

# Family Matters: How Household Dynamics Shape Canine Emotional Development Under the Just Behaving Mentorship Model

## Introduction

Raising a well-adjusted puppy is not just about teaching commands – it's about the social and emotional environment the puppy grows up in. Research in animal behavior has shown that puppies' early environments profoundly shape their confidence and temperament. For example, one study found that puppies raised inside a home (with plenty of human interaction and household stimuli) grew up more self-confident and less fear-aggressive than puppies raised in an isolated kennel setting [companionanimalpsychology.com](http://companionanimalpsychology.com). This underscores that family dynamics, caregiver behavior, and home routines can influence a young dog's development just as parenting and home environment shape a human child. Just Behaving, a mentorship-based puppy raising philosophy, emphasizes structured calm environments and guidance over traditional obedience drills. This report explores how family emotional dynamics, parenting styles, and home environments affect puppies' emotional and behavioral development under the Just Behaving model. We draw on attachment theory, social learning, and applied ethology for theoretical background, outline the Just Behaving approach and its core tenets (structured mentorship, calm modeling, and emotional wellness), and propose a mixed-methods study to examine these factors in real-world family settings. The goal is to bridge theory and practice – providing evidence on how a family's behavior and home life correlate with a puppy's outcomes, and offering guidance for veterinarians, researchers, and trainers to support healthy puppy development in any household.

## Theoretical Background

**Attachment and Consistency:** In psychology, consistent and responsive caregiving forms a *secure attachment* in human infants, leading to better emotional regulation and confidence. Similarly, psychologists view the human–dog bond as a bidirectional attachment comparable to a parent–infant relationship [en.wikipedia.org](http://en.wikipedia.org). Dogs exhibit infant-like attachment behaviors – seeking proximity to their caregiver when stressed and using the caregiver as a *secure base* to explore new environments [en.wikipedia.org](http://en.wikipedia.org). A puppy that trusts its family to be a steady source of guidance and safety is less likely to develop separation anxiety and is more resilient under stress [justbehaving.com](http://justbehaving.com). In contrast, an inconsistent or unresponsive home environment can create insecurity. Attachment theory predicts (and anecdotal evidence supports) that puppies raised with consistent, calm leadership develop a secure bond, whereas chaotic or unpredictable caregiving may lead to anxious, clingy, or fearful behaviors

later on. Just as human children thrive when parents provide reliable support, puppies appear to thrive when their human “parents” offer stable routines and gentle guidance – essentially becoming an *anchor* in the puppy’s world.

**Behavioral Modeling and Social Learning:** Young animals learn many behaviors by observing others. Puppies are especially adept at social learning from both canine and human role models. In natural settings, dog mothers and adult dogs in a pack teach puppies important social skills through modeling and mild correction. For instance, older dogs will self-handicap during play (toning down their strength or mouthing gently) and give subtle corrections (like a warning growl or blocking with their body) to show a puppy the limits of rough play [e-trainingfordogs.com](http://e-trainingfordogs.com). Puppies raised around calm, socially adept adult dogs pick up appropriate behaviors by imitation – they learn polite greeting, bite inhibition, and how to settle, without formal training [justbehaving.com](http://justbehaving.com). Likewise, puppies also observe humans and take cues from our actions and tone. Social learning theory suggests that if family members model calm behavior and good manners, the puppy is likely to mirror those behaviors, whereas if the family is loud, reactive or permissive, the puppy may adopt unruly habits. This dynamic is analogous to children mimicking their caregivers’ behavior. Indeed, studies indicate dogs look to humans for guidance much like toddlers do – if an owner approaches new situations with calm confidence, the puppy is more likely to view the situation as safe [nationalgeographic.com](http://nationalgeographic.com). Thus, the family’s conduct serves as a live demonstration for the puppy of “how to behave,” for better or worse.

**Emotional Contagion and Regulation:** Emotions can spread between humans and dogs within a household. A growing body of evidence shows that dogs can “*catch*” their owners’ emotions via behavioral and even physiological contagion [nationalgeographic.com](http://nationalgeographic.com) [nationalgeographic.com](http://nationalgeographic.com). If the humans in a household are anxious, frustrated, or highly stressed, a sensitive puppy may absorb that anxiety – showing agitation, whining, or fearfulness with no obvious external trigger. Conversely, when owners remain calm and emotionally steady, they provide an example the puppy can attune to, helping the pup develop its own emotional regulation capacity. As Clive Wynne put it, “dogs are amazingly social beings, so they are easily infected with our warmth and joy... [and] their owner’s stress and anxiety can also become the dog’s stress and anxiety” [nationalgeographic.com](http://nationalgeographic.com). In practice, this means a family’s tone of voice, body language, and emotional reactions set the emotional climate for the dog. A household that consistently projects confident calmness teaches a puppy that there is no cause for alarm, allowing the pup’s nervous system to remain balanced even in novel situations. On the other hand, a volatile or tense home environment might chronically elevate a puppy’s stress. Ethological research supports the importance of early emotional environments: rat pups raised by highly nurturing mothers (who give lots of gentle contact) become adults that handle stress better and explore more, whereas

those with less attentive mothers are more fearful. Likewise, canine studies have found that moderate challenges combined with maternal guidance produce more resilient dogs – e.g. in one guide dog study, puppies whose mothers made them work a bit harder for milk (by standing to nurse, requiring the pups to adapt) were far likelier to succeed as confident service dogs, whereas puppies with overly indulgent, constantly accessible mothers often failed to qualify. These examples illustrate that a balance of consistent support and gentle challenge in early life builds emotional stability.

Translating this to a family raising a puppy: a consistent daily routine, a calm presence during challenges, and gentle corrections when needed can biologically foster a puppy's ability to cope with stress. In contrast, an “overstimulating or chaotic environment – one with excessive sensory input, lack of routine, or constant excitement – may overwhelm a puppy's developing nervous system”, potentially leading to poor self-control or anxiety. In sum, theory and comparative research suggest that human caregivers who provide a secure, structured, and calm home will nurture a puppy that is emotionally resilient, socially adept, and well-behaved.

### **Just Behaving's Mentorship Model: Philosophy and Approach**

Just Behaving (JB) is a puppy-raising philosophy grounded in the idea that puppies learn best through structured mentorship, calm modeling, and prevention rather than through corrective training alone [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). In practice, this means JB places the family (and any mentor dogs) in the role of gentle guides and role models, shaping the puppy's behavior through everyday interactions. This section provides an overview of the JB model's core tenets – including tone of voice and presence, emotional mirroring, and indirect correction – and how they influence a puppy's development.

*Mentor adult dogs engage with puppies in a calm, controlled manner. In multi-dog homes, older dogs naturally self-handicap during play and give gentle feedback (e.g. a subtle block or soft growl) to teach puppies boundaries. The Just Behaving approach mirrors this concept, using calm canine and human role models to mentor puppies in proper behavior.*

**Guided by Calm Mentors, Not Commands:** From birth, JB-raised puppies are surrounded by calm adult dogs who *model appropriate behavior* – for example, not jumping on people, settling quietly, and playing gently [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). These mentor dogs teach through example and mild corrections much as a mother or older sibling dog would. Rather than immediately exposing puppies to chaotic play or numerous strangers, JB emphasizes controlled socialization: pups interact with well-mannered adult dogs and calm humans, which minimizes hyperactivity and fear during critical early learning. Families adopting a JB puppy are coached to continue this mentorship approach at home – treating the puppy as an

apprentice learning the household norms from patient teachers. The tone of voice and presence of the humans are key: JB encourages owners to interact in a low-arousal, confident, and emotionally consistent manner [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). By maintaining a steady, calm tone (instead of shouting or constantly using excited baby-talk), the family projects an air of security. The puppy, in turn, mirrors this demeanor – relaxed voices and gentle motions from people cue the puppy to remain relaxed. JB’s documented philosophy notes that *dogs mirror human emotions and that consistent human calmness yields calmer dogs*, a principle often summarized as “calm creates calm” [justbehaving.com](http://justbehaving.com). In essence, everyone in the family is encouraged to be a role model of the behavior they wish to see in the pup.

