detected between rescue (R=14) and non-rescue (NR=20) Salukis. In contrast rescue Greyhounds (n=20) scored significantly higher than non-rescue (n=70) on aggressive behaviour when approached directly by an unfamiliar child while being walked/exercised on a leash ( $U=572.0$ ,  $p=0.008$ ), and on aggression when unfamiliar persons approach the dog while s/he is in the caretaker’s car ( $U=605.5$ ,  $p=0.037$ ). Therefore, NR and R Salukis were combined into a single group, whereas Greyhounds were kept separated by rescue status (R and NR). Due to its small size, the NR Greyhound group was excluded from the exploratory comparison among breeds. In summary, a total of 768 hounds were included in the descriptive statistics, and 623 in the inferential analysis.

Sample demographics are provided in Table 1, with additional details in Supplementary Table

Variable	Scale	Most recorded score	Azawakht* (n°)	Borzo i (n)	Cirneco dell'Etna (n°)	Greyho und* (n°)	Greyho und rescue (n°)	Irish Wolfho und (n)	Italian Greyhound (n°)	Longdog/Lurcher* (n°)	Saluki (n°)	Silken Windho und (n°)	Spanish galgo rescue (n°)	Whippet (n°)
N of hounds: total (IF, NF, IM, CM)	N	-	17 (7, 2, 6, 2)	47 (12, 10, 20, 5)	33 (7, 11, 12, 3)	20 (1, 5, 11, 3)	70 (1, 48, 32, 1, 36)	17 (1, 7, 23, 1)	70 (13, 23, 21, 13)	108 (8, 34, 41, 11, 48)	34 (4, 10, 10, 10, 10)	51 (14, 10, 19, 8)	147 (1, 80, 0, 47)	123 (26, 33, 43, 21)
Rescue (R), non-rescue (NR)	N	-	NR	NR	NR	NR	R	NR	NR	68 R, 40 NR	14 R, 20 NR	R	R	NR
Aggressive behaviour when verbally corrected or punished (scolded, shouted at, etc.) by you or a household member.	0-4 intensity levels	0	15	44	29	17	66	48	63	94	34	50	141	121
Aggressive behaviour when approached directly by an unfamiliar child while being walked/exercised on a leash.		0	4	45	30	16	67	48	57	87	30	49	138	112
Aggressive behaviour toward unfamiliar persons approaching the dog while s/he is in your car (at the gas station, for example).		0	4	45	28	17	67	45	54	82	28	48	139	115
Aggressive behaviour when toys, bones or other objects are taken away by a household member.		0	15	42	32	14	61	42	64	90	31	48	135	118
Aggressive behaviour when bathed or groomed by a household member.		0	16	44	33	20	67	47	66	97	31	51	141	123
Aggressive behaviour when an unfamiliar person approaches you or another member of your family at home.		0	1	46	28	19	63	46	57	82	26	45	136	110
Aggressive behaviour when unfamiliar persons approach you or another member of your family away from your home.		0	5	43	30	19	68	46	56	90	27	48	136	114
Aggressive behaviour when approached directly by a household member while s/he is eating.		0	16	45	31	19	66	48	66	96	34	49	143	121
Aggressive behaviour when mailmen or other delivery workers approach your home.		0	2	41	24	17	65	34	39	59	16	43	127	102
Aggressive behaviour when his/her food is taken away by a household member.		0	16	45	29	17	62	47	63	94	34	49	137	122
Aggressive behaviour when strangers walk past your home while your dog is outside or in the yard.		0	1	35	20	16	64	35	36	54	16	40	111	95
Aggressive behaviour when an unfamiliar person tries to touch or pet the dog.		0	3	45	31	18	69	45	58	87	30	49	132	118
Aggressive behaviour when joggers, cyclists, rollerbladers or skateboarders pass your home while your dog is outside or in the yard.		0	2	37	22	16	65	37	43	67	18	41	118	104

