



CHILD PSYCHOLOGY

Spring 2024

Marjorine Henriquez-Castillo, PhD

Infancy and Toddlerhood: Physical Development

Chapter 4



4.8 Health: Protecting Health through Immunization

2023 Recommended Immunizations for Children from Birth Through 6 Years Old

VACCINE	Birth	1 MONTH	2 MONTHS	4 MONTHS	6 MONTHS	12 MONTHS	15 MONTHS	18 MONTHS	19-23 MONTHS	2-3 YEARS	4-6 YEARS
HepB Hepatitis B	HepB	HepB			HepB						
RV* Rotavirus			RV	RV	RV*						
DTaP Diphtheria, Pertussis, & Tetanus			DTaP	DTaP	DTaP		DTaP				DTaP
Hib* <i>Haemophilus influenzae</i> type b			Hib	Hib	Hib*	Hib					
PCV13, PCV15 Pneumococcal disease			PCV	PCV	PCV	PCV					
IPV Polio			IPV	IPV	IPV						IPV
COVID-19** Coronavirus disease 2019					COVID-19**						
Flu* Influenza					Flu (One or Two Doses Yearly)*						
MMR Measles, Mumps, & Rubella						MMR					MMR
Varicella Chickenpox						Varicella					Varicella
HepA* Hepatitis A						HepA*		HepA*			

FOOTNOTES

RV* **Hib***
Administering a third dose at age 6 months depends on the brand of Hib or rotavirus vaccine used for previous dose.

COVID-19** Number of doses recommended depends on your child's age and type of COVID-19 vaccine used.

Flu* Two doses given at least 4 weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.

HepA* Two doses of Hep A vaccine are needed for lasting protection. The 2 doses should be given between age 12 and 23 months. Both doses should be separated by at least 6 months. Children 2 years and older who have not received 2 doses of Hep A should complete the series.

ADDITIONAL INFORMATION

1. If your child misses a shot recommended for their age, talk to your child's doctor as soon as possible to see when the missed shot can be given.

2. If your child has any medical conditions that put them at risk for infection (e.g., sickle cell, HIV infection, cochlear implants) or is traveling outside the United States, talk to your child's doctor about additional vaccines that they may need.

Talk with your child's doctor if you have questions about any shot recommended for your child.

<https://www.cdc.gov/vaccines/parents/schedules/index.html>
 will be updated with 2024 guidelines





4.8 Health: Protecting Health through Immunization

Vaccine	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years
COVID-19* Coronavirus disease 2019	COVID-19*											
Flu** Influenza	Flu (One or Two Doses Yearly)**		Flu (One Dose Yearly)									
Tdap Tetanus, Diphtheria, & Pertussis					Tdap							
HPV† Human papillomavirus				HPV†								
MenACWY Meningococcal disease					MenACWY				MenACWY			
MenB Meningococcal disease											MenB	

Catching Up On Missed Childhood Vaccination¹

Vaccine	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years
MMR Measles, Mumps, & Rubella	MMR											
Varicella Chickenpox	Varicella											
HepA Hepatitis A	HepA											
HepB Hepatitis B	HepB											
IPV Polio	IPV											

ONLY IN PLACES WHERE DENGUE IS COMMON — MUST have a laboratory test confirming past dengue infection

Vaccine	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years
Dengue	Dengue											

<https://www.cdc.gov/vaccines/parents/schedules/index.html> ***will be updated with 2024 guidelines***

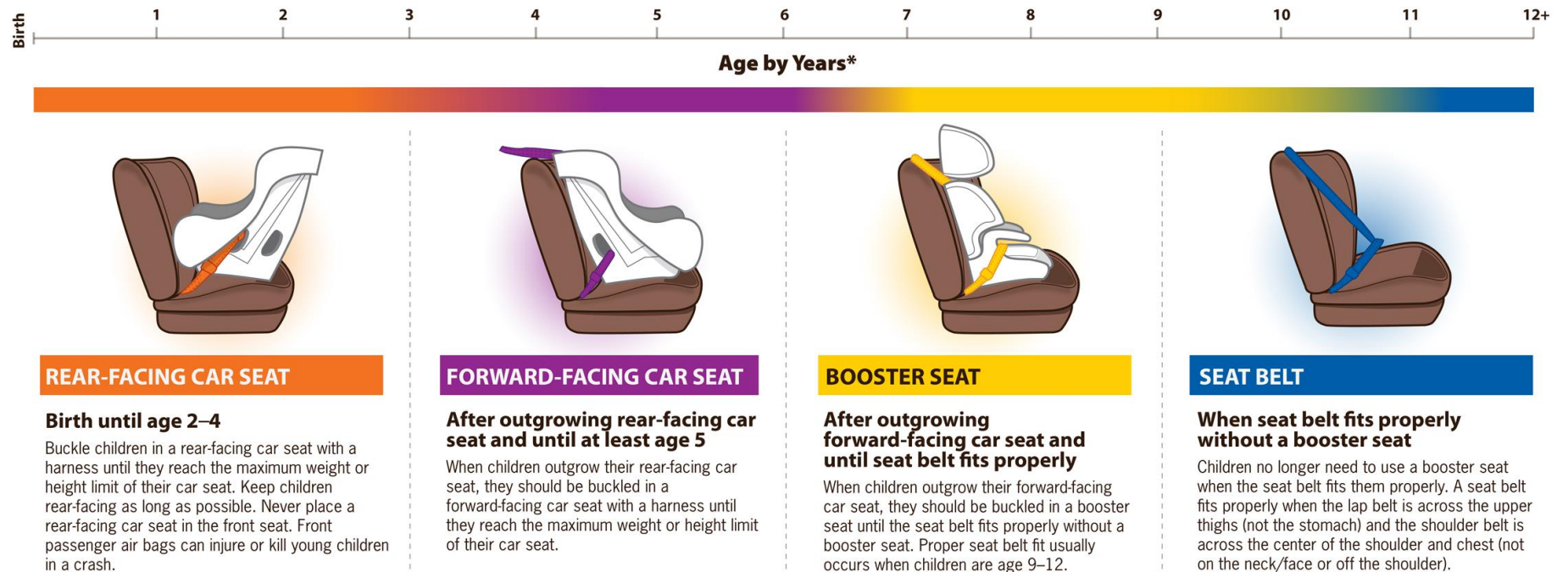




4.8 Health: Car Safety

- Motor vehicle injuries are a leading cause of death among children in the United States
- Preventable
- Always read manufacturer instructions

Using the correct car seat or booster seat can be a lifesaver. Make sure your child is always buckled in an age- and size-appropriate car seat or booster seat.



Keep children age 12 and younger properly buckled in the back seat.

*Recommended age ranges for each seat type vary to account for differences in child growth and weight/height limits of car seats and booster seats. Use the car seat or booster seat manual to check for important information about installation, the seat weight and height limits, and proper seat use.

Child passenger safety recommendations: American Academy of Pediatrics (AAP) 2018.