**Structured Leadership and Tone:** While JB rejects harsh training, it still emphasizes *structured leadership* – the humans provide guidance and set boundaries in a firm but gentle way. The family is taught to be the steady anchor in the puppy’s world, giving the pup a sense of reliable structure. This involves having consistent rules (e.g. waiting before dashing out the door, no nipping people) and reinforcing them calmly across all family members. Importantly, JB’s approach to leadership stresses *emotional neutrality* and clear communication over intimidation. The tone of voice used in guidance is typically calm, warm, and instructive. Instead of yelling “No!” or communicating anger when a puppy errs, JB families use gentle interruption cues – for instance a calm “uh-uh” or an upbeat “oops!” – to signal a mistake. The tone is kept neutral or positive, merely alerting the puppy that a behavior is undesired, often followed by redirecting the pup to a better behavior. Because the family maintains composure, the puppy isn’t frightened or confused; it simply learns through consistent feedback what it should and shouldn’t do. This consistency in both rules and tone means the puppy receives one clear, steady message. JB literature describes *Structured Leadership* as a lifestyle where “the human provides guidance, consistency, and protection... The structure is not oppressive; it’s a scaffold that supports the dog’s growth into a confident, well-behaved individual”. The puppy can trust that its family will guide it predictably – much like a toddler trusts a parent’s hand – which reduces the pup’s need to test boundaries or worry about its role. Over time, a well-led puppy “follows the owner’s lead out of trust and habit, not fear or constant bribery”. This captures what Just Behaving *is and isn’t*: it isn’t about instilling obedience through fear or continuous treats, but about cultivating a relationship where the puppy behaves well because it understands and trusts what is expected.

**Emotional Mirroring and Presence:** A unique aspect of the JB model is its focus on the owner’s *presence* and emotional self-regulation as a training tool. Families are encouraged to be mindful of their own stress levels and reactions, operating on the principle that puppies are highly attuned to human emotions [justbehaving.com](http://justbehaving.com). If an owner remains calm and unruffled during a puppy’s moment of excitement or during a

stressful event (like a loud noise or a visit to the vet), the puppy will “read” that calm demeanor as a sign that everything is okay. JB refers to this as emotional mirroring – the puppy’s internal state often reflects the emotional tone set by the humans. Thus, a parent figure who can model *composure* under pressure teaches the puppy by example how to recover from stimulation. This is supported by scientific observations that dogs often use owners as emotional reference points (a process called social referencing) [nationalgeographic.com](http://nationalgeographic.com). Under the JB approach, if a puppy becomes overly excited (say, zooming around the house), family members intentionally remain low-key and speak softly, rather than matching the puppy’s energy with loud laughter or chases. By providing a calm presence, they *help the pup learn to down-regulate*. Over time, JB-raised puppies develop robust self-soothing abilities – they can default to a relaxed state even amid distractions because that steady emotional ground has been modeled for them repeatedly [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com).

**Indirect Correction and Gentle Boundaries:** Puppies will inevitably make mistakes (chewing shoes, jumping up, mouthing hands) as they learn. A cornerstone of Just Behaving is indirect correction, which means correcting misbehaviors in subtle, non-punitive ways that mimic how a well-socialized adult dog would discipline a youngster. Rather than yelling at or hitting a puppy for doing something wrong, JB families use techniques like distraction, body language, or loss of attention to gently discourage unwanted behaviors. For example, if a puppy is about to grab food off the coffee table, a JB mentor might simply utter a calm “uh-uh” and calmly interpose their body or hand to block the pup, rather than scolding. If a pup jumps up on someone, an indirect correction might be to step forward, causing the pup to back off, and then rewarding it for keeping four paws on the floor. These interventions are “*low drama*” – the goal is to guide the puppy back on track without instilling fear or breaking trust. JB writings give the analogy of nudging a child in the right direction rather than delivering a punishment. By applying *natural consequences* (e.g. turning away and ignoring a puppy that’s nipping too hard, which mimics how another puppy would end play when bitten), the family corrects behavior while the puppy hardly realizes it’s being “disciplined.” This gentle boundary-setting is highly consistent: the puppy learns that certain actions simply never earn rewards or attention, while good behaviors do. Over time, there is nothing to “undo” – because serious misbehaviors were never allowed to become habits in the first place [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). The indirect correction philosophy acknowledges that “dogs will be dogs” (pups will test limits), but it chooses a *balanced middle ground* between permissiveness and punishment. Families neither ignore problems nor overreact to them. Instead, much like an experienced adult dog gently placing a paw on a rambunctious pup, the JB caregiver uses mild, proportionate interventions – a brief timeout from play, a gentle “eh-eh” sound, or guiding the pup to sit – to set limits. This way, the puppy learns boundaries without fear, and maintains a trusting, positive attitude toward its humans. Notably, JB’s calm, indirect style of

correction also prevents inadvertently *rewarding* bad behavior with a lot of excited attention (even yelling can reinforce a behavior by making it a game or giving the pup attention). By staying emotionally neutral when intervening, the family makes it clear that misbehaving is boring and gets no payoff, whereas calm behavior brings praise and fun.

**Holistic Wellness and Environment:** Finally, the JB model stresses that a puppy's emotional wellness is tied to its physical wellness and overall environment consistency. Families are advised to maintain a predictable daily routine for feeding, play, and rest, which gives the puppy a sense of security. "Puppies thrive on predictability: a repeatable schedule gives them a sense of security and helps them learn good habits more quickly". Thus, a JB household tends to have regular mealtimes, bedtime rituals, and designated calm periods. This doesn't mean the puppy's life is rigid – rather, it provides a reliable framework within which the pup can confidently explore. JB also educates owners on preventive care (like proper nutrition, digestive health, and exercise) on the premise that a puppy free of physical discomfort or erratic routines will be more emotionally stable [justbehaving.com](http://justbehaving.com). For instance, a pup with a tummyache or one that's overtired from irregular sleep is more prone to crankiness and stress. By keeping the puppy healthy and well-exercised (but not overstimulated), and the home environment predictable, JB families set the stage for good behavior to flourish "as the norm" [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). In summary, the Just Behaving model integrates guided social learning, calm human leadership, emotional consistency, gentle corrections, and routine to raise a puppy who can "just behave" – meaning the dog grows up naturally well-mannered and emotionally balanced, not because it was heavily conditioned with commands, but because it was immersed in a *mentoring home environment* that made good behavior second nature [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com).

