



A Case Of Multiple Behavioral Disorders In A Dachshund With Early Environmental Deprivation

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Abstract: Environmental conditions during critical developmental periods play a fundamental role in the behavioral development of dogs. Individuals subjected to sensory deprivation and limited social contact may develop persistent behavioral disorders in adulthood. This paper describes the case of Drago, a two-year-old intact male standard wire-haired Dachshund, raised in a kennel environment during the first four months of life, who exhibited: fear-based defensive aggression toward a family member, predatory-like behavior toward children, intolerance to handling with defensive responses and learned demand barking. The multimodal therapeutic approach included: environmental management, family education on communication signals, systematic desensitization and counterconditioning to handling, structured play activities with children, artificial den training and differential reinforcement. The intervention emphasized predictable routines, respect for tolerance thresholds and controlled gradual exposure. After two months of weekly sessions, significant improvements were documented across all problem areas: reduced frequency and intensity of aggressive responses, decreased chasing behavior, improved tolerance to handling and reduction in demand barking. This case highlights the behavioral consequences of early environmental deprivation and the effectiveness of a multimodal behavior modification approach calibrated to the specific etiology.

Key Words: Canine behavior, Environmental deprivation, Defensive aggression, Behavior modification, Dachshund, Fear-based aggression.

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Signaling

Drago is a two-year-old intact male standard wire-haired Dachshund weighing approximately 12 kg.

Anamnesis

Drago was acquired from a breeding facility at four months of age; he originated from a line specifically selected for hunting activity. During the first four months of life, he was raised in kennel conditions with limited environmental enrichment and restricted social contact. The puppy spent this period in a confined kennel environment with minimal exposure to domestic stimuli, scarce varied human interaction, and limited diversified environmental experiences. Consequently, Drago experienced sensory and social deprivation during critical developmental periods. Following adoption, no structured training or socialization program was introduced to address the behavioral deficits resulting from early deprivation.

At the time of adoption, Drago entered a complex family unit consisting of four members: the mother (who works from home), the father (affected by a medical condition causing frequent unpredictable vocal episodes characterized by screaming), a five-year-old daughter diagnosed with hyperactivity, and an eleven-year-old son. The family resides in an apartment in the center of Florence. The family environment is characterized by high levels of stimulation and unpredictability, particularly due to the father's uncontrollable vocalizations during crises related to his illness.

Approximately six months prior to consultation, a significant traumatic event occurred between Drago and the eleven-year-old son: during the behavioral assessment, the child reported

having accidentally dropped the dog during play, causing him pain (the dog “was crying”). The specific circumstances and height of the fall were not completely detailed, but this episode likely contributed to the development of negative associations and defensive behaviors toward the child, particularly during handling.

Drago is walked three times daily (at breakfast, lunch, and dinner) for brief on-leash outings lasting fifteen minutes around the block. These walks provide minimal environmental variation and limited opportunities for exploration or social interaction with conspecifics. Feeding consists of commercial dry food administered twice daily (at lunch and dinner). Throughout the day, Drago spends time primarily with the children when they return from school and with the mother during her working hours. Interaction with the father is less frequent and occurs predominantly in the evening hours. No other animals are present in the family unit. Toys are left freely available throughout the house. At night, Drago sleeps independently in the living room on the sofa, away from the bedrooms.

The adult family members had prior experience with the breed, having previously owned a Dachshund for twelve years with whom they had completed obedience training and participated in recreational nose work activities. The children, however, had grown up alongside the previous dog only during its adult and already well-trained years and had not been involved in any structured training process, resulting in limited practical knowledge of canine communication and appropriate interaction protocols. This asymmetry in baseline competence between adult and younger family members was considered in designing the educational components of the intervention.