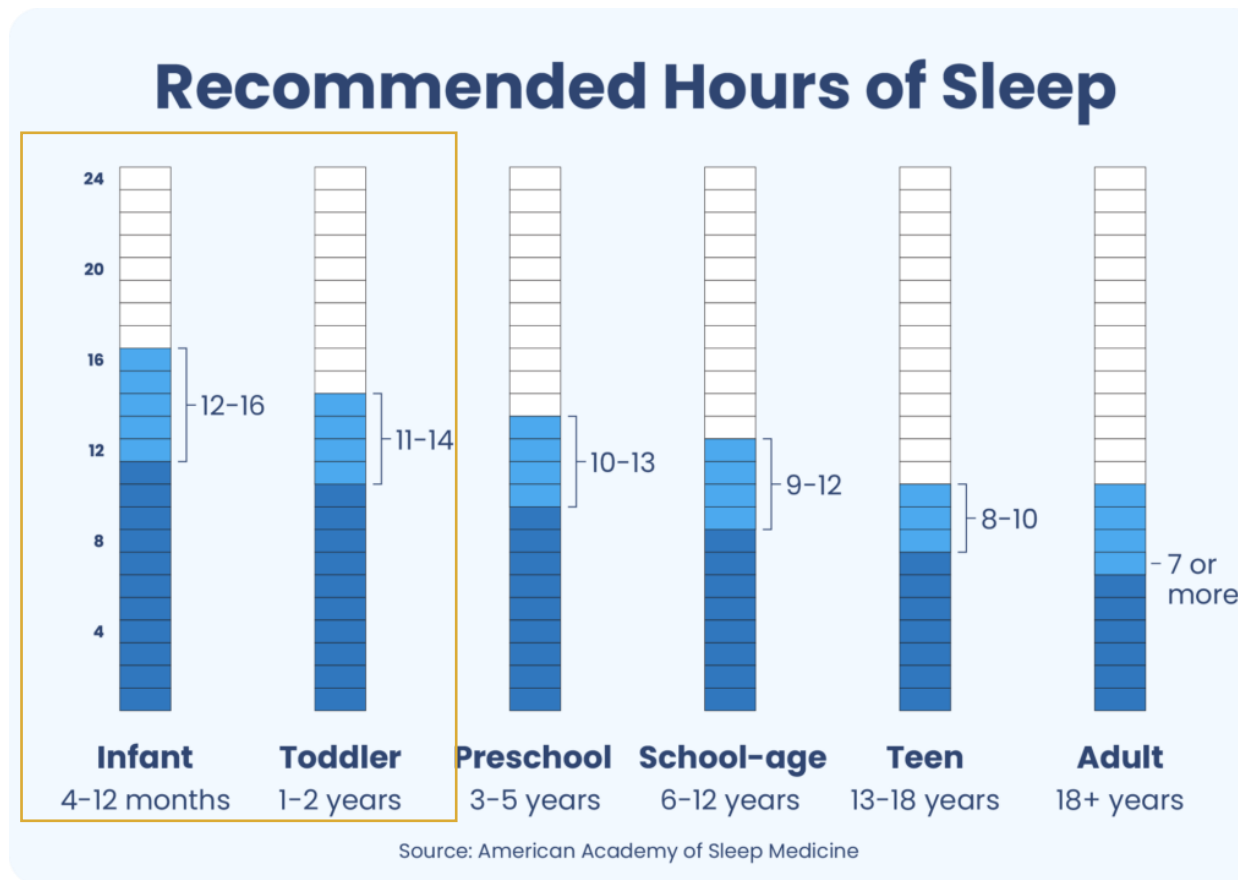
www.cdc.gov/transportationsafety/child_passenger_safety





4.9 Sleep

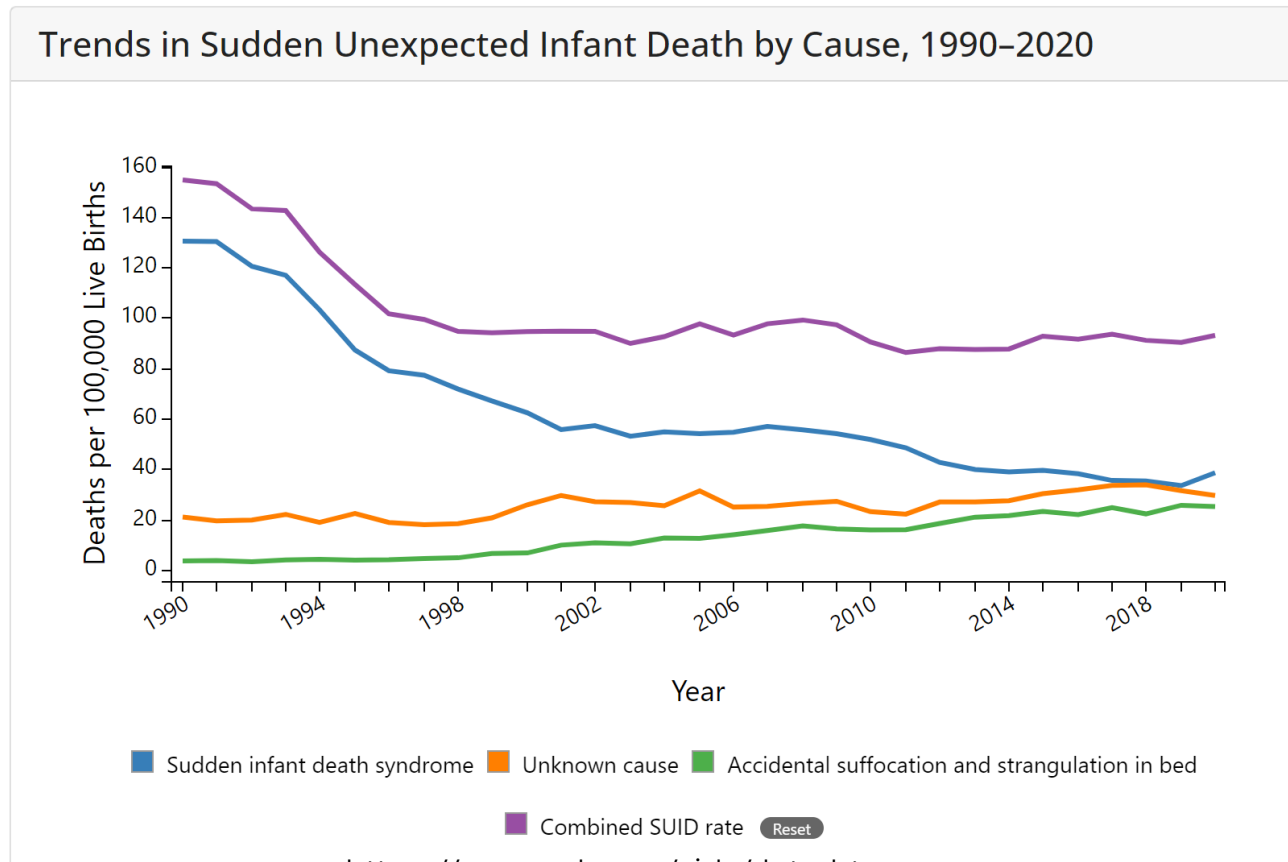
- About 16.5 hours in 24-hour period.
- By two-year-old, average of 10 hours.





4.9 Sleep: Sudden Infant Death Syndrome

- When the death of a healthy infant occurs suddenly and unexpectedly, and medical and forensic investigation findings (including an autopsy) are inconclusive.
- Leading cause of death in infants 1 to 12 months old