Aggressive behaviour when approached directly by an unfamiliar male dog while being walked/exercised on a leash	0	6	30	22	13	42	43	41	50	14	39	94	74
Aggressive behaviour when approached directly by an unfamiliar female dog while being walked/exercised on a leash	0	6	32	24	13	45	46	48	59	17	42	98	86
Aggressive behaviour when stared at directly by a member of the household	0	15	46	32	19	70	47	68	98	33	51	143	120
Aggressive behaviour toward unfamiliar dogs visiting your home	0	5	29	20	13	48	43	41	56	20	44	107	88
Aggressive behaviour toward cats, squirrels or other animals entering your yard	0	2	19	11	6	22	30	35	28	8	26	59	49
Aggressive behaviour toward unfamiliar persons visiting your home	0	2	45	27	18	68	44	46	76	24	48	133	112
Aggressive behaviour when barked, growled, or lunged at by another (unfamiliar) dog	1	3	12	14	3	13	9	21	34	13	13	41	33
Aggressive behaviour when stepped over by a member of the household	0	16	42	33	18	64	47	68	101	33	50	137	119
Aggressive behaviour when you or a household member retrieves food or objects stolen by the dog	0	15	42	30	16	62	47	63	95	33	48	140	118
Aggressive behaviour towards another (familiar) dog in your household	0	12	28	27	15	47	33	46	61	24	37	102	82
Chases or would chase cats given the opportunity	Never to always (5 levels)	4	21	10	5	30	8	12	42	18	6	50	43
Chases or would chase birds given the opportunity	Never to always (5 levels)	1	12	0	2	33	18	7	19	4	7	52	14
Chases or would chase squirrels, rabbits and other small animals given the opportunity	Always to frequently	9	25	23	11	35	8	22	54	24	15	62	55
Displays a strong attachment for one particular member of the household	Always to frequently	10	17	8	9	20	18	36	34	13	12	51	46
Tends to follow you (or other members of the household) about the house, from room to room	Sometimes to often	9	11	11	2	19	13	16	27	6	9	37	37
Tends to sit close to, or in contact with, you (or others) when you are sitting down	Often to always	4	11	10	6	20	19	18	35	12	16	40	28
Tends to nudge, nuzzle or paw you (or others) for attention when you are sitting down	Sometimes to often	5	16	7	5	24	10	18	30	8	20	46	37
Becomes agitated (whines, jumps up, tries to intervene) when you (or others) show affection for another person	Never to often	13	34	23	10	53	34	15	60	23	37	99	68
Becomes agitated (whines, jumps up, tries to intervene) when you (or others) show affection for another dog or animal	Never to often	9	30	20	9	42	28	9	43	20	27	78	57
Adaptable	1-10 Likert	10	1	14	9	5	18	17	16	5	12	29	34
Reliable	1-10 Likert	10	2	12	8	6	14	17	13	5	9	28	24

Active	10	1	10	16	5	12	13	25	20	9	12	28	40
Independent	8	2	4	7	1	14	9	9	17	6	7	20	26
Trainable	7	2	8	6	2	5	8	8	14	6	7	13	25
	10	3	4	6	3	8	14	11	12	3	6	16	18
Insecure	1	4	27	20	9	31	24	19	26	6	15	37	52
Challenging/difficult	1	2	28	17	12	44	27	25	39	18	23	89	69

**Table 1.** Sample description. "NR" = "non-rescue"; "R" = "rescue"; "F" = female, "C" = castrated, "I" = intact, "M" = male, "N" = neutered. Breeds flagged with a "\*" were not included in the inferential exploratory statistics. Please note that the inferentially analysed variables are reported in more detail in table 2, only for the breeds included in the inferential statistics.