### **Methodology: Proposed Study Design**

To investigate how family dynamics and home environment under the Just Behaving model influence puppy development, we propose a mixed-methods longitudinal study following puppies from 8 weeks (when they join their new families) to 12 months of age. The study design combines naturalistic observation with surveys and qualitative journaling to capture a rich picture of the family–puppy interactions over time. We will recruit a cohort of puppy-owner pairs (for example, families who have adopted 8–10 week old puppies, ideally those raised with the JB approach or similar early mentorship). Data will be collected at regular intervals (e.g. bi-weekly or monthly) using multiple methods:

- **Observational (Ethological) Study of Interactions:** Researchers will observe each puppy in its home environment to code real-life family–dog interactions.

This can be done through periodic home visits or video recordings that capture day-to-day scenarios (such as playtime, feeding, visitors arriving, or the family correcting misbehavior). A structured ethogram (behavior checklist) will be used to code both family behaviors (tone of voice, body language, responsiveness, etc.) and puppy behaviors (stress signals, excitement level, obedience, etc.). For example, observers might record how a parent intervenes when the puppy jumps on a child – do they remain calm and use a gentle body block (indirect correction) or do they shout? How does the puppy respond in each case? Key interaction contexts to observe include: how the family handles puppy excitement vs. calm moments, how conflicts or misbehaviors are addressed, how consistently routines (like bedtime or crate time) are enforced, and how the puppy reacts to each family member. These observations will be coded using the framework described in the next section, ensuring quantitative scores (e.g. rating of emotional consistency on a scale, counts of certain behaviors) are derived from the qualitative footage. Multiple observation sessions over the months will allow us to see changes as the puppy matures (and as the family potentially adjusts their approach). This ethological method provides objective, behavioral data on the *actual interactions* that shape the puppy's learning in the home.

- **Structured Surveys and Behavioral Assessments:** To complement direct observation, we will collect survey data from the caregivers and perform structured behavioral tests with the puppies at key developmental milestones (e.g. at 4 months, 8 months, 12 months). The caregiver surveys will include questionnaires about parenting style and household environment – adapted from human parenting style inventories and animal behavior questionnaires. For instance, owners will rate statements about their approach (consistent vs. lenient, calm vs. easily frustrated, etc.), akin to a “canine parenting style” assessment. They will also report on the home routine (How regular are feeding times? How do family members coordinate on training? Are there children in the home and how do they interact with the puppy?). Additionally, standardized behavior assessments of the puppy will be conducted periodically. These could include the Puppy Behavior Assessment Scale or custom tests to gauge traits like confidence and self-control. Examples include: a *novel object test* (to see how the puppy reacts to a new item or noise – does it approach confidently, hesitate, or panic?), a *gentle handling test* (how relaxed the puppy is when touched/examined by a stranger, indicating trust and socialization), and an *obedience/focus test* (such as measuring how well the puppy can follow a simple cue in a distracting environment). Owners will also be asked to fill out behavior checklists about their dog (e.g. frequency of anxious behaviors like trembling or destructive chewing, ease of calming the dog down, etc.). These surveys and tests will provide quantitative outcome measures for each puppy's emotional and

behavioral development. By also querying the owners on their own behaviors (like how often they raise their voice, or how they react to misbehavior), we can profile each family's style in a standardized way.

- **Caregiver Journals (Qualitative Logs):** Each family will be asked to keep a weekly journal of notable events and reflections throughout the study. This can be a structured journal where we provide prompts such as: “Describe any challenges with the puppy this week and how you responded,” “Notable successes or improvements in the puppy’s behavior,” “Any stressful events in the household this week (visitors, loud incidents, family stress) and the puppy’s reaction.” These caregiver journals serve as a qualitative data source capturing context that might not be evident in scheduled observations or surveys. For example, a family might note that one week they had an upheaval (guests staying over, or a family member was ill) and the puppy regressed in potty training or showed anxiety – valuable insight into how deviations in routine or emotional climate affect the pup. The journals also allow owners to self-report their feelings and strategies, which we can analyze for consistency with the JB philosophy (e.g. did they try the calm modeling approach during a puppy tantrum, and what was the outcome?). Over the months, these written narratives will help identify patterns (such as the puppy becoming more independent as the family becomes more consistent, or vice versa). We will encourage honesty and detail in the journals by ensuring they are not judged punitively, but used for research – possibly even keeping them anonymous from trainers so owners feel free to describe mistakes. The qualitative data from these logs will be later coded for recurring themes (like *owner frustration*, *successful calming techniques*, *puppy fear episodes*, etc.) to enrich our understanding of each family’s journey.

This mixed-methods approach – blending direct behavioral observation, quantitative surveys/tests, and qualitative journaling – allows for triangulation of data. The observational data grounds us in actual behavior (reducing self-report bias), the surveys provide structured comparisons across families, and the journals give depth and personal perspective. Together, they will enable a comprehensive analysis of how each family’s dynamics correlate with their puppy’s developing behavior and emotional health.

### **Metrics: Variables and Measures**

To make sense of the wealth of data, we will identify key variables on both the family side (independent variables) and the puppy side (dependent outcomes). This section defines the behavioral coding framework for family interactions and the measured puppy behavior outcomes that will be used in analysis.

### **Family Interaction Variables (Coding Framework)**



Based on the Just Behaving philosophy and general parenting dimensions, we will evaluate each family on several interaction variables. Using observation coding and survey responses, we will assign quantitative indices or categorical ratings for each of the following dimensions:

- **Emotional Consistency & Tone of Voice:** *How consistent and stable is the family's emotional tenor in interactions with the puppy?* This variable assesses whether caregivers maintain a calm, reassuring tone or if their emotional responses are erratic (e.g. sometimes gentle, sometimes shouting). We will code the tone of voice used for commands or corrections (neutral/calm vs. tense or loud) and note if family members have synchronized approaches. A high score here might indicate the owners almost always speak in gentle, encouraging tones and remain composed even during puppy misbehavior, whereas a low score might mean the household has frequent yelling or emotionally charged reactions. This consistency is crucial because dogs are thought to thrive under an emotionally steady guide. For example, if a puppy has an accident on the rug, does the owner calmly say "uh-oh, let's go out" and stay even-keeled, or do they yell in frustration? Similarly, if the puppy is excitable, does the family keep their voices soft to avoid escalating the excitement? We predict that families scoring high in emotional consistency (mostly calm, level-headed interactions) provide a *secure atmosphere* that should correlate with better puppy self-regulation. This will be measured by counting instances of yelling vs. calm redirects in observation sessions and through owner questionnaires (e.g. "I remain calm when my puppy is overly energetic" on a Likert scale). Just Behaving's guidelines explicitly encourage a neutral or cheerful tone even when saying "no," aligning with this metric.
- **Responsiveness & Predictability:** *How responsive and predictable are the caregivers in attending to the puppy's needs and enforcing routines?* This variable captures two related concepts: caregiver responsiveness (the degree to which the family notices and appropriately responds to the puppy's signals, like whining or indicating a need to go out) and environmental predictability (the regularity of the puppy's daily routine and rules). A responsive caregiver quickly attends to a puppy's distress (for instance, soothing the puppy when it's scared or taking it out promptly when it sits by the door), much like an attentive parent with a baby. Predictability reflects whether the puppy can rely on certain patterns – e.g. morning walks happen at roughly the same time, discipline is applied consistently for the same misbehavior by everyone, and there aren't sudden, random changes in what is allowed. We will measure responsiveness by observing the latency and appropriateness of owner responses to puppy cues (does the owner ignore the pup's subtle signals until a problem escalates, or

intervene early and kindly?). Predictability will be assessed via both observation (consistency of commands/rules) and survey items about routine. A high score might be assigned to a home where the puppy is on a regular schedule, and family members are proactive in anticipating the puppy's needs (leading to fewer meltdowns), whereas a lower score might be a chaotic home where the puppy's requests are often missed or schedules vary wildly day to day. The importance of predictability is supported by the idea that puppies "thrive on predictability: a repeatable schedule gives them a sense of security and helps them learn good habits more quickly". Lack of routine, conversely, can be stressful. We expect that puppies in highly responsive/predictable homes will show less frustration and faster learning (because they rarely have to cry or resort to bad behavior to get needs met, and they know what to expect each day). This variable will be coded from journals as well (e.g. entries might reveal if owners stick to plans or often deviate).