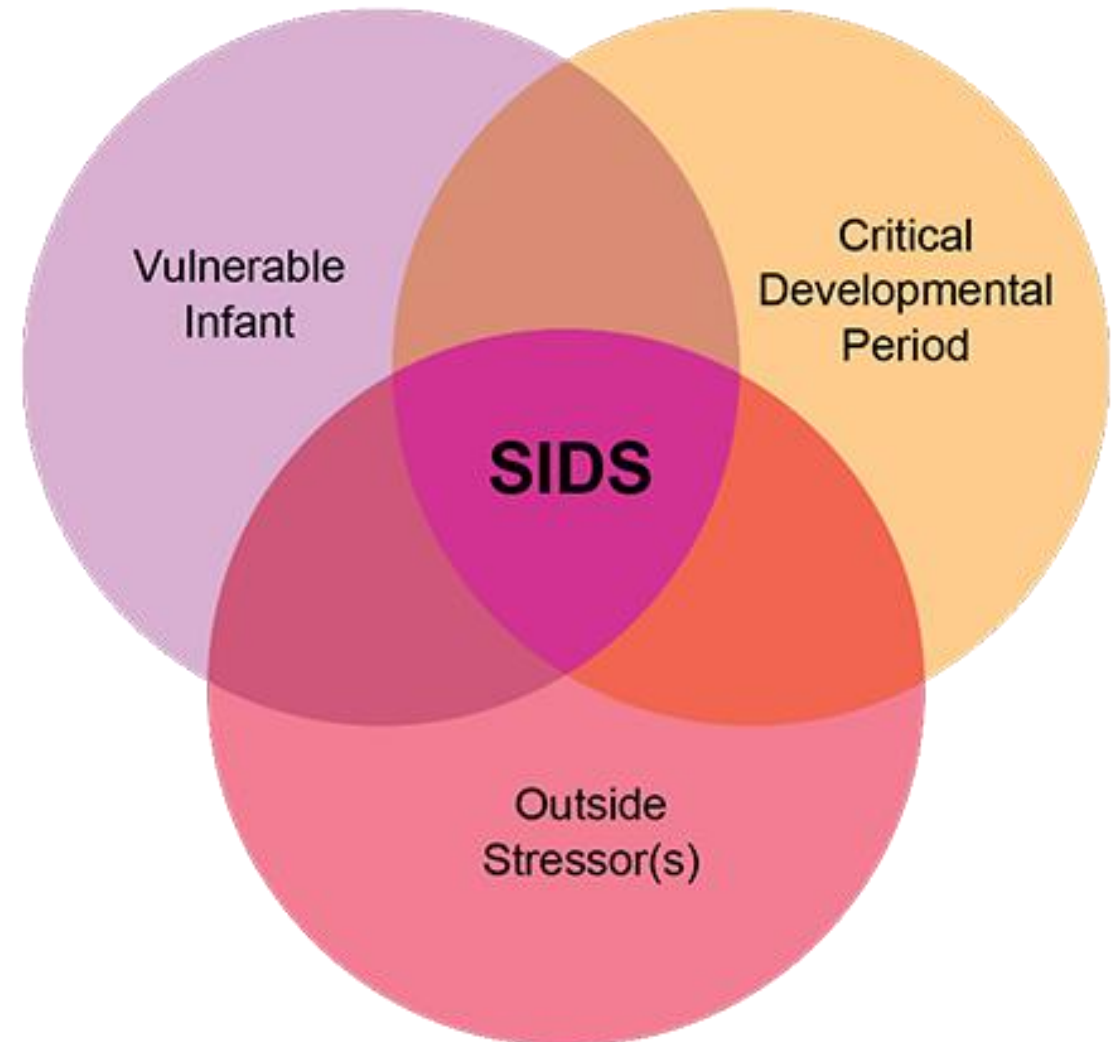




4.9 Sleep: Sudden Infant Death Syndrome

Risk Factors Babies are at higher risk for SIDS if they:

- Sleep on their stomachs
- Sleep on soft surfaces, such as an adult mattress, couch, or chair or under soft coverings
- Sleep on or under soft or loose bedding
- Get too hot during sleep.
- Are exposed to cigarette smoke in the womb or in their environment, such as at home, in the car, in the bedroom, or other areas
- Sleep in an adult bed with parents, other children, or pets; this situation is especially dangerous if:
 - The adult smokes, has recently had alcohol, or is tired.
 - The baby is covered by a blanket or quilt.
 - The baby sleeps with more than one bed-sharer.
 - The baby is younger than 11 to 14 weeks of age.





4.9 Sleep: Safe Sleep

Reducing the Risks

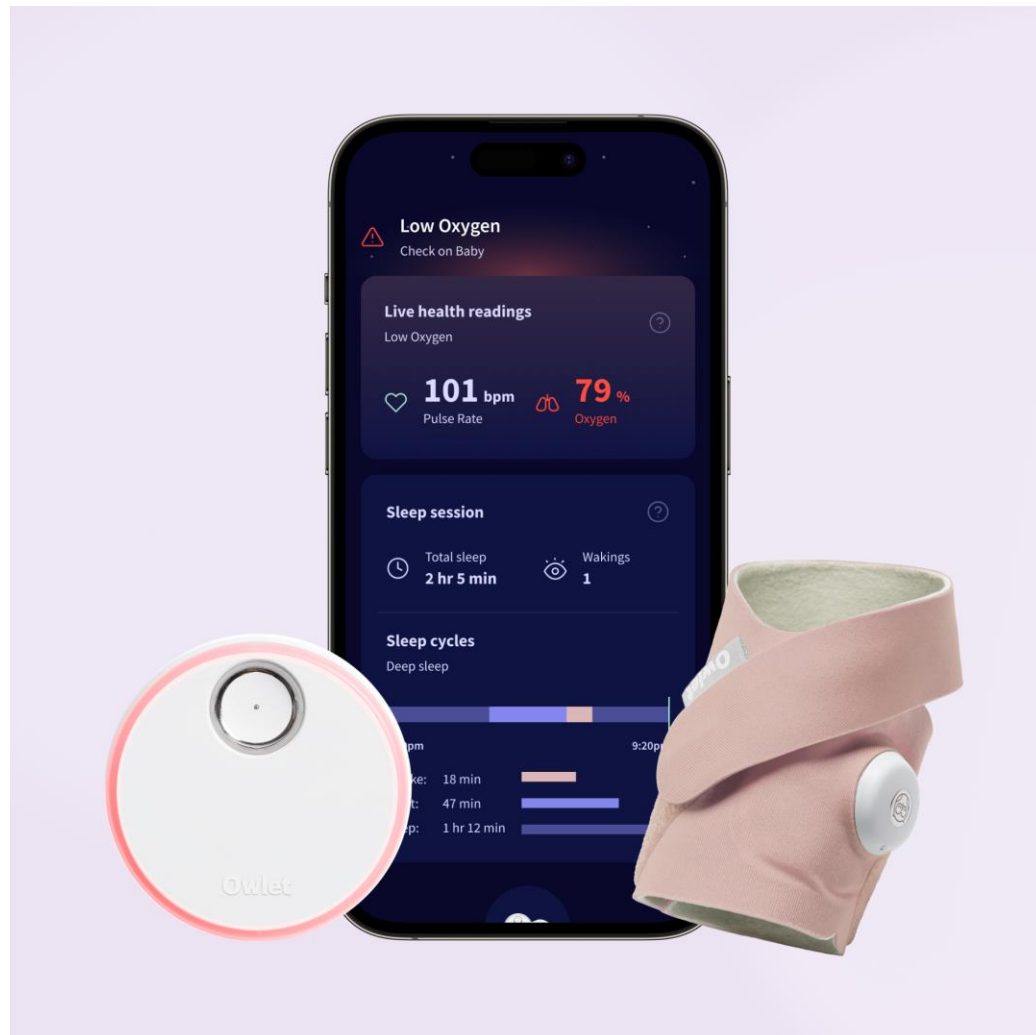
- Always place baby on his or her back to sleep (for naps and at night).
- Use a firm and flat surface.
- Use only a tight fitting sheet on the sleep surface; no other bedding or soft items in the sleep area.
- Breastfeed.
- Share your room with a baby, but on a separate surface designed for infants (not your bed).
- Do not put soft objects, toys, crib bumpers, or loose bedding under, over, or anywhere near baby's sleep area.
- Do no smoke during pregnancy or allow smoking around baby.
- Consider giving baby a pacifier.
- Do not let baby get too hot during sleep.
- Get regular health care (including vaccines).
- Avoid products that go against safe sleep recommendations, especially those that claim to prevent or reduce the risk of SIDS.
- Do not use heart or breathing monitors to reduce the risk of SIDS.