The combination of these behaviors, together with marked fear responses during the father’s crises, dangerous behavior toward children, and incessant vocalization to obtain food, constituted the primary reasons for requesting professional behavioral consultation. The family expressed growing concern for safety, particularly regarding interactions between Drago and the children, and frustration with the dog’s demanding behavior and the father’s inability to safely interact with the dog during his critical episodes.

Physical Examination

No information was provided regarding Drago’s general health status, previous or current pathologies, routine veterinary care, vaccination status, or ongoing pharmacological therapies at the time of initial consultation. The family had not conducted recent veterinary visits. A complete veterinary clinical examination was strongly recommended to rule out potential medical contributions to the behavioral problems, particularly painful conditions (orthopedic, neurological, or dental) that could contribute to handling intolerance and irritability. Recent studies have also highlighted how genetic factors such as inbreeding may influence neurological aspects in dogs (Gazzano et al., 2024), further emphasizing the importance of a comprehensive medical evaluation to establish a baseline health status. The importance of excluding medical causes before finalizing the behavioral diagnosis and therapeutic plan was emphasized to the owners.

Behavioral Assessment

During the initial behavioral assessment, conducted in August 2025, a comprehensive examination was performed with detailed analysis of each presenting problem. The assessment included direct behavioral observation of Drago conducted both in the home environment and during sessions at a dog training facility, detailed anamnesis collected from all family members, and analysis of typical daily routines and specific triggering contexts.

Problem 1: Fear-Based Defensive Aggression toward the Owner

The behavior manifests in the domestic environment during crises related to the owner's medical condition, when he screams and raises his voice uncontrollably; episodes occur primarily in the living room and kitchen areas. Triggering stimuli include the owner's screams and threatening vocalizations, his presence in an agitated or altered state, and his approach to the dog in such an emotional state. Drago exhibits fearful barking, defensive body postures (lowered body, ears back, tucked tail), and nipping attempts if the owner approaches despite warning signals. The behavior was classified as fear-based defensive aggression, with high intensity (escalation from barking to contact aggression), occurring at every crisis episode (high frequency), reduced latency (immediate reaction to the onset of vocalization), and persistence throughout the duration of the crisis with prolonged arousal states. The behavior is negatively reinforced by the owner's withdrawal or the dog's removal from the situation.

Problem 2: Chasing and Nipping of Children

This behavior occurs in the domestic environment during daily activities, particularly when the five-year-old daughter runs through the house or when the children engage in high-energy play. Triggering stimuli include rapid movements (running), high-pitched vocalizations typical of children's play and unpredictable directional changes. Drago exhibits active chasing with attempts to grab or nip the children, consistent with redirected predatory behavior or arousal-based responses. The behavior presents medium-high intensity, high frequency (occurs every time the children run), immediate latency, and variable duration based on the children's activity level. The behavior is self-reinforcing through the excitement of chasing and potentially reinforced by attention from family members attempting to intervene.

Problem 3: Nipping When Lifted by the Eleven-Year-Old Son

Every time the eleven-year-old son attempts to pick up Drago, the dog responds with defensive nipping. Triggering stimuli include being lifted off the ground by the child, loss of control over spatial position, and probable anticipatory fear based on the previous traumatic experience. Involved emotional states include fear, anticipatory anxiety and physical discomfort. The behavior represents defensive aggression related to aversive handling, with medium intensity (nipping without complete bite), 100% frequency in the specific context, immediate latency upon lifting and brief duration as the behavior quickly achieves interruption of the unwanted handling. The response is negatively reinforced by the immediate cessation of handling.

Problem 4: Incessant Demand Barking for Food

Drago exhibits continuous and persistent barking in contexts associated with food: during meal preparation, in the presence of food odors and when the owners are in the kitchen. The behavior represents learned instrumental communication maintained by positive reinforcement, as the family has consistently provided food to stop the barking. The behavior presents medium intensity (sufficiently high to be disturbing), high frequency (described as "incessant"), variable latency according to context and prolonged duration until food is obtained. The reinforcement history has strongly consolidated and maintained this problematic pattern.

