

Rudimentary Movement

Chapter 8
PED 201
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Rudimentary Movement

- Reflection of increased motor control and movement competence.
- Due to factors within: the task, the environment, and the individual.

Rudimentary Movement

- Neuromaturation theory (phylogenetic perspective)
- Dynamic systems theory (self-organizing perspective)

Rudimentary Movement

- The infant faces the tasks of overcoming gravity, controlling the musculature, and moving in a controlled manner.

Reflex Inhibition Stage

- Reflexes are gradually inhibited.
- This period of time stretches throughout the first year of life.

Precontrol Stage

- The infant begins to bring his or her movements under control.
- Roughly between the first and second birthday.

Issues

- Movement at this stage should be encouraged!
- The environment is key!

Issues

- There is a strong case for encouraging early motor skill acquisition.

Research has found...

- Infants exhibit definite stages in the performance of grasping.
- There is a sequence of progressions for upright posture and gait.
- There is an interplay between posture and both locomotion and manipulation.

EXPERIENCE HELPS LOTS!

Basics

- This sequence is not only the result of neuromaturation, but the result of an interaction between the task, the environment, and the individual.
- The sequence is invariant but the rate of acquisition varies child to child.

THE CHALLENGES

Stability

- Establish and maintain the relationship of the body to the force of gravity.
- Achieve an upright posture in both sitting and standing.

THE CHALLENGES

Locomotion

- Develop basic abilities in order to move through his/her environment.

THE CHALLENGES

Manipulation

- Develop the rudimentary abilities of reach, grasp, and release.

STABILITY

- Control of the Head and Neck
- Control of the Trunk

STABILITY

- Turns head, lifts chin, good prone control, good supine control.

STABILITY

- Sitting – (sits with support, self-support, alone)

STABILITY

- Standing - stands with support, cruises, alone.

LOCOMOTION

- *Scooting*
- *Crawling*
(homolateral pattern, 4 to 6 months)
- *Creeping*
(contralateral pattern, 6 to 9 months)

LOCOMOTION

Upright Gait

- with support, with handholds, with lead, alone

LOCOMOTION

Upright Gait

- Appears between 10 to 15 months.
- Wide base of support.
- Feet outward.
- Knees slightly flexed.
- Lack of synchronicity.

MANIPULATION

- *Reaching*
- *Grasping*
- *Releasing*

Reaching

- ***Reaching*** (globular, corraling, controlled)
- ***Grasping*** (reflexive, voluntary, two-hand palmer, one-hand palmer, pincer, controlled, feeds self)
- ***Releasing*** (basic, controlled)

Reaching

- First 3+ months, globular encircling motions in the general direction of the object.

Reaching

- Slow and awkward movements using shoulder and elbow with alternating glances between the object and the hand (4 months).
- The wrist and hand become more involved, the aim becomes perfected (6 months).