PROTECT THE CHILD FROM SIDS

- ENSURE THE CRIB IS PROPERLY ASSEMBLED
- USE A BLANKET SLEEPER NEVER USE LOOSE BLANKETS
- ALWAYS PLACE BABY ON HIS/HER BACK TO SLEEP
- ONCE BREASTFEEDING IS ESTABLISHED AFTER A PACIFIER
- KEEP A SMOKE-FREE ZONE AROUND YOUR BABY
- KEEP BABY IN MOM'S ROOM, BUT IN A SEPARATE SLEEPING AREA
- REMOVE EVERYTHING OTHER THAN THE MATTRESS AND SHEET FROM THE CRIB WHEN BABY IS SLEEPING.
- USE A FIRM MATTRESS WITH NO MORE THAN TWO FINGERS WIDTH BETWEEN THE CRIB AND MATTRESS
- DO NOT OVER-CLOTHE BABY WHILE SLEEPING, BABY SHOULD NOT BE HOT TO THE TOUCH
- THERE SHOULD NOT BE MORE THAN A SODA CAN WIDTH BETWEEN BARS



4.9 Sleep: Safe Sleep



CHILD PSYCHOLOGY

Spring 2024

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Infancy and Toddlerhood: Cognitive Development

Perceive, Communicate, Remember

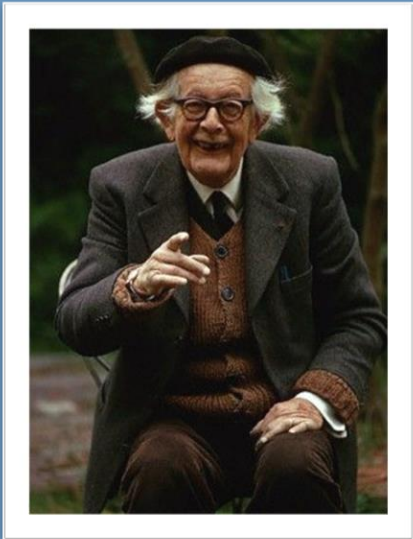
Chapter 5



5.1. Piaget

Constructivist

Sensorimotor



Jean Piaget
[1896-1980]
Maturation

Piaget's Stages of Cognitive Development



Sensorimotor Stage
Birth to 2 yrs

Preoperational Stage
2 to 7 yrs

Concrete Operational Stage
7 to 11 yrs

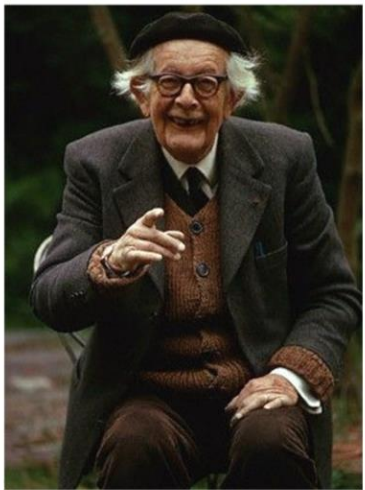
Formal Operational Stage
12 and up



5.1. Piaget

Constructivist

Sensorimotor



Jean Piaget
[1896-1980]
Maturation

Simple Reflexes
[Birth – 1 month]



Sensorimotor
Stage
Birth to 2 yrs

verywell



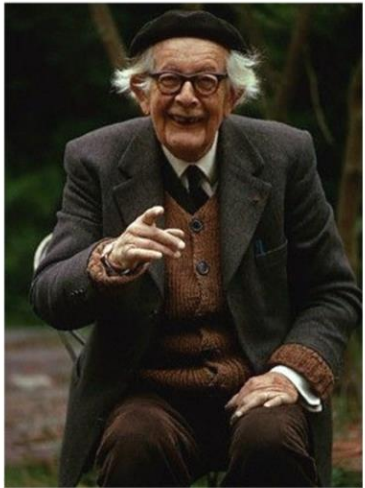
MakeAGIF.com



5.1. Piaget

Constructivist

Sensorimotor



Jean Piaget
[1896-1980]
Maturation

Simple Reflexes
[Birth – 1 month]

Primary Circular Reactions
[1 – 4 months]



Sensorimotor
Stage
Birth to 2 yrs

verywell

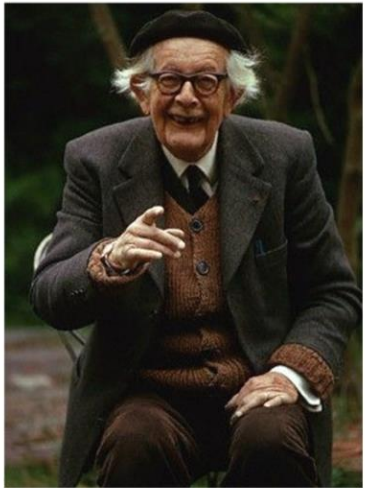




5.1. Piaget

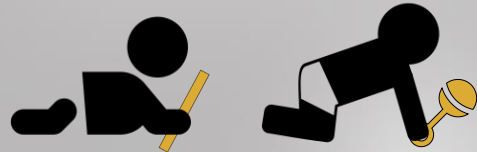
Constructivist

Sensorimotor



Jean Piaget
[1896-1980]
Maturation

Simple Reflexes
[Birth – 1 month]



Primary Circular Reactions
[1 – 4 months]

Secondary Circular Reactions
[4 – 8 months]



Sensorimotor
Stage
Birth to 2 yrs

verywell

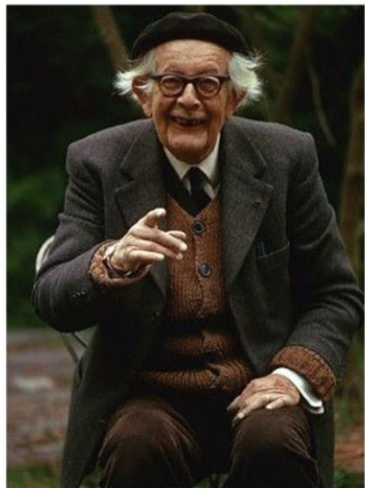


make a gif.com



5.1. Piaget

Constructivist



Jean Piaget
[1896-1980]
Maturation

Sensorimotor

Simple Reflexes
[Birth – 1 month]

Primary Circular Reactions
[1 – 4 months]

Secondary Circular Reactions
[4 – 8 months]

Coordination of circular
Reactions
[8 – 12 months]



Sensorimotor
Stage
Birth to 2 yrs

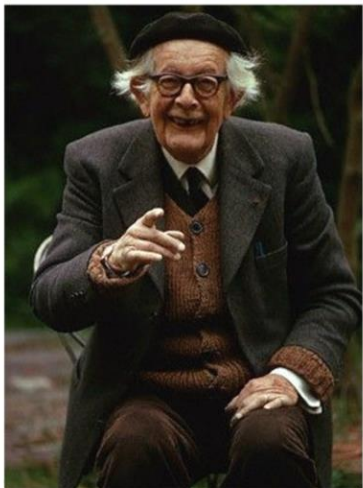
verywell





5.1. Piaget

Constructivist



Jean Piaget
[1896-1980]
Maturation

Sensorimotor

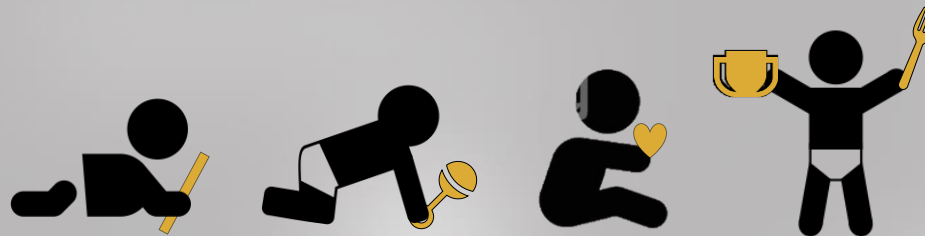
Simple Reflexes
[Birth – 1 month]

