Lesson 4: Case Studies – Practical Application of Developmental Theories

Course: English for Speech and Language Pathology III
Program: Third-Year Bachelor's in Speech and Language Pathology (Orthophonia)
Duration: 90 minutes

Learning Outcomes

By the end of this lecture, students will be able to:

1. Apply major developmental theories to real-life clinical situations.
2. Analyze children's developmental behaviors using theoretical frameworks.
3. Differentiate typical from atypical development through case analysis.
4. Select appropriate Speech-Language Pathology (SLP) intervention strategies based on developmental theory.
5. Integrate biological, cognitive, social, emotional, and environmental factors into clinical reasoning.
6. Develop evidence-based recommendations for children and adolescents with developmental difficulties.

Lesson Outline

1. Introduction
2. Why Use Case Studies?
3. Case Study 1: Language Delay
4. Case Study 2: Autism Spectrum Disorder
5. Case Study 3: Stuttering
6. Case Study 4: Adolescent Social Communication
7. Case Study 5: Child with Hearing Loss
8. Integrating Developmental Theories into Clinical Practice
9. Essential Vocabulary
10. Practical Activities
11. Summary
12. Review Questions

1. Introduction

Developmental theories become meaningful when applied to real clinical situations. Speech-language pathologists rarely work with textbook examples; instead, they evaluate children whose developmental profiles are influenced by biological, psychological, social, cultural, and environmental factors (Berk, 2023).

Case studies encourage clinical reasoning by requiring students to identify developmental strengths, recognize delays, interpret behaviors, and recommend evidence-based interventions (Paul et al., 2024).

2. Why Use Case Studies?

Case studies help clinicians:

- Connect theory with practice.
- Improve clinical decision-making.
- Develop problem-solving skills.
- Understand individual differences.
- Plan individualized intervention.
- Collaborate with families and multidisciplinary teams (Owens, 2023).

When analyzing a case, clinicians should ask:

- Is development typical for the child's age?
- Which developmental domains are affected?
- Which developmental theory best explains the child's behavior?
- What intervention would be most appropriate?

3. Case Study 1: Expressive Language Delay

Background

Ahmed is **3 years old**.

He understands simple instructions but speaks only about **20 single words** and rarely combines words into sentences.

His hearing is normal.

His parents report that he prefers pointing rather than talking.

Developmental Analysis

Piaget's Cognitive Theory

Ahmed is in the **Preoperational Stage**, during which symbolic thinking and rapid vocabulary growth should occur (Piaget, 1952).

His expressive language is below expected developmental milestones (Owens, 2023).

Vygotsky's Sociocultural Theory

Ahmed benefits from adult support.

His language can improve through:

- Modeling
- Scaffolding
- Interactive play
- Shared book reading

(Vygotsky, 1978)

Skinner's Behavioral Theory

Parents and clinicians can reinforce verbal attempts through praise, rewards, and natural consequences (Skinner, 1953).

SLP Intervention

- Parent training
- Language stimulation
- Expansion and recasting
- Play-based therapy
- Modeling
- Positive reinforcement

4. Case Study 2: Autism Spectrum Disorder (ASD)

Background

Sara is **5 years old**.

She has:

- limited eye contact,
- echolalia,
- repetitive behaviors,
- difficulty engaging in conversations.

Developmental Analysis

Bandura's Social Learning Theory

Sara has difficulty learning communication through observation and imitation, skills that are often reduced in children with autism (Bandura, 1977).

Vygotsky's Theory

Social interaction is essential for language learning.

Structured peer interaction can improve communication.

Bronfenbrenner's Ecological Systems Theory

Sara's development is influenced by:

- family support,
- school environment,
- therapy services,
- community resources.

(Bronfenbrenner, 1979)

SLP Intervention

- Joint attention activities
- Social stories
- Peer-mediated intervention
- Visual supports
- Parent coaching
- Functional communication training

(Paul et al., 2024)

5. Case Study 3: Childhood Stuttering

Background

Omar is **7 years old**.

He repeats sounds frequently.

His teacher notices he avoids answering questions.

His parents report increasing anxiety.

Developmental Analysis

Erikson's Psychosocial Theory

Omar is in the **Industry vs. Inferiority** stage.

Repeated communication failures may reduce self-confidence and increase feelings of inferiority (Erikson, 1963).

Humanistic Perspective

According to Rogers (1961), therapy should provide:

- empathy,
- acceptance,
- unconditional positive regard.

Reducing communication anxiety is essential.

Behavioral Theory

Fluent speech can be reinforced through positive feedback rather than criticism.