Behavioral Assessment

Based on the anamnesis characterized by early kennel confinement, limited sensory and social experiences during sensitive developmental periods (0-4 months) and clinical signs observed dur-

ing the behavioral assessment, Drago's clinical presentation was compatible with multiple behavioral disorders secondary to early environmental deprivation.

Primary Diagnoses

1. Fear-based defensive aggression toward family members with unpredictable vocalization
2. Redirected predatory behavior/arousal-based behavior toward children in motion
3. Handling intolerance with defensive aggression, exacerbated by previous traumatic experience
4. Learned insistent demand behavior (barking) maintained by positive reinforcement.

Contributing Factors

1. Early environmental deprivation (kennel housing during the first 4 months with limited socialization and experiences)
2. Chronic stress from unpredictable domestic environment (owner's medical condition)
3. Previous traumatic experience with the child (accidental fall during play)
4. Reinforcement of demand behavior by family members
5. Inadequate physical exercise and mental stimulation relative to breed requirements
6. Breed-specific behavioral characteristics (independence, tenacity, vocalization, high predatory drive) (Serpell & Duffy, 2014).

Intervention Approach

The intervention adopted in this case was multimodal and non-pharmacological, comprising reorganization of daily management, a structured behavioral rehabilitation program with particular attention to environmental management, systematic desensitization and counterconditioning protocols targeting handling intolerance, fear responses to the owner's unpredictable vocalizations, and arousal-based reactions toward children, family education, and the use of species-appropriate and breed-specific behavioral outlets (Overall, 2013). The intervention was designed to address both proximate factors (learning history, current reinforcement contingencies) and distal factors (early environmental deprivation, breed-specific behavioral predispositions) contributing to the presenting problems.

The objectives, established collaboratively with the family, included reduction in the frequency and intensity of defensive aggressive responses, improvement of Drago's relationships with all family members, education of the children regarding appropriate handling and canine communication, provision of appropriate outlets for arousal regulation and breed-typical behaviors, extinction of demand barking and increased tolerance to handling, particularly in interactions involving the children.

Environmental Management and Immediate Modifications

A safe space was established for Drago within the home using a crate positioned in a dedicated room inaccessible to children. The crate was left with the door always open to allow Drago to retreat independently when requiring tranquility or wishing to remove himself from stressful situations. This space was positively conditioned through systematic association with high-value food rewards, preferred toys, and meal administration. An absolute household rule was established regarding respect for the space by all family members: no one may disturb or interact with Drago when he is in his refuge. The safe space is used as a retreat during the owner's crises.

Management of the owner's crises was modified to include anticipatory intervention. When a crisis can be predicted based on early signs, Drago is guided preventively to his safe space before complete escalation. This proactive approach has significantly reduced exposure to the stimulus and prevented repetition and reinforcement of defensive aggressive responses. Throughout treatment, work focused on teaching Drago to autonomously recognize early indicators of crises and to retreat independently to his safe space, thus developing an adaptive coping strategy.

Family Education

Both children received comprehensive education on appropriate canine interaction, provided through age-appropriate instruction, practical demonstrations, and supervised practice sessions. Educational components included: correct approach techniques (lateral approach, avoiding direct frontal approach and looming from above), appropriate petting techniques (chest, shoulder, and flank rather than head), recognition and interpretation of calming signals and canine stress indicators, identification of situations in which interaction must be avoided (during feeding, rest, when in the safe space, when displaying stress signals), absolute prohibition of lifting Drago without direct adult supervision and permission, and modification of play patterns to avoid triggering chase sequences (structured games instead of running, use of toys rather than the body as play target).