- **Calm Reinforcement vs. Chaotic Play Cycles:** *Does the family reinforce calm behavior and manage play/excitement levels, or do interactions often tip into high-intensity chaos?* This dimension looks at the *quality of play and engagement* the puppy experiences. In a JB-aligned home, play sessions are fun but intentionally paused before the puppy becomes overly aroused, and calm behaviors (like lying quietly or playing gently) are praised, creating a cycle where calmness is rewarding. In other families, playtime might regularly escalate to wild zoomies or rough play without boundaries – possibly resulting in an overstimulated puppy that struggles to calm down. We will observe play interactions and note things like: does a parent initiate calm games (e.g. nosework, gentle fetch) or only riling games? Do they help the puppy settle after play, or inadvertently keep hyping the pup up (chasing it around, laughing and encouraging craziness)? How often do they give attention only when the puppy is hyper vs. when the puppy is relaxed? A quantitative measure could be the proportion of time the puppy is in a calm state during interactive sessions, or the number of *calm breaks* (enforced pauses) the family introduces during play. We will also code whether families practice calm reinforcement – e.g. petting and treating the puppy when it's lying down quietly, as JB advocates – versus *chaotic reinforcement* – e.g. only engaging when the puppy is jumping or barking, which can reinforce those behaviors. According to JB, providing plenty of play but in a controlled manner teaches a puppy to toggle between excitement and calm on cue [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). Families who allow frenzied play without structure may have puppies that stay in hyper-aroused states and have difficulty self-soothing. Thus, this metric is expected to correlate with the puppy's overall arousal modulation ability. Data from journals (reports of "the puppy was bouncing off the walls and we didn't know what to do") and surveys (e.g. "When

my puppy gets excited, I help them settle down” – agree/disagree) will supplement the observational coding.

- **Boundary-Setting and Correction Style:** *How does the family set limits and correct undesirable behavior?* This variable examines the discipline approach on a spectrum from very gentle/indirect to harsh or, on the other end, overly lax. Specifically, we will code whether the family employs indirect corrections (like distraction, body blocking, or calm verbal cues) as per JB recommendations, or if they tend toward direct punishment (yelling, physical punishment) or, conversely, do they often fail to correct at all (permissiveness). Each instance of the puppy misbehaving (jumping, nipping, stealing objects, etc.) in observation will be annotated with the type of correction used and the puppy’s reaction. A family that scores high on JB-aligned boundary-setting would, for example, consistently use a firm but gentle technique (such as saying “oops” and removing attention briefly when the pup nips, or gently placing the puppy back on the floor if it jumps on the couch uninvited) and rarely displays anger. Their corrections are timely, proportional, and emotionally neutral, matching JB’s ethos that guidance should “nudge” the puppy rather than scare it. A low score might indicate either end of poor boundary-setting: perhaps the family lets the puppy do anything with no guidance (leading to an unruly pup), or they only react when exasperated, possibly shouting or physically forcing the puppy (which could instill fear). We will also note consistency: if one parent is strict and another laughs off the puppy’s jumping, inconsistency can confuse the pup. Surveys will include items about discipline philosophy (e.g. rating statements like “We use time-outs or distractions rather than scolding” or “When our puppy misbehaves, we raise our voice”) to quantify this. We hypothesize that puppies whose families use *positive, indirect correction methods* and set clear boundaries will exhibit better understanding of rules and trust in their owners (since they aren’t afraid of them), whereas those in very punitive homes might show fear or avoidance (or, alternatively, those in permissive homes might show more misbehavior due to lack of guidance). This aspect directly tests JB’s claim that gentle, indirect discipline yields confident and cooperative dogs [justbehaving.com](http://justbehaving.com) (versus the possibility of either too harsh or too lenient approaches leading to problems).
- **Family Structure & Routine Stability:** *What are the structural elements of the household that might influence the puppy?* This includes the number and roles of caretakers (e.g. single owner vs. a family of five), the presence of young children, and the overall stability of the home routine (related to predictability above, but broader – e.g. any major changes or chaos in the household). We will document basic family demographics: are there multiple adults sharing responsibilities (and are they on the same page?), are there children (children can be less predictable

and may excite or stress puppies), and even other pets. We will also consider if the puppy has the presence of a mentor dog in the home (some families might have an older, calm dog which could aid the puppy's learning, essentially extending the JB mentorship effect to the home setting). Each of these factors can be coded categorically and used as variables in analysis. Routine stability overlaps with predictability but here we note major life events or household patterns – e.g. families that travel a lot or move house during the study vs. those with a steady home life. The expectation is that *fewer caretakers and high consistency* might make training easier (one or two very dedicated adults can create a unified approach), whereas a large family could either be a positive (lots of socialization) or negative (inconsistent rules) influence depending on coordination. The presence of children might introduce more *unstructured play* and noise, potentially testing the puppy's patience or increasing excitement cycles if not managed. However, it could also benefit the puppy if the children are taught to be calm and kind, as the pup learns to be gentle with them. We will capture these nuances in our analysis. Although family structure is not something that can be experimentally controlled, it's a key contextual variable: we might find, for instance, that puppies in households with very young kids show different developmental trajectories unless the parents implement extra calming strategies. Any major disruptions (like changes in work schedules, etc., noted from journals) will also be factored in as events that could temporarily affect the puppy's behavior. Overall, by quantifying these elements (e.g. "children present: yes=1, no=0"; "mentor older dog present: yes/no"; stability rating from 1=very unstable to 5=very stable routine based on life events), we can include them as covariates in analyzing outcomes.

All the above family interaction variables will be derived from the coding of observations, survey responses, and journals. We will create an operational definition for each and train observers to rate videos reliably (ensuring inter-rater reliability for coding behaviors like "caregiver calmness" or "puppy over-arousal level"). The framework blends concepts from human parenting style research (e.g. consistency, responsiveness) with the specific principles highlighted by Just Behaving (calm modeling, indirect correction). By quantifying these, we can statistically examine, for example, whether a higher "Calm consistency" score indeed correlates with a puppy's improved emotional regulation over time.