Primary Circular Reactions
[1 – 4 months]

Secondary Circular Reactions
[4 – 8 months]

Coordination of circular
Reactions
[8 – 12 months]

Tertiary Circular Reactions
[12 – 18 months]



**Sensorimotor
Stage**
Birth to 2 yrs

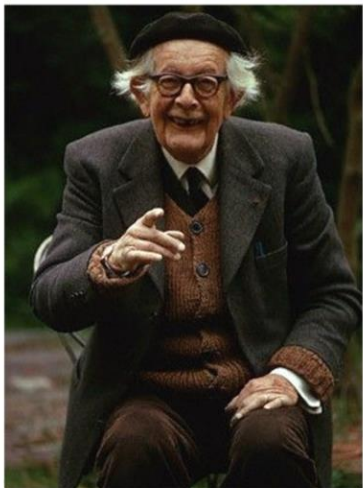
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5.1. Piaget

Constructivist



Jean Piaget
[1896-1980]
Maturation

Sensorimotor

Simple Reflexes
[Birth – 1 month]

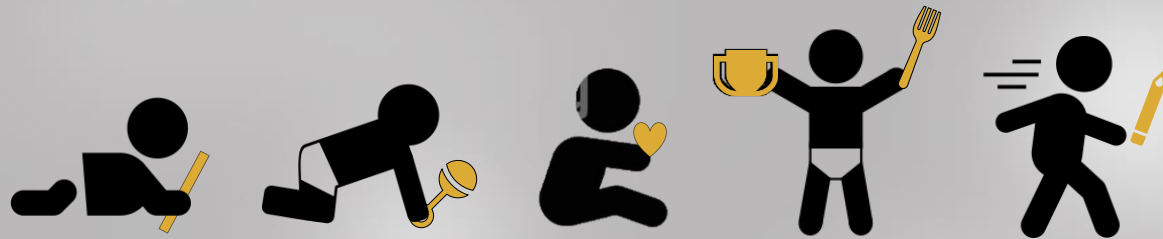
Primary Circular Reactions
[1 – 4 months]

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[4 – 8 months]

Coordination of circular
Reactions
[8 – 12 months]

Tertiary Circular Reactions
[12 – 18 months]

Internalization of Schemes and
Early Representation of
Thought
[18 months – 2 years]



Sensorimotor
Stage

Birth to 2 yrs

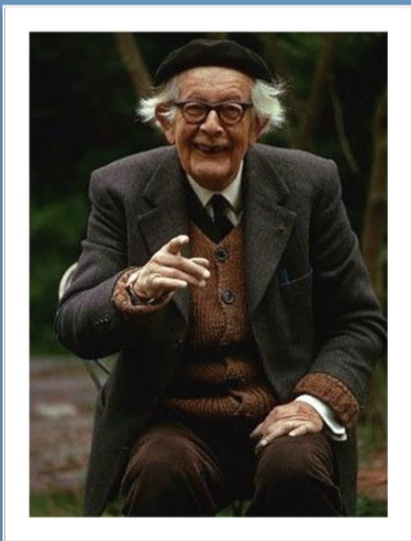
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5.1. Piaget

Constructivist



Jean Piaget
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Maturation

Sensorimotor

Simple Reflexes
[Birth – 1 month]

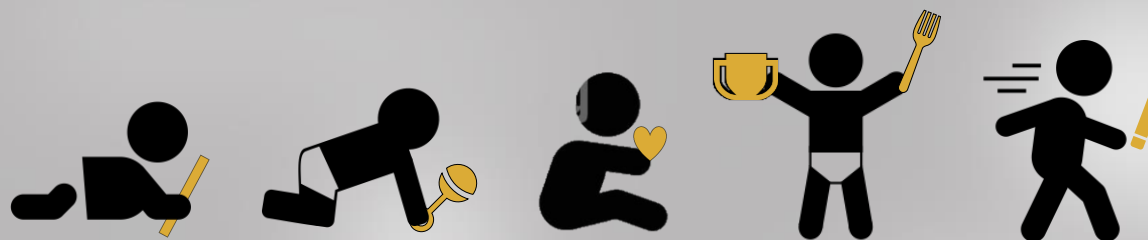
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Internalization of Schemes and
Early Representation of
Thought
[18 months – 2 years]



Sensorimotor
Stage
Birth to 2 yrs



Sensorimotor: Object Permanence

Before Object Permanence



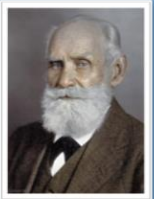
After Object Permanence



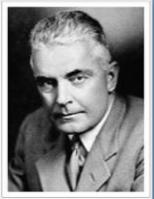
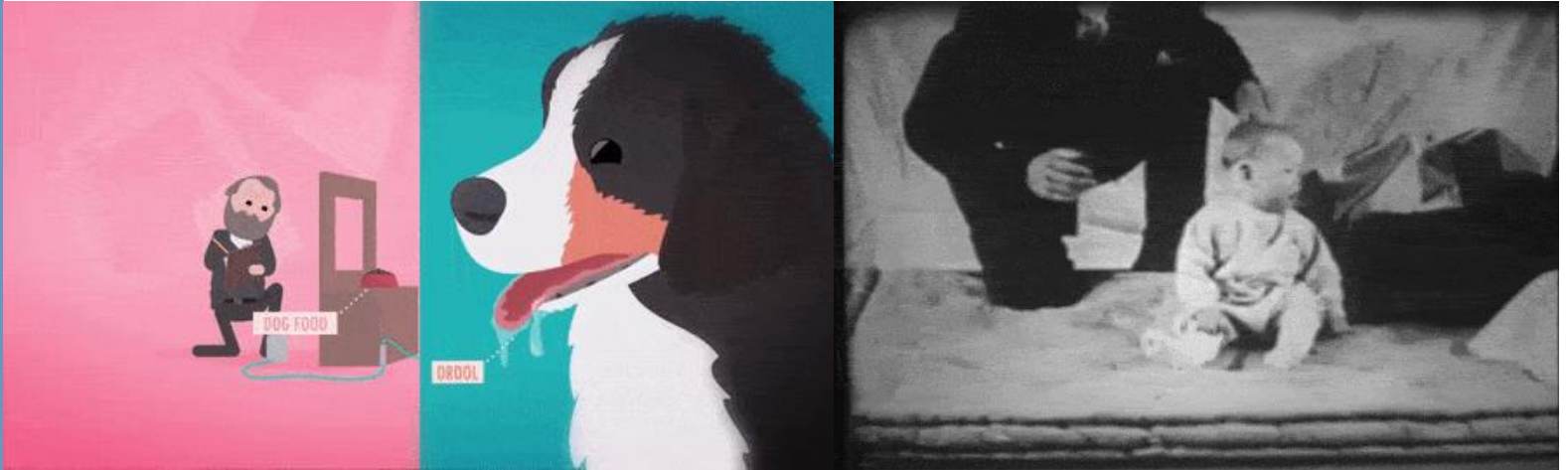
*Evidence that this happens earlier than Piaget suggested.



5.2 Vygotsky & 5.5. Theories of Cognitive Development, Learning, and Memory



Conditioned Stimulus Response



Classical Conditioning Learned



Operant Conditioning Reinforced



Social Learning



Influence of culture Scaffolding



5.3 Cognitive Milestones

- How children perceive and interact the world.