Behavior Modification Protocols

Structured Play Activities with Children

Structured games were introduced to rebuild positive associations between Drago and the children in controlled and predictable contexts; the importance of monitoring the well-being of both children and dogs during structured interactions is well documented in the literature (Giuliano et al., 2025). Basic obedience games were implemented where the children, under direct adult supervision, requested simple known commands (sit, down, stay) and immediately delivered high-value food reinforcers for compliance. This protocol established clear and predictable communication patterns, provided children with appropriate control mechanisms, and created positive associations between the children's presence and reward delivery. Controlled tug-of-war games were introduced with explicit rules: game initiation only on adult command, immediate cessation on "drop it" command, limited duration (1-2 minutes), and toy access controlled by the adult between sessions. These structured games provided an appropriate outlet for physical interaction while maintaining safety and control.

Artificial Den Training

Drago was introduced to artificial den training, an activity specifically suited to the ethological characteristics and breed-typical behavioral repertoire of Dachshunds. This activity served multiple therapeutic functions: providing an appropriate outlet for accumulated arousal and tension, satisfying the predatory and exploratory motivations characteristic of the breed, channeling the tendency toward vocalization in a functional and rewarded context, building confidence and behavioral competence through successful task completion and creating positive shared experiences between Drago and family members. A critical aspect of the protocol involved the inclusion of all family members as handlers during training sessions. This inclusive approach facilitated improvement of the relationship between Drago and each family member through shared positive activities, progressive repair of relational damage particularly with the owner and children, reduction of fear or hesitation among family members in managing Drago and provided tools for positive structured interaction in a clear training context. Sessions were conducted weekly at a local dog training facility, with homework assignments between sessions for family practice.

Systematic Desensitization to Handling

A gradual eight-week systematic desensitization and counterconditioning protocol was implemented to address handling intolerance (Landsberg et al., 2013). Phase 1 (weeks 1-2): habituation to light and brief touch (1-2 seconds) on non-sensitive body areas (chest, shoulders, back) with immediate high-value food reinforcement, conducted exclusively by adult family members.

Phase 2 (weeks 3-4): extension of touch to progressively more sensitive areas (paws, tail base, ears, muzzle region) maintaining constant positive reinforcement, with careful introduction of children under close adult supervision and with children delivering food rewards. Phase 3 (weeks 5-6): introduction of more prolonged handling (5-10 seconds) and simulations of care procedures (gentle restraint, body examination, simulation of veterinary procedures) with continuous reinforcement and monitoring of stress indicators. Phase 4 (weeks 7-8): introduction of very brief and gradual lifting exercises with Drago on low surfaces, initially conducted only by adult handlers, progressively involving children with very high-value reinforcement and immediate cessation at any sign of discomfort or stress. In all phases, progression to the next level occurred only when Drago demonstrated relaxed body language and voluntary participation at the current level.

Extinction of Demand Barking

A three-component approach was implemented to address demand barking. First, den training provided a functional context where barking was appropriate, required, and positively reinforced, allowing expression of the communicative tendency in an acceptable manner. Second, rigorous extinction of demand barking was implemented: family members were instructed never to provide food or any form of attention in response to barking. Food was delivered only when Drago was calm and quiet, or as reinforcement for compliance with obedience commands or recall response. The family was prepared and educated about the extinction burst phenomenon, namely the expected temporary increase in barking frequency and intensity that typically occurs at the beginning of extinction procedures. With consistent family compliance, the behavior showed progressive reduction over 2-3 weeks. Third, differential reinforcement of incompatible behaviors was implemented: Drago received high-value rewards when executing commands (sit, down) or responding to recall in a calm and quiet manner. These behaviors are incompatible with insistent barking, allowing replacement of the problematic pattern with more appropriate and equally effective alternative communication strategies.

Follow-up and Outcomes

After approximately eight weeks of weekly behavioral sessions, with implementation of the multimodal treatment protocol, significant improvements were observed in all problem areas.

Regarding fear-based defensive aggression toward the owner, the frequency and intensity of aggressive responses decreased substantially. Drago began to autonomously use his safe space at the onset of crises, effectively preventing escalation, and supervised interactions during calm periods showed reduced fear responses and increased tolerance.