### **Puppy Behavior Outcome Measures**

To assess the puppies' development, we will track several emotional and behavioral outcome metrics from 8 weeks to 12 months. These are the dependent variables we hypothesize will be influenced by the family environment factors above. The key canine outcomes include:

- **Emotional Regulation Ability:** This refers to the puppy's capacity to manage arousal and recover from stress or excitement. Practically, we will measure things like how quickly the puppy calms down after being startled or after vigorous play, and how well it can tolerate frustration. Specific measures could include the duration of post-excitement recovery (for instance, if playing fetch, how many seconds or minutes until the puppy lies down calmly after the game ends), and responses to mild stress tests (e.g. a loud sound or brief separation). A well-regulated puppy might startle at a sudden noise but then within seconds shake it off and return to normal behavior, whereas a poorly regulated one might stay anxious or overly excited for a long period. We will also record frequency of *extreme arousal episodes* (zoomies, inability to settle at night, etc.) as noted in journals or observations. Another indicator is how the puppy behaves when asked to "settle" or during an enforced quiet period – can it self-soothe with a chew toy or does it continue to be restless? Emotional regulation is a central goal of JB's approach: puppies raised with consistent calm mentorship are expected to develop "robust self-regulation skills" and be able to default to a relaxed state even in stimulating situations [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). We will quantify this by creating a composite score from various scenarios (e.g. average time to calm in different tests, observer ratings of the pup's overall calmness vs. reactivity). We anticipate that puppies from calmer, more structured homes will score higher in emotional regulation (quick stress recovery, fewer extreme highs and lows). For example, in a controlled challenge like a brief separation test, a well-regulated puppy might whine briefly then compose itself (maybe playing with a toy), whereas a dysregulated one might panic or take a long time to settle even after the owner returns.
- **Confidence and Social Boldness:** This outcome relates to the puppy's confidence in novel situations, with unfamiliar people, and during handling or new environments. We will evaluate confidence through standardized tests (such as novel object tests and interaction with strangers) and ongoing observations (how the puppy reacts on walks, in puppy classes, etc.). Signs of confidence include approaching new objects or people without excessive fear, recovering quickly from surprises, and showing curiosity. We'll use measures like: willingness to explore a new room or climb an unfamiliar obstacle, body posture (tail and ear position, relaxed vs. crouched stance) in novel environments, and scores on subscales of behavior tests (many puppy aptitude tests have items for confidence vs. shyness). We'll also measure how the puppy tolerates handling (important for vet exams and general family life): e.g. allowing paws to be touched, being lifted or hugged by a familiar person – a confident pup will allow this with minimal distress. We predict that puppies in families that provide lots of gentle exposure and a secure base (per attachment theory) will show greater

confidence. If an owner consistently modeled that new things are okay and the puppy could trust the owner's calm signals, the puppy should be less fearful and more bold in exploring [nationalgeographic.com](http://nationalgeographic.com). On the other hand, if a family inadvertently reinforced fear (or if they were very erratic, leaving the pup insecure), the puppy may be more hesitant or anxious with new stimuli. One specific metric: we might measure recovery from a startle (like an umbrella opening) – does the pup approach to investigate within, say, 30 seconds (indicative of confidence) or does it hide or freeze for an extended period (indicative of low confidence)? Another could be a *novelty seeking score* – how eagerly the pup engages with a new toy or puzzle. According to JB philosophy, a pup that has been raised with secure attachment and mild challenges should be “more resilient” and willing to explore [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). We will also incorporate owner reports of the dog's behavior in new situations (e.g. “My dog adapts quickly to new environments” rated in surveys). A high confidence outcome is exemplified by a puppy that walks into a friend's house calmly, tail wagging, versus a low confidence outcome where the puppy cowers or refuses to move in such scenarios.

- **Anxiety/Fear Indicators:** While confidence is the positive aspect, we will separately track signs of anxiety or fear as an outcome. These include behaviors such as avoidance (hiding behind the owner, refusing to go forward), appeasement gestures (excessive lip-licking, yawning, tail tucking when uncertain), and physiological stress signals (panting when not hot, trembling). We are particularly interested in any development of *separation anxiety* (does the puppy show extreme distress when left alone even briefly) or generalized fearfulness. Measures will involve both owner reports (e.g. scoring their dog's fear of common situations, any known phobias or separation-related behaviors) and direct tests (like a short alone test to see if the puppy settles or howls incessantly). We'll quantify things like: how often does the puppy exhibit fear signals during the observation periods (for instance, each time a stranger approaches, does it urinate or cower?), and a rating for overall *anxiety level*. Ideally, puppies raised with a secure, calm mentorship will have minimal anxiety – JB posits that such puppies are less prone to separation anxiety and handle stress better [justbehaving.com](http://justbehaving.com). If our data finds that certain puppies have high anxiety scores, we can examine if their families scored low on consistency or had other risk factors. For example, a puppy in a chaotic home might develop more fear-based behaviors. Conversely, if a family followed JB guidance closely, we'd expect to see a pup that might startle but *does not show prolonged fear* and recovers quickly. Key outcomes here could be: incidence of separation-related problems by 1 year (yes/no), fearfulness score on a standardized behavioral inventory, and frequency of calming signals observed (a well-adjusted pup might

rarely need to appease if not threatened, whereas an anxious pup might constantly show appeasement gestures). Lower anxiety is of course the desired outcome; our study could provide evidence whether the mentorship model indeed correlates with puppies that are “less prone to anxiety-related behaviors” [justbehaving.com](http://justbehaving.com).

- **Attention and Focus (Trainability):** Another measurable outcome is the puppy’s attentiveness to humans and ability to focus on tasks or commands. This encompasses the dog’s *engagement level* with the family: does the puppy check in and listen to guidance even with distractions, or is it unfocused and unruly? We will measure attention/focus through simple training exercises and observation: e.g., during a 2-minute training session, how many times does the puppy disengage or get distracted? How quickly does it respond when its name is called while playing? We might conduct a formal “sit-stay” test or a short obedience sequence appropriate for its age and record success and latency. Also, observer ratings of how “in tune” the puppy is with the handler are useful (some puppies will make eye contact and follow a pointed finger readily, indicating attentiveness and bond, whereas others seem oblivious or overly distracted). We expect that puppies from families with consistent leadership and bonding will have better focus and a stronger desire to follow guidance – since JB’s approach builds *intrinsic understanding and habit* of paying attention to the human partner. Additionally, lack of fear facilitates learning: a dog that isn’t anxious can concentrate better. We will get owners’ perspectives too: survey questions on how easy or hard the puppy is to train, and whether the puppy can settle and pay attention during training. One specific measure could be a distraction test: the owner asks the puppy to “sit” while someone squeaks a toy across the room – does the puppy remain attentive or completely lose focus? We can also look at *duration of sustained attention*, e.g. how long the puppy will engage in a game of learning without wandering off. According to JB, puppies raised with calm communication and trust might “focus on their handler more readily and need less constant micromanagement” because they are not overstimulated or confused [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com). We will see if those in our study who have the benefit of structured, low-stress upbringing indeed show greater attentiveness. This outcome is important practically because a focused dog is easier to train and more enjoyable to live with (it listens to cues, comes when called, etc.).

In addition to these primary outcomes, we will record any occurrence of behavioral problems by 12 months (such as aggression, extreme hyperactivity, compulsive behaviors) as secondary outcomes, to see if there is any correlation with family factors. However, given the sample and the emphasis on well-socialized puppies, we expect

serious problems to be rare. More likely, we will see differences in degree of the above measures rather than binary “problem vs no problem.” For each outcome, we will have data points across time (since we’ll assess at multiple ages), which lets us observe development trajectories (for instance, does the puppy’s confidence consistently improve, or does it dip during fear periods and recover? Does attention span lengthen over time, and is the growth faster in some environments?).

