# Development (Puppies)

## Stages

## Issues

Stages

## Prenatal/Neonatal (inception-12 days)

## At birth, umbilical cord is chewed through, placenta is removed & eaten, & puppy is thoroughly licked clean.

## Besides cleaning, mother’s licking stimulates reflexive muscular movements & breathing.

## Karma (Belgian sheepdog) gives birth:

## At birth puppy is unable to control body temperature & is deaf & blind.

## The organizing effects of hormones are important here.

## A number of reflexes are apparent here, Exs.:

### Negative Geotactic - on tilt, will try to get head up.

### Rooting - track & oppose pressure to snout area.

## Thus, a number of reflexes ensure adequate warmth, nutrition, elimination, & general survival.

## Most time is spent sleeping & nursing.

## Urination & defecation must be stimulated by mom’s licking of the anogenital region during this time.

## Early neonatal handling involving as little as 3 min/day & exposure to various mild environmental stressors (like changes of temperature & physical gentling), may have positive impacts on pup’s resistance to disease, emotional reactivity, & learning ability in adulthood.

## Some amount of handling stress should be part of a breeder’s normal rearing practice to compensate for the absence of naturally occurring stressful changes in the whelping area.

## Transition (12-21 days)

## Steady improvement in motor ability.

## Eyes & ear canals open.

## Visual cliff & righting reflexes appear.

## Can support themselves on all 4 paws & walk as early as Day 12.

## Socialization (3-12 weeks)

## Litter begins to behave like a pack.

## Expressive tail wagging appears.

## Sexual & aggressive play occurs.

## In regards to play, Lindsey (2000) notes: *. . . in the succinct words of Hediger, “good training is disciplined play”. Play & training are not contrary things, but complimentary activities. If puppies or dogs cannot be shown the play in an activity, they will not willingly perform it for long. Nothing is more motivational important in dog training than play.*

## Imprinting &processof socialization are important beginning during this stage.

## Although observational learning has not been adequately demonstrated in adults, Slabbort & Rasa (1997) demonstrated puppies (9-12 wks) made better drug dogs at 6 months if they were allowed to watch their moms work.

## Others studies suggest mom has influence on food preferences of pups.

## Lastly, it is common belief that K9 progeny reflect more of mom’s emotionality than pop’s.

## Socialization Stage – Fox ’71 speculates:

## Puppy Behavior → Adult Behavior

## Anogenital licking by mom → Passive submission displays (rolling on side, urinating).

## Jumping, licking, & nipping of mom’s mouth → Adult greeting, active submission.

## Separation distress vocs. (yelping & whining) → Separation distress vocs. (barking & howling)

## Distress vocs. → Passive submission vocs.

## Upward head movement, butting- nursing behavior → Social greeting & play solicitation

## Competition over teats → Dominance related behaviors

## Juvenile (12 weeks-sexual maturity)

## Stable social hierarchy is established in the litter by about 15 wks.

## Need to be exposed to separation experiences or tend to become excessively reactive when they are finally exposed to it.

## Imprinting &processof socialization continue to be important here.

## Object permanence not reliably observed before 11 months.

## The “*fear impact stage*” occurs at this time. Reaches a maximum at ≈12 weeks. May be analogous to stranger anxiety in 1.5 year old humans.