Chasing and nipping of children decreased drastically from multiple daily occurrences to occasional mild interest in movement. Structured play activities successfully provided appropriate interaction outlets, children demonstrated markedly improved understanding of canine communication and appropriate behavior, and Drago's arousal level in response to children's movement became significantly more manageable with faster recovery to baseline.

Handling intolerance showed marked improvement. Drago tolerates handling by adult family members with relaxed body language. The eleven-year-old son was able to calmly pet Drago on chest and shoulders without eliciting defensive responses. Brief controlled lifting from low surfaces by trained adult family members was achieved with minimal stress when appropriate desensitization protocols were followed, although continued supervision and gradual progression remain necessary for children's involvement in lifting.

Demand barking showed substantial reduction in both frequency and intensity. Drago learned alternative communication strategies such as sitting quietly and establishing eye contact, and

accepted delayed gratification when food rewards were provided contingent on calm behavior rather than vocalization. The family reported significantly reduced stress related to this behavioral pattern.

Overall, Drago demonstrated reduced baseline anxiety, improved emotional regulation and faster recovery from arousal states, with a consolidated daily routine incorporating reliable autonomous use of safe space and regular participation in den training activities. Notably, den training produced a meaningful improvement in the human-animal bond across all family members, providing a shared positive experience that progressively strengthened trust and mutual understanding between Drago and each member of the family unit.

Discussion

This case illustrates the complex interaction between early environmental deprivation, breed-specific behavioral characteristics, ongoing environmental stressors and learned behaviors in the development and maintenance of multiple behavioral disorders in the domestic dog. The therapeutic approach required particular attention to both historical factors that created vulnerability and current maintaining factors that reinforced problematic response patterns.

Drago's first four months of life, spent in kennel conditions with limited socialization and reduced environmental enrichment, likely contributed significantly to his behavioral vulnerability and reduced adaptive capacity. Management conditions during early breeding in kennel environments can have profound effects on behavioral development, particularly when individuals receive inadequate sensory exposure, limited human contact and restricted environmental complexity during sensitive developmental periods (Iacopini & Gazzano, 2024). Such early deprivation can result in increased fear, reduced capacity to cope with novel or unpredictable stimuli, compromised social competence, and difficulties in acquiring new behavioral repertoires that persist throughout life even when environmental conditions subsequently improve (Scott & Fuller, 1965; Appleby et al., 2002; Dietz et al., 2018).

The manifestation of fear-based defensive aggression toward the owner during medical crises represents a particularly challenging clinical problem given the unpredictable and uncontrollable nature of the triggering stimulus. Phobic responses to unpredictable loud vocalizations are well documented in dogs and can be particularly problematic when the source is a family member, creating chronic stress and compromising the dog's sense of security in the domestic environment (Gazzano & Ogi, 2020). The defensive aggression observed when escape was prevented or when the owner approached during episodes is entirely consistent with classic fear aggression patterns described in the literature (Landsberg et al., 2013; Overall, 2013), where aggression represents a last-resort defensive strategy when avoidance or flight are not possible. Environmental management through provision of a safe space proved essential in this case, allowing Drago to remove himself from overwhelming situations before reaching the threshold for aggressive response, thus preventing repetition and reinforcement of the aggressive response pattern while simultaneously providing an adaptive alternative coping strategy.

The predatory-like behavior directed toward children in motion reflects activation of breed-typical hunting sequences in an inappropriate domestic context. Dachshunds have been selected over centuries for independent pursuit of prey in confined underground spaces, traits that include high predatory drive, intense focus and persistence (tenacity), rapid arousal in response to movement, and readiness for physical engagement with the target (Serpell & Duffy, 2014). In the absence of appropriate outlets for these intrinsic behavioral motivations, such breed-specific characteristics can manifest as problematic behaviors in the domestic environment where they are directed toward inappropriate targets. The introduction of artificial den training provided an ethologically appropriate and structured channel for these breed-typical behavioral tendencies,

with the important added benefit of strengthening the human-animal bond through shared activity and successful task completion.

