CONSULT THE EXPERT

PUPPY & KITTEN SOCIALIZATION

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During this time of accelerated learning and acceptance, animals develop social attachments and species identification abilities. Basic exposure to a variety of species, environments, and situations can help most young animals become familiar with a variety of animate and inanimate stimuli.

Socialization of puppies and kittens is critical to their health and welfare and to the safety of pet owners. According to a recent study, <50% of pet owners socialize their puppy.² Cats and dogs that have limited socialization can become intolerant of other animals, humans, and/or unfamiliar places or sounds; these animals may have a poor quality of life and difficulty receiving appropriate medical care due to their fears. A study on the relinquishment of dogs and cats to shelters found that 40% of dogs and 28% of cats were surrendered for behavior reasons, with aggression identified as the most common reason in dogs and the second most common reason in cats.3 Clinicians can help owners understand how to optimize their pet's socialization period for the best possible behavior outcome.

Socialization can also refer to helping behaviorally normal kittens and puppies learn to be at ease in their expected living environment through exposure to different humans, environments, surfaces, sights, and sounds and to novel objects. For fearful pets, desensitization (via gradual exposure) and counterconditioning paired with positive reinforcement should be used to prevent sensitization (ie, fears becoming more pronounced).

Socialization Stages

The socialization stage can be divided into primary and secondary stages.

Primary

The primary socialization stage occurs at ≈ 3 to 6 weeks of age and is key to intraspecies socialization. At this stage, puppies and kittens begin to

TABLE

STAGES OF DEVELOPMENT

Stage	Age (Dogs)	Age (Cats)
Prenatal	In utero	In utero
Neonatal or infantile	0-2 weeks	0-1 week
Transitional or intermediate	2-3 weeks	1-2 weeks
Socialization*	3-12 weeks	2-7 weeks
Juvenile	12 weeks to sexual maturity	7-16 weeks
Adolescent	Sexual maturity to social maturity	Sexual maturity to social maturity
Adult	Social maturity to 7-8+ years	Social maturity to 7-8+ years
Senior	8+ years	8+ years

^{*}An extended socialization period may occur in some dog breeds (≤16 weeks) and in some cats (≤9 weeks).

learn proper social behaviors through interaction with littermates, as well as reciprocal social play and bite and claw inhibition. Species identification also occurs, and animals have the potential to develop interspecies tolerance.

Secondary

The secondary socialization stage occurs at \approx 6 to 12 (\leq 16) weeks of age. At this stage, puppies and kittens can learn to bond with humans; this is also when integration into a new household is typically started.

Socialization occurs rapidly in kittens. In a study, kittens handled by humans for 5 minutes per day from birth to 45 days of age more readily approached strangers and novel toys as compared with kittens that were not handled⁴; kittens that were not handled until ≥7 weeks of age were less likely to respond to new stimuli. Kittens that receive only minimal socialization by 8 weeks of age are more likely to be aggressive and may accept only 1 or 2 humans in their social circle.⁵

Variability

Some breeds (eg, cocker spaniels, Cavalier King Charles spaniels) have a slightly longer socialization stage of ≤16 weeks; this can also occur in some kittens ≤9 weeks of age.^{6,7} This variability in the socialization stage may be considered a hallmark of domestication.⁸ Kittens and puppies ≥12 to 16 weeks of age are less engaged with and less likely to approach novel stimuli and are more likely to show a fear response. Cats and dogs that are properly socialized when young are typically more accepting of and resilient to new experiences and show more socially positive behavior.^{4,5,9-12} Dogs and cats that are not adequately socialized before moving out of the socialization stage rarely make good pets.³

Socialization Challenges

Fear Period

A fear period has been identified in puppies 8 to 10 weeks of age. A single traumatic event can have lifelong effects (ie, single-trial learning) and may

be difficult or even impossible to treat. Significant efforts should be made to help puppies avoid traumatic events (eg, shipping, rehoming, surgical interventions, painful clinic visits) during this time to prevent a lifelong fear-based response to stimuli. A similar fear period has not been identified in kittens, but it likely exists.