By the end of the study (12 months age, roughly adolescence for dogs), we will have a profile for each dog on emotional regulation, confidence, anxiety levels, and attentiveness, which can be compared to the profile of its family on the variables in the prior section. This sets the stage for analysis of correlations and potentially causal inferences about how the family’s behavior affected the pup.

### **Data Analysis Plan**

Given the mixed-methods design, our analysis will integrate quantitative statistical analysis with qualitative thematic analysis. The plan is as follows:

**Quantitative Analysis:** We will first quantify each family’s interaction style and each puppy’s outcome measures as described. Using statistical software, we’ll create a dataset where each puppy is an entry with numerical scores for family variables (consistency score, responsiveness score, etc.) and outcome metrics (regulation score, confidence rating, etc.). We will perform correlational analyses to see direct relationships – e.g. does a higher *emotional consistency* score correlate with a shorter stress recovery time in the pup? Does *predictable routine* correlate with fewer anxiety behaviors? We expect to see positive correlations between “good” family scores (calm, consistent, responsive) and “good” puppy outcomes (confidence, regulation, focus), and negative correlations with anxiety/fear outcomes. For a more robust analysis, we can use multiple regression or generalized linear models to account for several factors at once. For instance, we might regress the puppy’s confidence score on a combination of variables like consistency, responsiveness, and presence of children to see which predictors have the strongest effect when controlling for others. If our sample size is sufficient, we could also compare subgroups: e.g. perform an ANOVA or t-test comparing puppies from high-consistency families vs. low-consistency families on their mean anxiety scores, to test for significant differences. Another powerful approach is a *mixed-effects model* (particularly since we have repeated measures over time for each puppy): we can include random effects for each dog and test how time trends differ by family environment. For example, do puppies in calm families show a faster decrease in fearfulness from 8 weeks to 12 months compared to those in less calm families? Such longitudinal analysis could reveal not just correlations but how early environment influences developmental *trajectory*. We will also examine interactions – an interesting one might be “presence of a mentor dog” x “human consistency” to see if having an



adult dog mitigates some effects of human inconsistency, for instance. Although the study is not randomized, by measuring many variables we can use regression to control for some confounds (like initial temperament of the puppy at 8 weeks, which we could include based on breeder assessment). Quantitative analysis will produce statistical evidence (p-values, effect sizes) for links between family dynamics and puppy outcomes. For example, we might find that the *emotional consistency score* explains, say, 40% of the variance in the puppies' regulation scores – a strong indication that calmer households yield puppies with better self-control. We will visualize these results with scatter plots (family score vs. puppy outcome) and possibly group bar charts (comparing mean outcomes across high vs low quartile of a family variable) to illustrate the relationships.

**Qualitative Analysis:** Alongside the numbers, we will deeply analyze the caregiver journals and open-ended survey responses. Using a qualitative data analysis software or manual coding, researchers will code journal entries for recurring themes and noteworthy incidents. We anticipate themes might include “*successful calm modeling*”, “*challenging incidents with inconsistency*”, “*puppy’s reaction to family stress*”, “*progress milestones*”, etc. We will look for patterns: for example, families that we quantitatively rated as inconsistent might have journal entries describing confusion or setbacks (“We weren’t on the same page and Rocky got mixed signals”). Conversely, journals from highly consistent families might emphasize how quickly the puppy learned routines or how the puppy remained calm even during a normally stressful event (because the family handled it smoothly). By identifying such patterns, we can illustrate the quantitative findings with qualitative evidence. We might perform a thematic analysis where we group journal excerpts into categories that correspond to our variables – e.g. gathering all excerpts related to how corrections were done, or all instances of the puppy showing fear and what the context was. This can reveal whether, say, all the noted fear incidents occurred on weeks when the household had chaos (supporting the idea that chaos triggers puppy anxiety), or whether calm intervention narratives coincide with positive behavior changes. We will also code any *evolving changes* in owner attitude: some families might adopt more of the JB practices over time (documenting “at first we yelled, but then we tried the calm approach and it worked better”), which can provide quasi-experimental insight within that case. These qualitative insights will be used to complement the stats: we might quote an owner’s journal to explain *why* a particular family got a high consistency score and how that appeared to help the puppy (or vice versa). Essentially, the journals add context and help verify causality clues – if multiple families write “when we stuck to the routine this week, Fido was much better behaved,” that triangulates with our hypothesis about routine stability.

**Integration – Mixed Methods:** Finally, we will integrate findings by comparing the quantitative and qualitative results. This could be done in a mixed-methods matrix or

narrative form. We may categorize families (e.g. “Calm/Structured”, “Chaotic/Reactive”, etc.) based on quantitative scores and then see if the qualitative data for each category tells a consistent story. If the data align, we’ll have increased confidence in conclusions. If there are outliers (e.g. a family that scored as chaotic but the puppy still did well, or vice versa), we will explore those cases qualitatively to understand why – perhaps there was an unmeasured factor like the puppy’s innate resilience or a particularly calming older dog in the home. Those insights can be discussed as well.

On the technical side, data analysis will likely involve using software like SPSS or R for stats, and NVivo or similar for qualitative coding. We will ensure to use appropriate statistical tests (with significance level set, say, at 0.05) and consider effect sizes since the practical significance is important in behavior.

The end goal of analysis is to determine which family environmental factors are most strongly associated with positive puppy development outcomes. For instance, we might conclude that *owner emotional consistency has a very high correlation with puppy stress recovery ( $r > 0.6, p < 0.01$ )*, whereas *the presence of children did not show a significant effect when controlling for consistency*, suggesting it’s not kids per se, but how the family manages them, that matters. We will also look at the combination of factors: a multiple regression could yield an equation like *predicted puppy confidence = 0.5(consistency score) + 0.3\*(responsiveness) – 0.2\*(harshness of correction)\**, etc., illustrating the relative importance. These findings will then be interpreted in light of our theoretical background – do they support attachment theory analogies? Do they validate the JB model’s claims?

We will also consider any evidence of *causation* (though strictly speaking this is observational, not experimental, we can infer plausible causal links if timeline shows, for example, improvements in a puppy following changes in family behavior noted in journals). Additionally, we might use the staggered introduction of JB techniques (if some families adopt new strategies mid-way) as a natural experiment. The mixed analysis allows us to tell a more complete story: not just “what” correlations exist, but “how” and “why” these family behaviors influence the puppies, illustrated with real examples from the data.

## **Discussion**

The anticipated findings of this study will deepen our understanding of the powerful role family dynamics play in a puppy’s behavioral development. Based on the theoretical background and the Just Behaving philosophy, we expect a clear pattern to emerge: puppies raised in calm, consistent, and responsive home environments tend to develop better emotional regulation, greater confidence, and fewer behavior issues. In contrast, puppies exposed to inconsistent or highly chaotic family interactions may show more anxiety, impulsivity, or difficulty in self-control. These results would empirically support

the idea that “it takes a village” – or in this case, a stable family – to raise a well-adjusted dog.

One likely outcome is evidence aligning with attachment theory within human-canine relationships. For instance, we might find that puppies whose owners scored high on responsiveness and emotional consistency exhibit signs of a secure attachment: they are more comfortable exploring new situations with their owner present (demonstrating the “safe haven” effect [en.wikipedia.org](https://en.wikipedia.org)), and they handle brief separations with minimal distress. On the other hand, puppies from less responsive homes might display more pronounced separation anxiety (whining, destructive behavior when alone), mirroring what we see in human children with insecure attachments. Such findings would emphasize that a puppy’s trust in its caregivers – built through reliable, positive interactions – is foundational to its confidence and composure.