Handling intolerance, particularly toward the eleven-year-old son, was likely multifactorial in origin, combining lack of systematic habituation to handling during the sensitive period with a specific traumatic experience (fall during play) that created a strong negative association. Dogs raised in kennel environments with minimal handling during early development often show increased sensitivity and defensive responses to body handling later in life (Appleby et al., 2002). The additional traumatic experience with the child created a particularly strong conditioned fear response specific to that handler. Systematic desensitization and classical counterconditioning proved effective in modifying this response, although the process required careful gradation, patience, and absolutely consistent application of positive reinforcement principles. The involvement of all family members in both the handling desensitization protocol and den training activities was crucial for generalizing improved tolerance across different handlers and contexts.

Demand barking behavior represented a classic example of reinforced operant behavior. The family's understandable desire to reduce noise and appease Drago led to consistent provision of food in direct response to barking, thereby creating a powerful positive reinforcement schedule that strongly consolidated and maintained the very behavior they wished to eliminate. This pattern demonstrates how well-intentioned management decisions can inadvertently create or exacerbate behavioral problems when learning theory principles are not adequately understood. Application of extinction procedures combined with differential reinforcement of alternative behaviors successfully modified this established pattern, although as predicted by learning theory an initial extinction burst occurred before progressive improvement was observed. Family education about this expected phenomenon and encouragement to maintain consistency during this challenging phase were essential for treatment success.

The multimodal approach employed in this case, which combined environmental management to reduce exposure to overwhelming stimuli, systematic desensitization and counterconditioning to modify emotional responses, family education to prevent reinforcement of undesired behaviors and promote appropriate interactions, species-appropriate and breed-specific behavioral outlets and consistent application of learning theory principles through differential reinforcement proved effective in addressing the complex series of interrelated problems presented. The comprehensive nature of the intervention was necessary given that the problems emerged from multiple contributing factors operating at different levels (developmental history, current environment, learning history, breed characteristics). Although in this case the behavior modification program produced satisfactory outcomes in the absence of pharmacological intervention, emerging evidence suggests that complementary pharmacological support could further optimize results in analogous cases, particularly when elevated anxiety or fear levels interfere with the learning processes central to behavior modification protocols. In particular, recent research on the gut-brain axis in dogs highlights bidirectional relationships between intestinal microbiome and behavioral states associated with anxiety and fear (Sacchetti et al., 2025), opening the possibility of considering, in future protocols, evaluation of gastrointestinal health and nutritional interventions, or probiotics, as adjuvant strategies. Similarly, nutraceutical supplementation is emerging as a potential support tool in the management of anxiety disorders within the veterinary field, with promising results documented in shelter dogs (Giuliano et al., 2024). In cases where high anxiety levels interfere with learning processes, evaluation of such complementary approaches falls within the scope of veterinary behavioral medicine and should be considered in close collaboration with a veterinary professional.

The case also underscores the critical importance of breeding conditions and early experiences during sensitive developmental periods, as well as the long-term consequences of environmental and social deprivation (Dietz et al., 2018), reinforcing the need for evidence-based management protocols in breeding facilities and shelters as a fundamental preventive strategy. Consistent in-

volvement of all family members in treatment implementation proved essential for intervention success, as consistency across handlers and contexts represents a critical element in behavior modification, particularly in cases characterized by fear and aggression, where inconsistent applications can compromise progress or generate additional problems.