Variable	Frequency	Borzoi (n°)	Cirneco dell'Etna (n°)	Greyho und rescue (n°)	Irish Wolfho und Italiano (n°)	Piccolo Levriero Italiano (n°)	Saluki (n°)	Silken Windho und (n°)	Galgo rescue (n°)	Whippet (n°)	Differences
Chases or would chase cats given the opportunity	Never	8	6	7	9	17	3	7	33	9	<b>Piccolo Levriero Italiano</b> < rescue <i>Galgo</i> (p=0.032), Borzoi (p=0.003), Whippet (p<0.001), rescue Greyhound (p<0.001), Saluki (p<0.001).
	Rarely	6	4	10	11	18	2	13	26	19	<b>Silken Windhound</b> < Borzoi (p=0.01), Whippet (p<0.001), rescue Greyhound (p<0.001), Saluki (p<0.001).
	Sometimes	6	4	12	14	10	4	16	19	23	<b>Irish Wolfhound</b> < Borzoi (p=0.014), Whippet (p=0.002), rescue Greyhound (p=0.002), Saluki (p<0.001).
	Often	6	7	11	5	10	7	6	19	26	<b>Rescue Galgo</b> < Whippet (p=0.025), rescue Greyhound (p=0.027), Saluki (p=0.003).
Always	21	10	30	8	12	18	6	6	50	43	
Chases or would chase birds given the opportunity	Never	12	0	33	18	7	4	7	52	14	<b>Irish Wolfhound</b> < rescue <i>Galgo</i> (p=0.008), rescue Greyhound (p<0.001), Whippet (p<0.001), Borzoi (p<0.001), Saluki (p<0.001), Cirneco (p<0.001).
	Rarely	10	2	21	10	15	4	11	27	28	<b>Piccolo Levriero Italiano</b> < rescue Greyhound (p=0.036), Whippet (p=0.011), Borzoi (p=0.016), Saluki (p<0.001), Cirneco (p<0.001).
	Sometimes	11	8	7	12	12	10	16	25	31	<b>Silken Windhound</b> < Saluki (p=0.004), Cirneco (p<0.001).
	Often	3	6	4	5	17	4	11	14	20	<b>Rescue Galgo</b> < Saluki (p=0.002), Cirneco (p<0.001), <b>Rescue Greyhound</b> < Cirneco (p=0.015), <b>Whippet</b> < Cirneco (p=0.013).
Always	11	16	4	3	19	12	6	26	30		

Tends to follow you (or other members of the household) about the house, from room to room	Never	11	3	7	4	3	5	4	22	8	<b>Borzoi</b> < rescue <i>Galgo</i> (p=0.039), Whippet (p=0.004), Saluki (p=0.017), Silken Windhound (p=0.001), Irish Wolfhound (p<0.001), Piccolo Levriero Italiano (p<0.001). <b>Rescue Greyhound</b> < Silken Windhound (p=0.019), Irish Wolfhound (p=0.005) Piccolo Levriero Italiano (p<0.001). <b>Rescue Galgo</b> < Irish Wolfhound (p=0.014), Piccolo Levriero Italiano (p<0.001). <b>Cirneco</b> < Piccolo Levriero Italiano (p=0.016). <b>Whippets</b> < Piccolo Levriero Italiano (p=0.012).
Always	3	6	11	14	24	3	10	11	33	29	
Tends to nudge, nuzzle or paw you (or others) for attention when you are sitting down	Never	9	3	6	2	3	3	6	25	24	<b>Whippet</b> < Cirneco (p=0.002), Irish Wolfhound (p<0.001), Piccolo Levriero Italiano (p<0.001). <b>Borzoi</b> < Cirneco (p=0.009), Irish Wolfhound (p<0.001), Piccolo Levriero Italiano (p<0.001).
Rarely	9	3	18	4	4	4	8	11	31	26	
Sometimes	16	7	24	10	18	8	8	20	46	37	Levriero Italiano (p<0.001). <b>Silken Windhound</b> < Cirneco (p=0.015), Irish Wolfhound (p<0.001), Piccolo Levriero Italiano (p<0.001). <b>Rescue Galgo</b> < Cirneco (p=0.006), Irish Wolfhound (p<0.001), Piccolo Levriero Italiano (p<0.001). <b>Rescue Greyhound</b> < Cirneco (p=0.044), Irish Wolfhound (p=0.002), Piccolo Levriero Italiano (p<0.001). <b>Saluki</b> < Piccolo Levriero Italiano (p=0.014).
Often	8	11	10	18	14	14	7	11	23	19	
Always	5	8	12	13	29	8	8	3	22	16	

**Table 2.** Distribution (n°) of the dogs in the four inferentially analysed variables. Dogs not reported for each variable correspond to missing data (e.g., the respondent answered they did not remember/notice).