SLP Intervention

- Fluency shaping
- Stuttering modification
- Parent education
- Classroom accommodations
- Confidence-building activities

6. Case Study 4: Adolescent Social Communication Difficulties

Background

Lina is **15 years old**.

Academically she performs well.

However, she:

- misunderstands sarcasm,
- interrupts conversations,
- struggles with peer relationships.

Developmental Analysis

Piaget

Adolescents typically reach the **Formal Operational Stage**, characterized by abstract thinking and understanding figurative language (Piaget, 1952).

Difficulty interpreting sarcasm may indicate pragmatic language deficits.

Erikson

Lina is experiencing **Identity vs. Role Confusion**, where peer relationships play a major role in psychosocial development (Erikson, 1963).

Bronfenbrenner

School, peers, family, and culture all influence adolescent communication.

SLP Intervention

- Pragmatic language therapy
- Role-playing
- Conversation coaching
- Peer-group intervention
- Social problem-solving

7. Case Study 5: Child with Hearing Loss

Background

Adam is **2 years old**.

He has moderate bilateral hearing loss.

His spoken vocabulary is limited.

He recently received hearing aids.

Developmental Analysis

Biological Perspective

Reduced auditory input delays spoken language development unless early intervention is provided (Owens, 2023).

Vygotsky

Language develops through meaningful interaction.

Family involvement is essential.

Bandura

Children acquire communication skills by observing caregivers.

Parents should model language continuously.

SLP Intervention

- Auditory-verbal therapy
- Parent coaching
- Listening activities
- Vocabulary expansion
- Early language intervention

(Paul et al., 2024)

8. Integrating Developmental Theories into Clinical Practice

Speech-language pathologists rarely rely on a single developmental theory.

Instead, effective intervention combines multiple perspectives.

Theory	Clinical Application in SLP
Piaget	Select age-appropriate language tasks
Vygotsky	Use scaffolding and guided learning
Skinner	Reinforce successful communication
Bandura	Model correct speech and language
Erikson	Promote confidence and participation
Bronfenbrenner	Involve family and school
Rogers	Build a supportive therapeutic relationship
Biological	Consider neurological and genetic factors

9. Essential Vocabulary

Term	Definition
Case Study	Detailed analysis of an individual situation
Clinical Reasoning	Decision-making based on evidence
Developmental Milestone	Expected skill at a particular age
Modeling	Demonstrating desired behavior
Scaffolding	Temporary support during learning
Reinforcement	Consequence that increases behavior
Expressive Language	Producing language
Receptive Language	Understanding language
Pragmatics	Social use of language

10. Practical Activities

Activity 1 – Match the Theory

Theory	Clinical Example
Piaget	_____
Skinner	_____
Bandura	_____
Vygotsky	_____
Erikson	_____

Activity 2 – Multiple Choice

1. Which theory emphasizes scaffolding?

a) Freud

b) Skinner

c) Vygotsky

d) Rogers

2. Which theory explains learning through observation?

a) Bandura

b) Erikson

c) Piaget

d) Freud

3. Which developmental stage includes identity formation?

a) Infancy

b) Early childhood

c) Adolescence

d) Older adulthood

Activity 3 – Short Answer

For each case:

1. Which developmental domains are affected?
2. Which developmental theory best explains the child's behavior?
3. Which intervention would you recommend?

Activity 4 – Clinical Discussion

A **6-year-old** child has normal intelligence but rarely interacts with classmates and avoids speaking during group activities.

Discuss:

- Which developmental theories explain this behavior?
- What additional assessment is needed?
- How should an SLP collaborate with teachers and parents?

11. Summary

Case studies bridge developmental theory and clinical practice by allowing students to apply theoretical concepts to authentic communication disorders. In Speech-Language Pathology, understanding how biological, cognitive, social, emotional, and environmental factors interact enables clinicians to conduct accurate assessments, design individualized interventions, and support communication across the lifespan. Effective clinical reasoning often integrates multiple developmental perspectives rather than relying on a single theory (Berk, 2023; Paul et al., 2024).

12. Review Questions

1. Why are case studies valuable in Speech-Language Pathology education?
2. How does Piaget's theory help explain language development?
3. Explain how Vygotsky's concept of scaffolding can be used in speech therapy.
4. Describe Bandura's concept of modeling and its role in intervention.
5. How does Skinner's theory support behavior change during therapy?
6. Explain Erikson's psychosocial theory in relation to childhood communication disorders.
7. How does Bronfenbrenner's ecological systems theory influence intervention planning?
8. Why is family involvement important in child language intervention?
9. Which developmental theory best supports parent-mediated intervention? Explain.
10. Why should speech-language pathologists integrate multiple developmental theories when planning treatment?