## As sexual maturity approaches, the activating effects of hormones become important.

## Very impressionable age where a lot of training should occur. Short & fun sessions several times per day are best.

## Adulthood (sexual maturity till ¾ of expected lifespan)

## Activity levels typically decrease somewhat. “*Settle in*” & become easier to manage.

## Senior Years (last ¼ of lifespan)

## Bodily systems start to show wear & tear.

Issues

## Hormones - 2 types of effects:

### Organizing – occur very early in life

## Occur neonatally.

## Have permanent effects on physical development & behavior.

## Exs.

### Sexual Behavior - Consists of: *Lordosis,* Mounting, Ejaculation

# Organizing Effects - Male

##  Behavior as Adult Male FemaleCondition at Birth Behavior BehaviorTestes intact strong none

## Castration weak strong

## Castration + TP strong none

# Organizing Effects - Female

##  Behavior as Adult Male FemaleCondition at birth Behavior BehaviorOvaries intact weak strong

## Ovariectamy weak strong

## TP moderate none

## TP pre- & post-nat strong none

## So, if TP present->masculine, if not-> feminine.

### IUP data - Intra Uterine Position effect (Ghiraldi, Plonsky, Svare, 1993)

### Urine Posture

## Females exposed to androgens at birth urinated in the adult male posture 62% of the time (Beach, 74).

## Some males (neutered young) don’t raise the leg.

### Life Expectancy

## Type of Rat Life Expect.

## Normal female 521 days

## Normal male 377

## Masculinized female 316

## Feminized male 733

### Activating – occur in adulthood

## Produce a state of readiness to respond.

## In males, it begins with the lifting of the leg somewhere ≈7-15 months of age.

## Become more interested in smells & spend more time sniffing.

## Begin marking & take an interest in the female (especially the odors she leaves behind).

## Effects of castration.

## Animals that require more learning for adequate performance continue to be active for longer periods after castration. In humans, effect is highly variable.

## Two important variables:

### Age at castration (neonatal & pre/post puberty)

### Previous sexual experience

## May influence some forms of aggressive behavior in a similar manner.

## Humans may go up because less worry of babies.

## Imprinting & Socialization

## Imprinting

### Definition & Characteristics

## Defined as “*an instance in which an object acquires significance as a result of early exposure*”.

## Distinguishing characteristics:

### Requires a small amount of early exposure

### Occurs during relatively short sensitive period

### Exhibits long lasting & durable effects

### Is largely irreversible

## Primarily associated with social attachment, but may play a role in numerous complex behaviors.

## Perfect example of the complex interaction between nature & nurture.

### The Birds

### Generality

## H. Harlow, found that Rhesus monkeys reared in isolation for 1st 6 months, NEVER behaved normally.

## Extreme isolation (≅6 months) in dogs creates an animal fearful of any social or novel context.

## In humans, some argue the first 6 years to be “*critical*” (e.g., language learning).

## BTW, when pups given choice of wire or terry, they also prefer terry.

### In Dogs

## 6-8 weeks is considered to be a critical period for social bonding. Occurs from 3-12 (or 16) weeks, but dog most sensitive during 6-8.

## This age is considered by many to be the most influential time of the dogs life. Thus, this time is often called a “*critical/sensitive*” period.

## Personally, I believe that the 1st couple of years are sensitive (although the above time frame is especially so).

## Things Learned

## Appetites & aversions, social affinities & responsiveness

## Sexual behavior

## Patterns of active/passive agonistic behavior & play

## Packing (*allelomimetic*) behaviors

## Reactions to separation & other emotionally provocative situations

## Approach-avoidance patterns

## Development of dominant-subordinate relationships

## Patterns of exploratory behavior & activity levels

## Functional fear & avoidance responses

## General learning & problem solving ability

## Trainability

## In summary, they learn how to deal with the world at this time and it sets the stage for the rest of their lives.

## Specific Things to Train

## Housetraining

## Walk on leash without pulling

## Close ranging during off leash walks

## Name & Recalls (typically “come” or “here”)

## Feedback words (typically “*good*” & “*eh*”/“*no*”)

## Retrieving

## Socialization

## Socialization

### A *process* of exposure to relevant stimuli in environment (preferably during sensitive period). Not to be confused with the stage.

### Recommendations

## *A process of exposure to relevant stimuli in the environment (preferably during sensitive period).*

## Pup should be *pleasantly* exposed (food & play can be helpful).

## I do trips to Main St. weekly during 1st year & regularly during the 2nd year.

## Need to be introduced to & interact with people (children, men, women, races, sizes, disabled, crowds) regularly throughout 1st couple years.

## Different floor surfaces, elevators.

## Swimming, bathes, grooming, nail trimming.

## Various sounds (traffic, vacuum, lawn mower).

## Other dogs, cats, sheep, etc.

### Effects of Deprivation

## The following conditions may be observed:

### Patterns of extreme hyperactivity & neophobia.

### Intense precocious aggressiveness.

### Fearfulness toward humans & other dogs (which can lead to aggression).

## Deprived pups are more prone to:

### Separation anxiety.

### Oral fixations.

### Coprophagia (eating feces).

### Difficulty with house training.

## Temperament Tests

## Lindsey (2000) notes: *“Puppy temperament tests should not be employed to predict adult aptitudes or the potential exhibition of adult behavior patterns but should be used as tools to isolate and quantify a puppy’s various strengths & weaknesses at the time of testing.”*

## Common Themes:

### Isolate & walk away, recall (sociability)

### Roll ball past, toss toy (retrieve & play)

### Loud noise (reactivity to environ)

### Pinch toe (reactivity to pain)

### Alpha roll, lift dog (reaction to dominance)