S1. Overall, in the present study, Sighthounds exhibited a very low level of aggressive behaviour, with little variation among breeds, combined with high predatory drive which is consistent with the existing literature (Elliott et al., 2010; Howell et al., 2018; Normando et al., 2023, 2024). For all aggression-related items, the most reported level of aggression in the Sighthound group was 0 (absence of aggression), except for “aggressive behaviour” when barked, growled, or lunged at by another (unfamiliar) dog” (with level 1 being most reported). They also scored high on reliability, adaptability and level of activity, and very low in being difficult/challenging and insecure.

Only four variables did not have any combination of breed\*score =1 individual, and therefore were included in the inferential exploratory statistics: how often the dog chased or would have chased cats given the opportunity (total valid answers = 611); how often the dog chased or would have chased birds given the opportunity (total valid answers = 618); how often the dog tended to follow the caretaker (or other members of the household) about the house, from room to room (total valid answers = 619); and, how often the dog tended to nudge, nuzzle or paw the caretaker (or others) for attention when the caretaker is sitting down (total valid answers = 618) (Table 2). All four variables showed significant differences among breeds ( $U=40.9$ ,  $U=46.2$ ,  $U=34.1$ ,  $U=59.1$ , respectively, all  $p<0.001$ ).

### *Predatory behaviour*

In the overall sample, the most frequently reported score for chasing cats was “always”. Piccolo Levriero Italiano was reported to perform this behaviour less often, whereas Saluki was reported to perform it more often than most other breeds. Regarding bird chasing behaviour, Cirneco dell’Etna and Saluki were most frequently reported as “always” engaging in the behaviour. The significant differences in pairwise comparisons among breeds are shown in Table 2. As Sighthounds have historically been selected to hunt and pursue prey mammals mainly by using vision, it is unsurprising that many of them (33.0%) were reported to always (attempt to) chase cats. This percentage is less than that was reported for rescue Greyhounds by Elliott et al. (2010), who found that 15.1% consistently chased cats, using a slightly different scale. When comparing only rescue Greyhounds, the percentage in the present study (42.9%) exceeded that in Elliott et al. (2010), whereas rescue *Galgos* (34.0%) showed a lower percentage than that previously reported for Italian-based samples (41.5%) by Normando et al. (2023). This last pattern is consistent with the present findings. Although chasing birds was not primarily the target of sighthound selection, it is noteworthy that scores for this behaviour were more evenly distributed across response options, with “never” being the slightly more common category. Particularly interesting is the consistently high predatory orientation observed in Saluki and, to a lesser degree, Cirneco. These two breeds have been reported to be genetically distinct from more Western-derived sighthound breeds (e.g., Piccolo Levriero Italiano, Borzoi, Irish Wolfhound, Scottish Deerhound, Whippet, Greyhound (Parker et al., 2017); which may contribute to the behavioural differences observed in this study.

### *Shadowing and actively soliciting interaction*

For both shadowing the caretaker (following from room to room), and for nudging, nuzzling or pawing the caretaker (or others) for attention, the most frequently reported score across the sample was “sometimes”. The breeds that were more often reported as shadowing were Irish Wolfhound and Piccolo Levriero Italiano. Three breeds were more frequently reported to perform nudging, nuzzling or pawing the caretaker (or others) for attention: Cirneco, Irish Wolfhound and Piccolo Levriero Italiano. The significant differences in pairwise comparisons among breeds are shown in Table 2. The present findings partly align with Elliott et al. (2010), who reported that rescue Greyhounds were mostly scored as performing shadowing behaviour “some of the time”.

In Normando et al. (2023), both shadowing and soliciting interactions from familiar people were reported a median of 9 out of 10 in an Italian sample of Whippets and Piccolo Levriero Italiano, with the latter scoring significantly higher in both questions. Similarly, Piccolo Levriero Italiano showed these behaviours significantly more often than most other breeds in the present study.

