



*What are regulatory disorders
in infancy?*

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Definition

- ★ Are they disorders?
- ★ Are they disturbances? (I.e. temporary, passing and relatively minor?)
- ★ Are they difficulties in “settling”
- ★ What is their relationship with the caretaking environment and parenting practices?
- ★ How to deal with them?





Regulatory



★ Described by Minde and Minde
(Introductory Textbook, early 90's)



★ Described by Greenspan and Wieder



★ Described by Ayres, DeGangi, and other
occupational therapists

★ “Pediatric disorder of self-
regulation”(DeGangi)



Status of diagnosis

- ★ Category created by “expert consensus” in Zero to Three Dx. Classification
- ★ Subtypes are described but unclear which are boundaries and clinical validity
- ★ What is their relationship to “attentional deficits”, disruptive behavior disorder, and motor coordination disorders (DSM IV)?





Diagnosis of regulatory disturbance



- ★ A behavioral pattern of dysfunction
- ★ Interferes with everyday life, relationships, functioning



- ★ Infant fails to be content or mostly happy
- ★ Evidence (first hand and historical) of

Sensory Processing abnormalities in a variety of sensory channels





Sensory integration theory



★ Theoretical Model:

★ What the child perceives (sensory channels)



★ How the information is processed in the brain and a response organized

★ How the response is expressed with the body



★ How the system “calibrates” or “regulates” itself for adequate functioning



Diagnosis



- ★ Whether sensory integration overall fails or overall succeeds
- ★ Take into account historical factors
- ★ Take into account **TRANSACTIONAL** nature of most behaviors and processes
- ★ I.e. **CAREGIVING ENVIRONMENT**
- ★ Take into account stressors for baby, environmental demands (e.g. whether conducive to self-regulation)



Diagnosis



- ★ How many sensory processing difficulties are necessary to make diagnosis?
- ★ Is there a combination of sensitivities, I.e. hyper and hypo sensitivities
- ★ What is the role of motor skills in the diagnosis?
- ★ Overall: focus on degree of interference, dysfunction and the context of transactions
- ★ How difficult is it for the child him or herself to be content in the best circumstances?



Common manifestations of regulatory disturbances



- ★ Complaints of excessive cry
- ★ Complaints of sleep disturbance, initiating or maintaining sleep
- ★ Complains of excessive motor activity
- ★ Complaints of feeding problems or behavior during meals
- ★ Complaints of management of emotions, mostly anger





Other clinical manifestations



★ Less common >

★ Child who is unresponsive

★ Child who is lagging behind

★ Child who is always placid and sees the world pass by

★ Child with mixed sensitivities





Child mostly hyper-sensitive



★ Difficulty with many transitions, places, time of day, sleep-wake cycles, changing environments, etc.



★ Baby has difficulties with being touched, held

★ Baby reacts strongly to noises, to lights or visual patterns, easily distracted, hard to focus on one thing.



★ Hard to stay organized



Child mostly hypersensitive



- ★ Child may be very cautious or anxious
- ★ Child may be angry or upset by many changes or minor environmental demands
- ★ Child may be hypersensitive to odors, flavors, textures
- ★ Things have to be just so
- ★ Things easily ruined for infant



Child mostly hyperactive



- ★ Child seems to seek stimuli constantly
- ★ Seeing is not enough, things have to be experienced through touch, mouth, with the body
- ★ Child likes to make noise
- ★ Child seeks deep pressure on body
- ★ Child tends to seek movement stimulation
- ★ Squirming, moving all the time, etc.



Child mostly hyperactive



- ★ Somewhat insensitive to effects of his own behavior
- ★ Child often motorically clumsy, hypertonic, walks on tiptoes, brusque movements, strong.
- ★ Child often has motor skills problems, coordination, etc.



Often short attention span



- ★ May not perceive spatial relationships, crash into things, bump, “butt” people, squeeze too hard, hit, bite without being necessarily angry
- ★ “bull in a china cabine”



Child hypersensitive and angry



★ Child has hypersensitivities

★ Child appears mostly discontent

★ Infant tends to “do his own thing”



★ Infant has clearly a “mind of own”

★ Child may resist change, be unable to shift gears or change his/her focus



★ Child is upset and it is hard to calm, let go ,
move on



Child hypersensitive and angry



- ★ Older child, toddler or preschooler

- ★ May organize around opposition

- ★ Being the boss

- ★ Being defiant

- ★ Do what he/she wants

- ★ Elicit negative interactions, punishments

- ★ Attempt to “undo” punishment effect





Child mostly hyposensitive



- ★ May have low muscular tone
- ★ Infant may “tire easily”, run out of energy
- ★ Positions of comfort, not like changes, new things.
- ★ Likes preferred routines and patterns
- ★ Does not get bored, “sits there” , not move around
- ★ Does not elicit much activity



Regulatory challenges and caregiving environment



★ PARENTS OR CAREGIVERS

★ Do they notice uniqueness?

★ Do they notice and attribute to uniqueness in child, or to purposeful behavior?

★ Do they interact by mostly adapting stimulation to child and presenting things sensitively?





Regulatory challenges and caregiving environment



- ★ What is parents' reaction to child's behavior?
- ★ How does this fit with their expectations?
- ★ Does child "reward" parents or frustrate them?
- ★ Effects of feeding, crying, sleeping difficulties on parents?
- ★ Child's need for supervision, attention etc?





Regulatory challenges and “ecological “ factors



- ★ How do the child and his/her environment “Fit into each other”?
- ★ Level of visual stimulation (toys, ornaments, eg. Visual “diet”)
- ★ Level of auditory stimulation (radio, television, people talking, e.g. auditory diet)
- ★ Overall level of sensory input in environment: too high, too low? In different sensory channels.



How to detect sensory processing issues?



★ By direct observation of child in office and in natural setting (home, day care)



★ By direct interaction with child, holding, playing interacting



★ By observing parent child interaction

★ By obtaining history from parent, with detailed examples, of reaction to stimuli