Limitations and Recommendations

Several limitations of this case report must be highlighted. Complete medical evaluation was not confirmed prior to behavioral diagnosis and behavioral modification implementation; therefore, it was not possible to definitively rule out underlying pathologies that could contribute to irritability, pain-related defensive responses or general behavioral changes. The recommendation for a thorough veterinary examination including orthopedic, neurological and dental evaluation was provided to the family but compliance was not verified. The unpredictable nature of the owner's medical condition made complete environmental control impossible, necessitating ongoing management strategies and acceptance that some exposure to triggering stimuli would likely continue. Long-term follow-up data beyond the eight-week intensive treatment period were not available at the time of this report; therefore, it was not possible to assess maintenance of improvements, potential relapse and final long-term prognosis.

Recommendations for ongoing management include: maintenance of environmental modifications, particularly availability and respect of the safe space; continuation of regular participation in artificial den activities to provide ongoing appropriate behavioral outlets and maintain family bond; continuous supervision of all child-dog interactions even after improvements to ensure safety and prevent regression; consistent application of learned training protocols and reinforcement strategies by all family members; gradual increase in duration and environmental variability of daily walks to provide additional physical exercise and environmental enrichment; completion of the recommended veterinary medical evaluation to rule out contributing medical factors; periodic behavioral reassessment to monitor maintenance of improvements and address any emerging concerns. With appropriate ongoing management, the prognosis for maintenance of improvements and further progress is considered favorable.

Conclusion

Drago's clinical case highlights the significant impact of early environmental deprivation on canine behavioral development and confirms the complexity of clinical presentations resulting from inadequate early experiences. This case demonstrates that multiple behavioral disorders resulting from early sensory and social deprivation can be successfully addressed through a comprehensive and individualized behavior modification program.

Key elements that contributed to favorable outcomes include: accurate behavioral diagnosis, environmental management strategies, systematic desensitization and counterconditioning protocols, comprehensive family education, active involvement of all family members, provision of ethologically appropriate activities, consistent application of learning theory principles.

The case underscores that with appropriate intervention addressing the multifactorial nature of behavioral disorders, even dogs with significant early deprivation and multiple severe problems can achieve substantial improvement, preserving the human-animal bond and improving welfare for all parties involved.

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Un Caso Di Disturbi Comportamentali Multipli In Un Bassotto Con Deprivazione Ambientale Precoce

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Sintesi

Le condizioni ambientali durante i periodi critici dello sviluppo ricoprono un ruolo fondamentale nello sviluppo comportamentale del cane. I soggetti che da cuccioli subiscono deprivazione sensoriale e contatto sociale limitato possono sviluppare disturbi comportamentali persistenti nell'età adulta.

Il presente lavoro descrive il caso di Drago, un bassotto standard maschio intero di due anni a pelo duro, cresciuto nei primi quattro mesi in box, che ha manifestato: aggressività difensiva da paura verso un membro della famiglia, comportamento simil-predatorio verso i bambini del nucleo familiare, intolleranza alla manipolazione con risposte difensive, abbaio di richiesta appreso.

L'approccio terapeutico multimodale ha compreso: gestione ambientale, educazione della famiglia sui segnali di comunicazione, desensibilizzazione sistematica e controcondizionamento alla manipolazione, attività di gioco strutturate con i bambini, addestramento in tana artificiale e rinforzo differenziale di comportamenti incompatibili, applicato nella gestione dell'abbaio di richiesta e delle reazioni eccitate verso i bambini. L'intervento ha promosso l'adozione di routine prevedibili, il rispetto delle soglie di tolleranza individuale e l'esposizione graduale e controllata agli stimoli ansigeni.

Dopo due mesi di lavoro a cadenza settimanale, si sono osservati miglioramenti significativi: si sono ridotte la frequenza e l'intensità delle risposte aggressive, il comportamento di inseguimento è diminuito significativamente, è migliorata la tolleranza alla manipolazione e si è ridotto l'abbaio di richiesta.

Questo caso evidenzia le conseguenze comportamentali della deprivazione ambientale precoce e l'efficacia di un approccio di modificazione comportamentale multimodale calibrato sull'eziologia specifica.