2 Months

- Pays attention to faces
- Begins to follow things with eyes and recognize people at a distance
- Begins to act bored (cries, fussy) if activity doesn't change



4 Months

- Lets you know if she is happy or sad
- Responds to affection
- Reaches for toy with one hand
- Uses hands and eyes together, such as seeing a toy and reaching for it
- Follows moving things with eyes from side to side
- Watches faces closely
- Recognizes familiar people and things at a distance



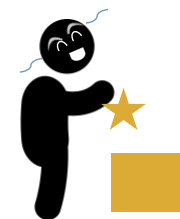
6 Months

- Looks around at things nearby
- Brings things to mouth
- Shows curiosity about things and tries to get things that are out of reach
- Begins to pass things from one hand to the other



9 Months

- Watches the path of something as it falls
- Looks for things he sees you hide
- Plays peek-a-boo
- Puts things in mouth
- Moves things smoothly from one hand to the other
- Picks up things like cereal o's between thumb and index finger



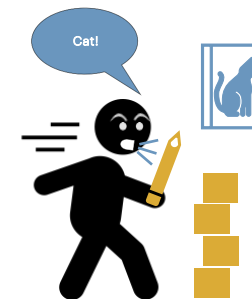
1 Year

- Explores things in different ways, like shaking, banging, throwing
- Finds hidden things easily
- Looks at the right picture or thing when it's named
- Copies gestures
- Starts to use things correctly; for example, drinks from a cup, brushes hair
- Bangs two things together
- Puts things in a container, takes things out of a container
- Lets things go without help
- Pokes with index (pointer) finger
- Follows simple directions like "pick up the toy"



18 Months

- Knows what ordinary things are for; for example, telephone, brush, spoon
- Points to get the attention of others
- Shows interest in a doll or stuffed animal by pretending to feed
- Points to one body part
- Scribbles on own
- Can follow 1-step verbal commands without any gestures; for example, sits when you say "sit down"









2 Years

- Finds things even when hidden under two or three covers
- Begins to sort shapes and colors
- Completes sentences and rhymes in familiar books
- Plays simple make-believe games
- Builds towers of 4 or more blocks
- Might use one hand more than the other
- Follows two-step instructions such as "Pick up your shoes and put them in the closet."
- Names items in a picture book such as a cat, bird, or dog



5.4. Language Development

- How babies communicate (verbal and non-verbal)

	Intentional Vocalizations
<i>Blah Blah Blah</i>	Babbling and Gesturing
	Understanding
Gurt	Holophrastic Speech
	Underextension
	First words and cultural influences
	Vocabulary growth spurt
	Two-word sentences and telegraphic speech





5.4. Language Development

- How babies communicate (verbal and non-verbal)



Intentional Vocalizations

- Infants coo (vowel sounds) in the first few months, practicing vocalization and enjoying the sounds they make.
- Cooing helps infants learn conversational turn-taking by alternating vocalizations with others.
- Baby language decoded

Blah
Blah Blah



Gurt



<https://youtu.be/IYz6tE3XmHM>



<https://youtu.be/0yCSrb26MLc>



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



Babbling and Gesturing

- Around 4-6 months, infants babble with a wider range of sounds (consonants, vowels, clicks) preparing them for spoken language.
- Deaf babies use gestures to communicate, similar to babbling in hearing babies.



<https://youtu.be/WSHK7ea96Lw>



<https://youtu.be/SnZVpc3T60I?si=f-GGWpUzJMRpr730>



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



Understanding

- At around ten months of age, the infant can understand more than he or she can say



<https://youtu.be/cuLzmTZhQMw>



<https://youtu.be/SQL1hBP0M7I>



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



Holophrastic Speech

- Around 1 year old, children use single words (holophrases) to express thoughts ("ju" for juice).
- Meaning of these words depends on context and familiarity with the child ("ju" might mean juice or milk depending on the situation).
e.g. Andrew says "gurt" when he means "I want yogurt."



<https://youtu.be/bHcXWNyxeTg?si=hA7Z-GDvU8CuOMQt>



https://youtu.be/V_BJ-0EB_9s?si=fp9LLOGGjWMu960q



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



Underextension & Overextension

- Children initially misuse new words: "Doggie" might only refer to the family's specific dog (underextension).
- Or they might use a word too broadly: "Doggie" for all animals (overextension).



Underextension



<https://youtu.be/AgY7nkbYFaw?si=PnOFGzQarBnE3AAM>



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



First words and cultural influences

- First words in English tend to be nouns (cup, ball) reflecting a focus on object identification.
- In verb-heavy languages like Chinese, early words might be verbs, possibly due to cultural emphasis on action and relationships between objects.



https://www.youtube.com/shorts/YCh_GfeV3pl?feature=share

The First Words Produced by Children in Bilingual English/Mandarin Chinese Environments

Sandra Levey and Denise Cruz
Lehman College, City University of New York

The first words produced by children in bilingual environments where English and Mandarin Chinese are spoken were investigated. The goal was to determine if verbs would appear in the children's early productions, which would be consistent with the findings for the first words produced by children in monolingual Mandarin Chinese environments. A greater number of nouns than verbs were produced as children's first words in both English and Mandarin Chinese. Although nouns were produced in both English and Chinese, verbs were produced only in Mandarin Chinese.

Children's first words have been a focus of interest to many researchers, in part to determine if there is a universal basis to lexical acquisition and if adults' verbal communication or input plays a role in the acquisition of early words. Nelson (1973) initiated this area of study with the finding that the first words of monolingual English-speaking children could be placed into four categories: *nouns* (naming objects or entities), *verbs* (requests for objects and/or actions), *social terms* (personal comments and greetings), and *modifiers* (descriptions). Nouns could be further divided into two categories: specific and general nominals. *Specific nominals* consisted of proper names (e.g., *Mommy, Daddy*). *General nominals* consisted of human terms (*baby*); food and drink items (*juice, milk, cookie, water, toast, apple, cake*); animals (*dog, cat, duck, horse*); clothing (*shoes, hat*); toys (*ball, blocks*); vehicles (*car, boat, truck*); furniture (*clock, light*); other common items (*bottle, key, book*); and action words (*up, sit, see, eat, down, go*). Social terms consisted of personal/social words (*hi, bye-bye, no, yes/yeah, please, thank you*).

Nouns were found to be the largest category of first words (Gentner, 1982; Nelson, 1973; Nelson, Hampson, & Shaw, 1993), and verbs were the second largest category, followed by modifiers and personal/social utterances. The dominance of nouns produced by children in monolingual English-speaking environments has been confirmed by the analysis of the first 50 words produced by English-speaking children out of a total production of 1,789 children (Fenson et al., 1994). In this sample, 54% of words were classified as nouns, but none could be classified as verbs. The remaining words were classified as neither nouns nor verbs.

The predominance of nouns as first words in other monolingual language environments, such as French (Basano, 2000), Hebrew (Dromi, 1988), Italian (Caselli et al., 1995; D'Odorico, Carubbi, Salerni, & Calvo, 2001), and English (Goldfield, 1993; Nelson, 1973) lent support to the hypothesis that nouns comprise the first words of children across all languages (Golinkoff, Mervis, & Hirsh-Pasek, 1994). Contrary to these findings, verbs have been reported to appear to a greater degree in the first words produced by children speaking Mandarin Chinese (Tardif, 1995, 1996), Japanese (Clancy, 1985), Korean (Choi, 2000; Choi & Gopnik, 1995; Kim, McGregor, & Thompson, 2000), and Tzotzil (de León, 1997). An explanation for the difference in the production of first words among different languages may be found in the environmental effects.