Continues ►

COMMON SOCIALIZATION MISCONCEPTIONS

- ► False: Puppies should not be taken in public until they have had all their vaccinations. Research has shown that puppies in a socialization class were no more likely to contract canine parvovirus than puppies kept at home.¹⁷
- ► False: Puppies should be taught to submit through dominance displays (eg, pinning, scruffing, alpha rolls). Rough handling of puppies typically triggers fear, avoidance, and, in worst-case scenarios, aggression (see **Suggested Reading**, page 27).
- ► False: Puppies will grow out of being fearful. Although puppies <12 weeks of age typically recover rapidly from negative interactions, research has demonstrated that abnormal behavior left untreated can worsen over time. Counterconditioning and desensitization are effective treatments. In some cases, psychoactive medication may be indicated.
- ► False: Kittens raise themselves. Kittens require daily attention and gentle, hands-on guidance to develop into well-socialized adult cats at ease with their environment, other animals, and humans.

Kittens that receive only minimal socialization by 8 weeks of age are more likely to be aggressive and may accept only 1 or 2 humans in their social circle.

Recognizing Problem Behaviors

Fearful puppies and kittens typically show a reluctance to explore their environment. They often hide and stay close to their owner or refuse to leave the carrier. Signs of distress in puppies include panting, pacing, vocalizing, lip licking, and freezing. Kittens may try to hide or freeze. Normal behavior

Puppies that go through socialization classes are more likely to be kept in the home as adult dogs.

POLL

When do you recommend new puppy owners begin puppy socialization classes?

- A. As soon as possible
- B. After the puppy's first vaccination visit
- C. After the puppy has completed its full vaccination series
- D. I do not recommend puppy socialization classes to new puppy owners.

Scan the QR code to submit your answer and see the other responses! The poll is located at the bottom of the article.



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includes an eagerness or willingness to investigate a new environment. It is abnormal for a kitten or puppy to startle and not recover; normal behavior includes recovery and re-engagement with their surroundings. Puppies and kittens should not show aggression. Any aggressive behavior should be addressed, as the animal will not grow out of the problem behavior (see *Common Socialization Misconceptions*, previous page).¹³

Recommendations for Pet Owners

Position statements and handouts on puppy and kitten socialization are available to help owners ensure their pet is receiving adequate socialization (see Suggested Reading). Puppies can be enrolled in socialization classes, and kittens can be enrolled in kitten kindergarten. Puppies that go through socialization classes are more likely to be kept in the home as adult dogs. 14 Well-designed classes provide positive exposure to new sights, sounds, and humans; a variety of surfaces; and social play. Classes can also provide pet owners with basic information on puppy or kitten ownership and address common behavior problems (eg, chewing, scratching, house training). The curriculum should include introductions to pet carriers and/or crates and information on how to safely transport pets in a vehicle.

Owners should also be encouraged to bring their pet to the clinic outside of the appointment time so the puppy or kitten can receive positive attention and treats, which can help create a positive lifetime association with the clinic. In addition, kittens and puppies should be exposed to a new human each day, with an effort made to introduce them to those in and out of uniform, with and without assistance devices, and of different sexes, races, and ages. Early, positive exposure to children is also needed because children look, sound, and move differently than adults.

Clinicians can also recommend supplements and/ or pheromones that may provide behavioral support.¹⁵ In a study, puppies that wore dog-appeasing pheromone collars were rated by their owners as

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better socialized and faster to adapt to change.¹⁶ In addition, if abnormal behavior is observed, referral to a veterinary behaviorist may be needed for early intervention, which is more likely to result in a meaningful, positive change in long-term behavior.

Conclusion

Although the socialization stage is important, owners should understand that meeting the social and behavior needs of their pet is an ongoing com-

mitment that requires working with their pet not only during its socialization stage but also during adolescence and beyond.

Active promotion of early, varied, and positive interactions is key to helping puppies and kittens learn to thrive. Clinicians should guide pet owners in this process; assisting owners in achieving developmental success for their pet can increase the prevalence of behaviorally normal pets.

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Suggested Reading

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