Another key point of discussion will be the role of modeling and imitation. If our analysis shows that families practicing the JB-style calm mentorship have puppies with noticeably better manners and focus, it validates the concept that dogs truly learn by watching us and other dogs. We may be able to document specific examples: e.g. a family that always greeted visitors calmly had a puppy that learned to sit and wag tail when the door opened, whereas a family that erupted into loud frenzy during greetings ended up with a puppy that jumps and barks at guests. By relating such examples, we illustrate social learning in action. This supports JB’s claim that guided social learning in a low-arousal setting produces a dog who “just behaves” appropriately out of habit [justbehaving.com](https://justbehaving.com), rather than one who only behaves when commanded. Essentially, the discussion would highlight that *owners teach even when they don’t realize they are teaching* – every interaction is training the puppy what to expect and how to act. This underscores the responsibility on families to be mindful role models.

The findings on indirect correction vs. other discipline styles will also be illuminating. We anticipate that puppies who experience primarily gentle, non-frightening corrections will not only trust their owners more, but also show *better behavior long-term* – perhaps needing fewer corrections as they mature. We might discuss a scenario from the data: for instance, puppies A and B both liked to chew shoes initially; Family A used indirect methods (blocking and redirecting to a toy calmly) from the start, while Family B yelled “No!” and slapped the puppy’s rump. By 12 months, puppy A might have learned not to chew shoes and still happily brings toys to its owner, whereas puppy B might continue to steal shoes when owners aren’t looking (having only learned to avoid chewing in front of them) or could show submissive urination when scolded due to fear. If the data show such differences, it provides a persuasive argument that *how* we correct matters greatly for the dog’s relationship and behavior. It would validate JB’s balanced approach as not just humane but effective – the dog corrected indirectly doesn’t become fearful or

confused, and thus can learn the lesson without collateral damage to its confidence. This part of the discussion can tie into broader debates in dog training: our results could offer evidence against aversive training techniques by demonstrating that puppies in punishment-heavy homes had either more behavior issues or more anxiety (consistent with wider research that aversive training can increase stress and aggression). At the same time, completely laissez-faire environments might also show problems (the puppy that was never given boundaries might develop unruly habits), highlighting that some form of guidance is needed – ideally the gentle guidance that JB promotes.

One interesting aspect we expect to discuss is the effect of family structure and children. Our results may show, for example, that having young kids in the home is not necessarily detrimental if the overall environment is calm and structured – in fact it can be beneficial by providing extra socialization – but only if the parents maintain oversight and consistency. If a family with children managed to involve the kids in the mentorship process (perhaps teaching the kids to also model calm behavior and not tease the puppy), their puppy might flourish in being very gentle and social. Conversely, another family with kids who allowed a lot of rough play without rules might have a puppy that became too rough or excitable. The data could therefore inform guidelines specifically for households with children: e.g. emphasizing the need for adult “team leaders” (as some dog programs suggest, an adult in the family should take charge to help the dog feel secure [dogsforgood.org](https://dogsforgood.org) [smalldoorvet.com](https://smalldoorvet.com)). We will discuss any such patterns and possibly recommend strategies (like including children in training classes so they learn how to act around the puppy). Additionally, if the presence of an older mentor dog in some homes significantly helped the puppy (which we suspect it might, given evidence that puppies learn manners from older dogs [e-trainingfordogs.com](https://e-trainingfordogs.com)), we could discuss the idea of peer mentorship – maybe suggesting that families without another dog seek out “puppy mentors” via playdates with stable adult dogs, as a practical implication.

Another important discussion point is the concept of prevention vs. remediation. If our findings back the JB philosophy, they will show that many common behavior problems (excessive biting, jumping, fearfulness) can be largely *prevented* by the right environment from the start. Puppies who never get inadvertently rewarded for jumping (because the family always gently prevented it and reinforced sitting) will not develop a jumping habit, eliminating the need for later training fixes. We could contrast this with puppies in the study who did not have such mentorship – perhaps they developed more bad habits that then required formal training to correct. This highlights the broad applicability of our study: any family bringing home a new puppy can benefit from these insights, not just those in the JB program. We can assert that investing effort in the family’s behavior and environment early on pays dividends in a well-behaved adult dog. It aligns with the idea that “rather than waiting for bad habits to form and then trying to correct them, Just Behaving proactively prevents unwanted behaviors from ever taking

root” [justbehaving.com](https://www.justbehaving.com). Our evidence might show lower incidence of behavior “problems” in those proactive homes, lending scientific backing to prevention-focused puppy raising.

It will also be important to acknowledge the role of the puppy’s individual temperament. Not every outcome can be attributed solely to nurture; genetics and early life before 8 weeks play a role too. We expect some puppies may be naturally more timid or bold. However, by tracking puppies from the same start point (8 weeks) and seeing how different their trajectories become under different families, we can discuss how much environment seems to modify or moderate innate traits. For instance, a slightly shy puppy might become quite confident in a supportive home, whereas the same caliber of shyness might evolve into pronounced fear in a less supportive home – emphasizing that while we can’t change genetics, the family can buffer or exacerbate those tendencies. This nuance will be discussed to avoid over-generalizing or “blaming” owners for every quirk (some issues might arise despite great efforts, and some puppies might do okay despite suboptimal environments due to resilience).

**Limitations:** We will discuss limitations such as the sample size and generalizability. Our study might mainly involve families who subscribe to JB or similar philosophies (since they volunteered), so they might not be representative of all dog owners. Additionally, observational studies can’t prove causation definitively – there may be third variables (for example, more experienced dog owners might both create a calmer home *and* have inherently easier puppies, skewing results). We will mention how we attempted to control for some factors (like initial puppy temperament) but acknowledge that a true experimental design (which isn’t ethical or feasible here) is not possible. Nevertheless, the consistency of results across multiple families and methods can strengthen causal inference. We’ll also note that our coding of behavior has some subjectivity, though we trained coders to be reliable; subtle biases could creep in if observers knew which families were “supposed” to be JB-adherent (blinding observers to the family’s philosophy might be a measure we take).

**Comparison to Other Studies:** We will compare our findings to existing literature. For example, if we found that home-raised pups do better than kennel-raised (which one could infer from our data if any pups came from different early rearing backgrounds), we can cite studies like the one by Zazie Todd (2019) that also found home-raised puppies were more confident and less fearful [companionanimalpsychology.com](https://www.companionanimalpsychology.com). We’ll integrate how our results extend those findings by focusing on the post-adoption environment. We can also relate our findings to human psychology research – perhaps drawing an analogy that just as authoritative parenting (high warmth, high consistency) produces well-adjusted children, a similar style in dog rearing seems to produce well-adjusted dogs. This cross-disciplinary connection adds depth to the discussion.

Ultimately, the discussion will likely conclude that the data strongly support the main premise: how you raise your puppy – in terms of family behavior and environment – truly shapes the kind of dog you end up with. A supportive, structured family is like fertile soil for a puppy’s mental development, whereas an inconsistent or tumultuous home can sow the seeds of behavior problems. This reinforces that dog training is as much about training the people (the family’s habits and emotional skills) as it is about training the dog. Our study provides empirical evidence for the mantra that “good dogs are made at home, not just in training class.” This conclusion leads naturally into the practical applications of the findings.