CARETAKER INPUT

The categories of children's earliest words appear to relate to the input of caretakers in children's language environments



5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah

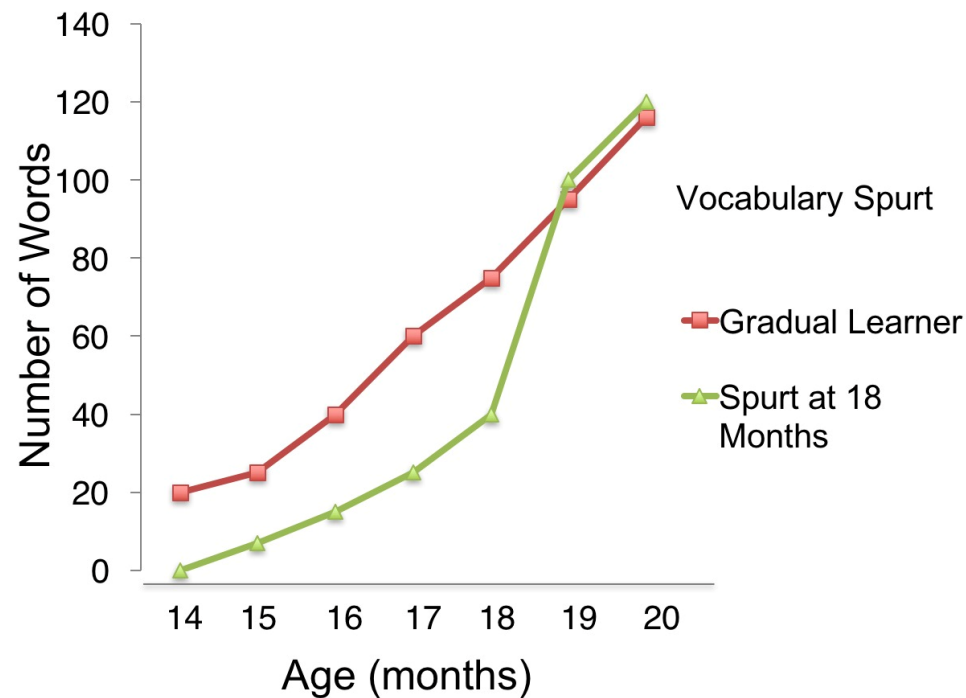


Gurt



Vocabulary growth spurt

- One-year-olds typically know around 50 words.
- By toddlerhood (around 2), their vocabulary explodes to 200 words, forming short, essential phrases ("text message" speech) to communicate.





5.4. Language Development

- How babies communicate (verbal and non-verbal)



Blah
Blah Blah



Gurt



Two-word sentences and telegraphic speech

- At 18 months, toddlers start using two-word phrases ("baby bye-bye") to communicate.
- These early sentences focus on meaning, omitting articles and grammatical features, similar to text messages ("Give baby ball").



<https://youtube.com/shorts/mD0EkESknLs?si=AVKIR7oQZlflL6fE>



https://youtu.be/8hnmfi-8df0?si=P3Pd2j9N-kXf0gF_



5.2 Language Milestones

- How babies communicate (verbal and non-verbal)



2 Months

- Coos, makes gurgling sounds
- Turns head toward sounds



4 Months

- Begins to babble
- Babbles with expression and copies sounds he hears
- Cries in different ways to show hunger, pain, or being tired



6 Months

- Responds to sounds by making sounds
- Strings vowels together when babbling ("ah," "eh," "oh") and likes taking turns with parent while making sounds
- Responds to own name
- Makes sounds to show joy and displeasure
- Begins to say consonant sounds (jabbering with "m," "b")



9 Months

- Understands "no"
- Makes a lot of different sounds like "mamamama" and "bababababa"
- Copies sounds and gestures of others
- Uses fingers to point at things



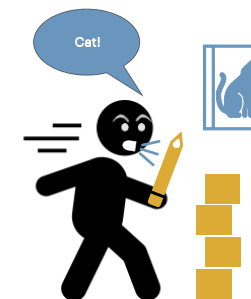
1 Year

- Responds to simple spoken requests
- Uses simple gestures, like shaking head "no" or waving "bye-bye"
- Makes sounds with changes in tone (sounds more like speech)
- Says "mama" and "dada" and exclamations like "uh-oh!"
- Tries to say words you say



18 Months

- Says several single words
- Says and shakes head now
- Points to show others what is wanted



2 Years

- Points to things or pictures when they are named
- Knows names of familiar people and body parts
- Says sentences with 2 to 4 words
- Follows simple instructions
- Repeats words overheard in conversation
- Points to things in a book



5.2 Language Milestones

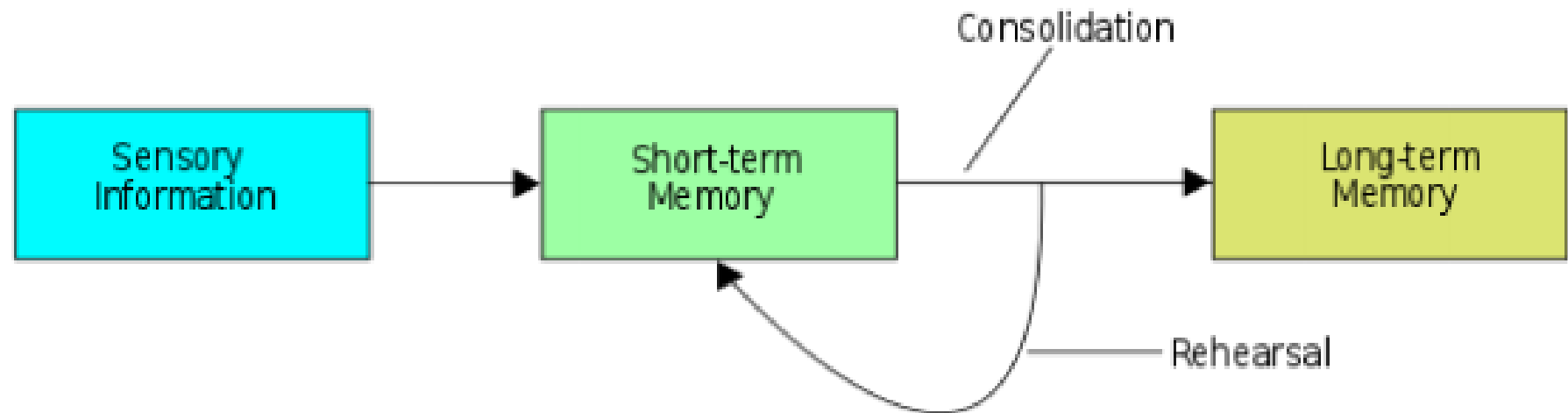
- How babies communicate (verbal and non-verbal)
- Child-Directed Speech: exaggerating the vowel and consonant sounds, using a high-pitched voice, and delivering the phrase with great facial expression





5.6. Memory and Attention

- How babies remember the world.
- **Memory Stages:** Our memory has 3 stages: Sensory (fleeting), Short-term (seconds), and Long-term (potentially permanent).