Overall, the observed distributions for shadowing and soliciting attention, with a substantial proportion of dogs showing these behaviours often or always, challenge the widespread perception that Sighthounds are aloof. However, it is worth noting that most of the Sighthounds sampled belong to Western lineage, which are described as being less aloof than those of Eastern lineage. Moreover, the inclusion of Lurchers, which are mainly crossbreeds with non-Sighthound breeds, may have contributed to this pattern.

As for the limitations of this study, the present work represents a pilot study relying solely on caregiver-reported behaviour rather than objective behavioural assessment. Therefore, it shares general constraints associated with self-reported data (Cohen and Todd, 2019; Krumpal, 2013; Rosenthal, 1965), and it has some specific limitations including questionnaire length and relatively small sample sizes for individual breeds, which excluded the possibility of more complex statistical analysis which could have investigated multiple factors, such as ontogenetic and environmental ones. This preliminary study aimed only to assess whether interbreed differences were detectable and to describe the extent of behavioural variation, thereby facilitating insight into the design of future studies to explore the underlying causes of such differences.

## Conclusions

This pilot study evaluated potential behavioural differences within and between breeds belonging to a specific functional group of dogs: Sighthounds. The primary objective was to characterize the distribution of selected behavioural traits to support the design of future, more comprehensive investigations. Overall, the sampled Sighthounds were reported to display very low levels of aggressive behaviour with little variability, alongside a consistently high predatory drive, with the latter showing some meaningful interbreed differences. Further research is needed to clarify the respective contributions of genetic predisposition and environmental/ontogenetic influences on this behavioural variation. The present findings provide preliminary guidance on the behavioural parameters most likely to contribute to informative results in future studies targeting sighthound populations.

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### Caratteristiche comportamentali dei levrieri: un'indagine esplorativa

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#### Sintesi

Il comportamento animale è il risultato di fattori sia genetici che ambientali/epigenetici, e c'è grande interesse nel comprendere il loro relativo contributo rispetto al comportamento canino. Il ruolo della razza/tipo rimane controverso, con studi che riportano effetti che vanno da trascurabili a sostanziali. Una limitazione potrebbe essere che nella maggior parte degli studi è inclusa solo una razza per tipo, trascurando le possibili differenze all'interno dello stesso tipo. Questo studio preliminare mira a valutare le possibili differenze tra razze di levrieri e a descrivere le variazioni comportamentali, facilitando così la progettazione di studi futuri volti ad esplorare le cause alla base di tali differenze. Un sondaggio online, che includeva sezioni del C-BARQ (comportamenti aggressivi, predatori, di attaccamento/affetto) e la valutazione di 7 aggettivi, ha prodotto un campione di convenienza di 768 cani appartenenti a 10 razze più i Lurcher. È stata descritta la variazione intra- e inter- razze e sono stati eseguiti test esplorativi di Kruskal Wallis su alcuni comportamenti predatori e di interazione/attaccamento in nove razze. I levrieri hanno mostrato un basso livello di comportamento aggressivo, con poche variazioni tra le razze, combinato con una elevata tendenza predatoria e un discreto livello di attaccamento/affetto. Le razze differivano nell'inseguimento di gatti e uccelli (entrambi  $p < 0,001$ ), con il Saluki (e il Cirneco per gli uccelli) che mostrava questi comportamenti più spesso e il Piccolo Levriero Italiano meno spesso rispetto alla maggior parte delle altre razze. Anche seguire costantemente il proprietario e ricercare interazioni differivano (entrambi  $p < 0,001$ ) con il Piccolo Levriero Italiano e, in misura minore, con l'Irish Wolfhound e il Cirneco, che mostravano questi comportamenti più spesso rispetto alla maggior parte delle altre razze. I risultati di questo studio possono fornire indicazioni preliminari su alcuni parametri comportamentali che potrebbero contribuire a risultati informativi in studi futuri incentrati sui levrieri.