### **Collaborative Applications**

The insights from this research have wide-ranging applications for veterinary behaviorists, researchers, dog trainers, and families alike. By understanding specifically how family dynamics impact puppy development, professionals can better guide pet owners in raising well-balanced dogs. Below we outline how different stakeholders can apply these findings, in line with Just Behaving’s family-centered, mentorship approach:

- **For Veterinary Behaviorists and DACVB Residents:** Veterinary behavior specialists in training (DACVB residents) can integrate these findings into both preventive advice and behavior modification plans for clients. The research provides concrete evidence that early environment and caregiver behavior are crucial, which residents can use to educate new puppy owners seen in practice. For example, a behaviorist could develop an “attachment-based puppy consultation” where they assess a family’s interaction style (perhaps using a questionnaire derived from our coding framework) and coach the family on improving consistency or calmness. If a resident encounters a young dog with emerging separation anxiety or fear issues, rather than only focusing on dog-centric training, they might work with the family on altering their own interactions (increasing the owner’s emotional availability and routine consistency to mirror a secure-base parenting style). The collaborative research with Just Behaving also exposes residents to an alternative training paradigm emphasizing development and prevention [justbehaving.com](https://justbehaving.com) [justbehaving.com](https://justbehaving.com). They can apply these concepts by encouraging clients to implement *mentorship techniques* – e.g. finding a calm older dog for playdates or practicing low-arousal greetings. Moreover, the data on indirect correction vs. aversive methods can guide behaviorists in persuading clients to switch to gentler techniques. For instance, if a resident can show a skeptical dog owner quantifiable results (like “families that used our gentle intervention plan saw 50% fewer aggression incidents in their pup”), it lends weight to recommendations. In the long term, DACVB residents can carry these insights into their careers, potentially reducing the incidence of behavior cases by promoting healthier puppy-raising practices from the start. Our

study also offers them publishable case studies and the ability to “ask research questions that are difficult to address in standard clinical settings” [justbehaving.com](http://justbehaving.com), bridging academia and practice. By co-authoring papers or presenting these findings at conferences, veterinary behaviorists help disseminate knowledge that caring for the *human–animal relationship* is as important as training the animal alone.

- **For Canine Behavior Researchers:** The collaborative framework of this study provides a model for further scientific exploration of in-home puppy development. Researchers can build on our mixed-methods design to investigate specific questions – for example, a follow-up study might experimentally test an owner training intervention where one group of puppy owners is coached in calm mentorship techniques and another group receives standard advice, then measure differences in puppy outcomes. Our findings can refine hypotheses for future research, such as examining the physiological correlates (cortisol levels, heart rate variability in puppies) in calm vs. chaotic households to add a biomedical perspective. Additionally, the rich dataset from our study could be mined for publications on topics like *attachment in dogs* or *socialization practices*. Researchers in animal behavior and welfare can use our results to advocate for better breeder and shelter policies – e.g., emphasizing that adoption programs should include family education on these principles to ensure successful integration of puppies into homes. The partnership with Just Behaving also shows a successful model of citizen science and field research: academics can collaborate with breeding programs or training organizations to get real-world data, rather than limiting studies to lab settings. By doing so, they ensure findings have immediate practical relevance. Our results contribute empirical validation to an “*evolving philosophy*” of dog rearing [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com), helping to move anecdotal wisdom into evidence-based practice. This can inspire further peer-reviewed research and cross-pollination between human developmental psychology and canine science. Ultimately, researchers can use these insights to push for a paradigm shift in puppy training literature – incorporating family systems and emotional factors into what has traditionally been a focus on reinforcement schedules and socialization checklists.
- **For Family-Focused Dog Trainers and Puppy Coaches:** Trainers who work directly with pet owners can immediately apply the lessons learned to improve their training programs. Instead of only teaching sit, stay, come, a family-focused trainer can incorporate modules on “human behavior coaching.” For example, puppy kindergarten classes could include a segment on managing one’s tone and body language, effectively training the owners to be better mentors. Our findings give trainers a framework to assess clients: they might use a simplified

checklist from our coding scheme during in-home consultations to identify if inconsistency or anxiety in the owners might be contributing to the puppy's issues. Trainers can then provide targeted guidance – perhaps teaching relaxation techniques to an anxious owner (since calming the owner may calm the dog [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com)), or helping a disorganized family implement a schedule for the puppy. The evidence that puppies mirror human emotions and thrive on predictability can be a powerful motivational tool: trainers can show clients tangible proof (from our study data or case examples) that “if you adjust *your* behavior, your puppy will improve.” Family-oriented trainers could also design interactive exercises where the whole family practices scenarios in a calm manner – for instance, rehearsing how to respond when the puppy is jumping or how to do a low-key greeting when coming home, so that everyone is consistent. The study's outcome measures (like focusing ability, fearfulness) can serve as benchmarks for trainers to monitor progress beyond basic obedience – they can celebrate with a client that, thanks to their combined efforts, the puppy can now handle loud noises without panic, or can relax on a mat for 30 minutes while the family eats dinner. Additionally, these findings are broadly applicable to *any family with a dog*, not just puppies. Trainers working with adolescent or adult dogs with issues might retroactively apply some of these family strategies (for instance, improving consistency and routine in the home to help an anxious rescue dog). In essence, trainers become not only dog teachers but family coaches, which can improve outcomes. By sharing this knowledge in blogs, workshops, or social media, trainers help spread the philosophy that a well-behaved family dog is a product of a thoughtful, loving home environment as much as good training technique.

- **For Multi-stakeholder Collaboration:** Perhaps one of the most exciting applications is fostering collaboration between practitioners (trainers, vets) and researchers to continue evolving our understanding of family–puppy dynamics. Just Behaving's initiative to invite DACVB residents and researchers to collaborate [justbehaving.com](http://justbehaving.com) [justbehaving.com](http://justbehaving.com) can be expanded. The findings from this study could lead to the creation of best-practice guidelines or even certification programs for “Puppy Family Coaching” – developed jointly by behaviorists and training organizations. Through conferences and publications, these insights will encourage a more holistic approach to dog training across the industry. We foresee integration into veterinary pediatric visits for puppies (some progressive veterinary practices already offer puppy socialization and training info; they could add a brief assessment of owner interaction style using our findings). Shelters and rescue organizations could also use this knowledge: when adopting out puppies, they might provide a mini-workshop to new families on creating a calm, structured home (as our research shows its importance).



In summary, the applications of this research promote a shift in focus: from solely training the dog to mentoring the entire family unit. By demonstrating how household emotional climate and routines shape a dog's behavior, we empower all stakeholders to implement changes that lead to more harmonious human-canine relationships. The Just Behaving philosophy, once supported by data, becomes not just an alternative approach for a specific breeder, but a widely adoptable model for family dog ownership in general. The broad applicability cannot be overstated – whether a family has a Golden Retriever from a specialized program or a mixed-breed rescue pup, the principles of consistent calm parenting, modeling desired behavior, and providing structure apply universally. Our hope is that these findings will be disseminated in user-friendly ways (guidebooks, infographics, vet handouts) so that every new puppy owner can benefit from the mentorship model insights, ultimately leading to fewer behavior problems and surrendered dogs, and more well-adjusted family dogs living happy, integrated lives.