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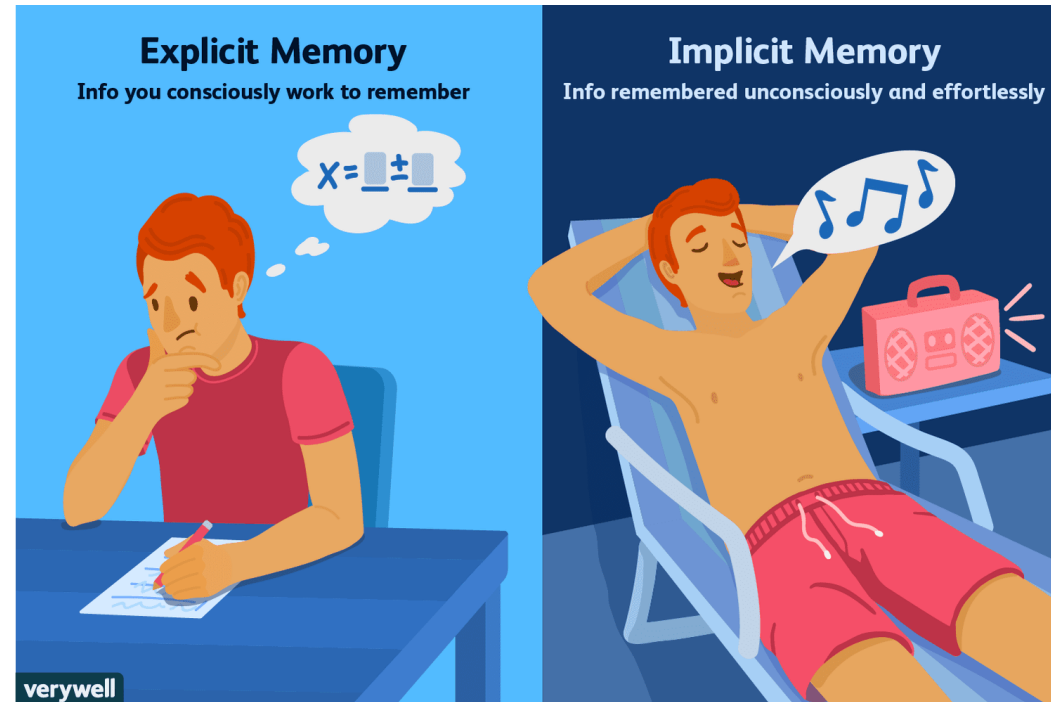
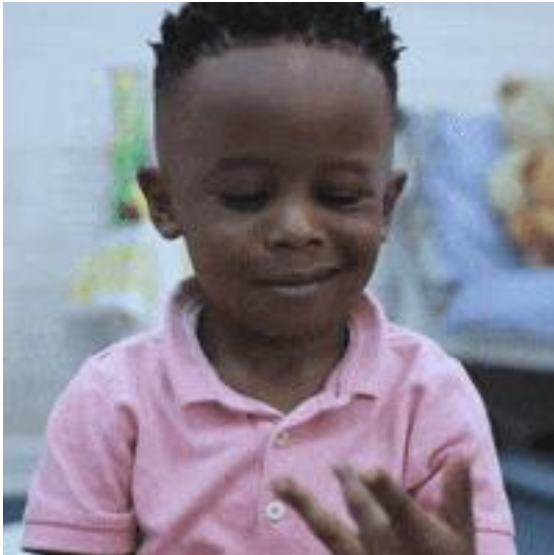
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5.6. Memory and Attention

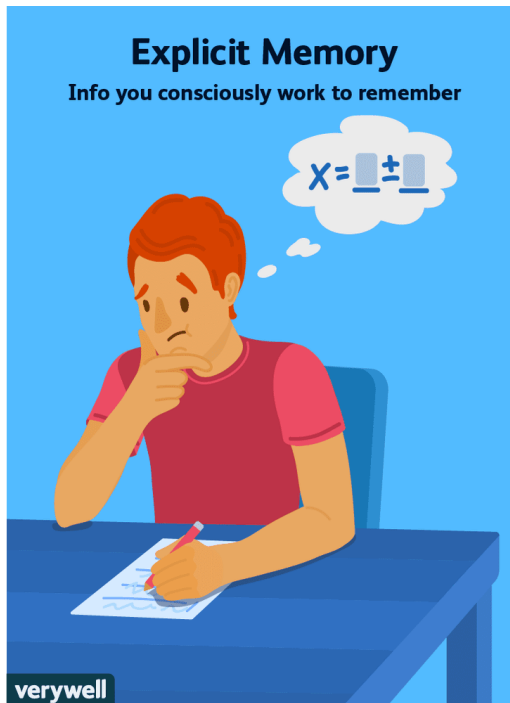
- How babies remember the world.
- **Explicit Memory:** This includes details about events (episodic) and general knowledge (semantic). Flashbulb memories (vivid snapshots of shocking events) are a specific type of episodic memory.
- **Implicit Memory:** This handles procedures learned through practice, like riding a bike or playing a sport. We access these skills automatically without even thinking.





5.6. Memory and Attention

- How babies remember the world.
- **Explicit Memory:** This includes details about events (episodic) and general knowledge (semantic). Flashbulb memories (vivid snapshots of shocking events) are a specific type of episodic memory.



Semantic memory:
which concerns facts



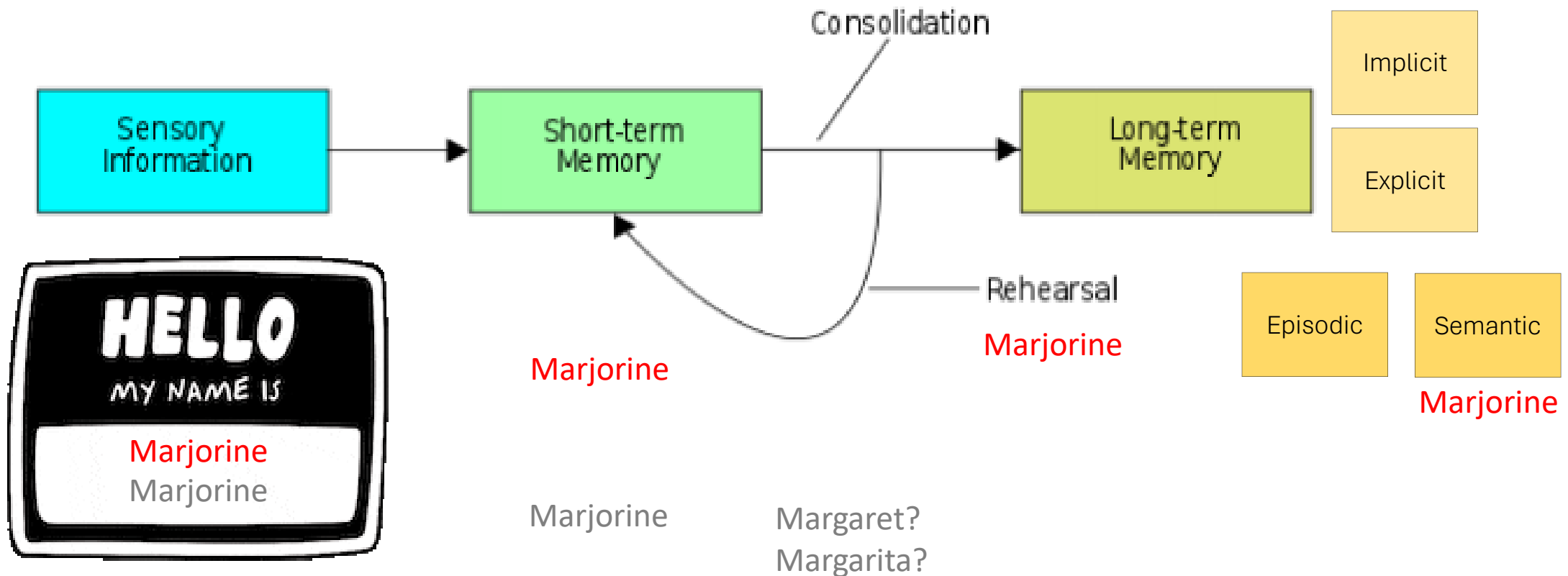
Episodic memory: which concerns primarily personal or autobiographical information





5.6. Memory and Attention

- How babies remember the world.
- **Memory Stages:** Our memory has 3 stages: Sensory (fleeting), Short-term (seconds), and Long-term (potentially permanent).





5.6. Memory and Attention

- Understanding memory and attention in babies/toddlers has been difficult, but progress has been made.



<https://youtu.be/ee3MFixiXwc>



<https://youtu.be/DkwEFw0UEz4>