WPS

unlocking potential

For over 75 years, WPS has been the leading independent publisher of educational and psychological assessments and related intervention resources in the areas of autism, speech and language, school and clinical psychology, and occupational therapy.

wpspublish.com

Unraveling the Complexities of Pragmatics: Putting the Pieces Together

Presented by WPS Assessment Consultant

Laura Stevenson, MS, CCC-SLP

Objectives

Participants will learn

- six unique areas of pragmatic language

- the difference between Pragmatic Judgment and Pragmatic Performance

- how to determine strengths and weaknesses within a variety of pragmatic language domains

Laura Stevenson

MS, CCC-SLP

- 20+ years of experience as a speech–language pathologist

- Certificate of Clinical Competence from the American Speech-Language-Hearing Association

- Licensed by the Arizona Department of Health

- Experienced in a variety of school settings (Pre-K–Grade 12), private clinics (toddlers–school-aged children), and home health (birth–young adults)

- Contact Information:

  lstevenson@wpspublish.com
  424.318.9636

Assessment Consultant

I am an assessment consultant with Western Psychological Services. I am a salaried employee and have no additional relevant financial interests or conflicts of interest related to this presentation.

Agenda

- What are pragmatics?

- Commonly assessed pragmatic skills

- Informal methods of assessing pragmatic language

- Pragmatic Domains and Constructs

- Video-Based Assessment

  - Overview

  - Administration

  - Scoring

What Are Pragmatics?

"Knowing when to say what to whom and how much."
(*Hymes, 1971*)

"The range of communicative functions (reasons for talking), the frequency of communication, discourse skills (turn-taking, topic maintenance and change, requests for clarification), the flexibility to modify language for different listeners and social situations, and the ability to convey a coherent and informative narrative."
(*Paul, Norbury, & Gosse, 2017*)

Pragmatic Language

A broad array of linguistic skills works cohesively to produce pragmatic language. This includes appropriate:

Turn-taking	Politeness	Proper introduction to a topic
Stylistic variations adjusted for different listeners	Topic maintenance	Changes in direction or intention

The Environment That Generates Language Provides Context for What Is Communicated

Undiagnosed Pragmatic Communication Disorders

Negative Spiral

The Importance of Quality Communication

Pragmatic language deficits adversely affect the social and academic performance of school-aged children, especially those who present with high-functioning autism and social pragmatic communication disorder.

Commonly Assessed Pragmatic Skills

Body language

Eye contact

Conversation initiation, maintenance, ending

Making the sequence of statements coherent and logical

Taking turns with other speakers

Maintaining a topic

Informal Methods of Assessing Pragmatic Language

Narrative sample

Theory of mind

Emotional understanding task

Social problem-solving task

Informal Methods of Assessing Pragmatic Language *(cont.)*

Shared attention

Double interview

Click to add text
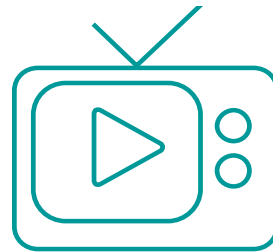Click to add text

Maintaining a topic

Conversation with a peer

Pragmatics Have Typically Been Assessed As…

- Isolated units

What If We Used Videos?

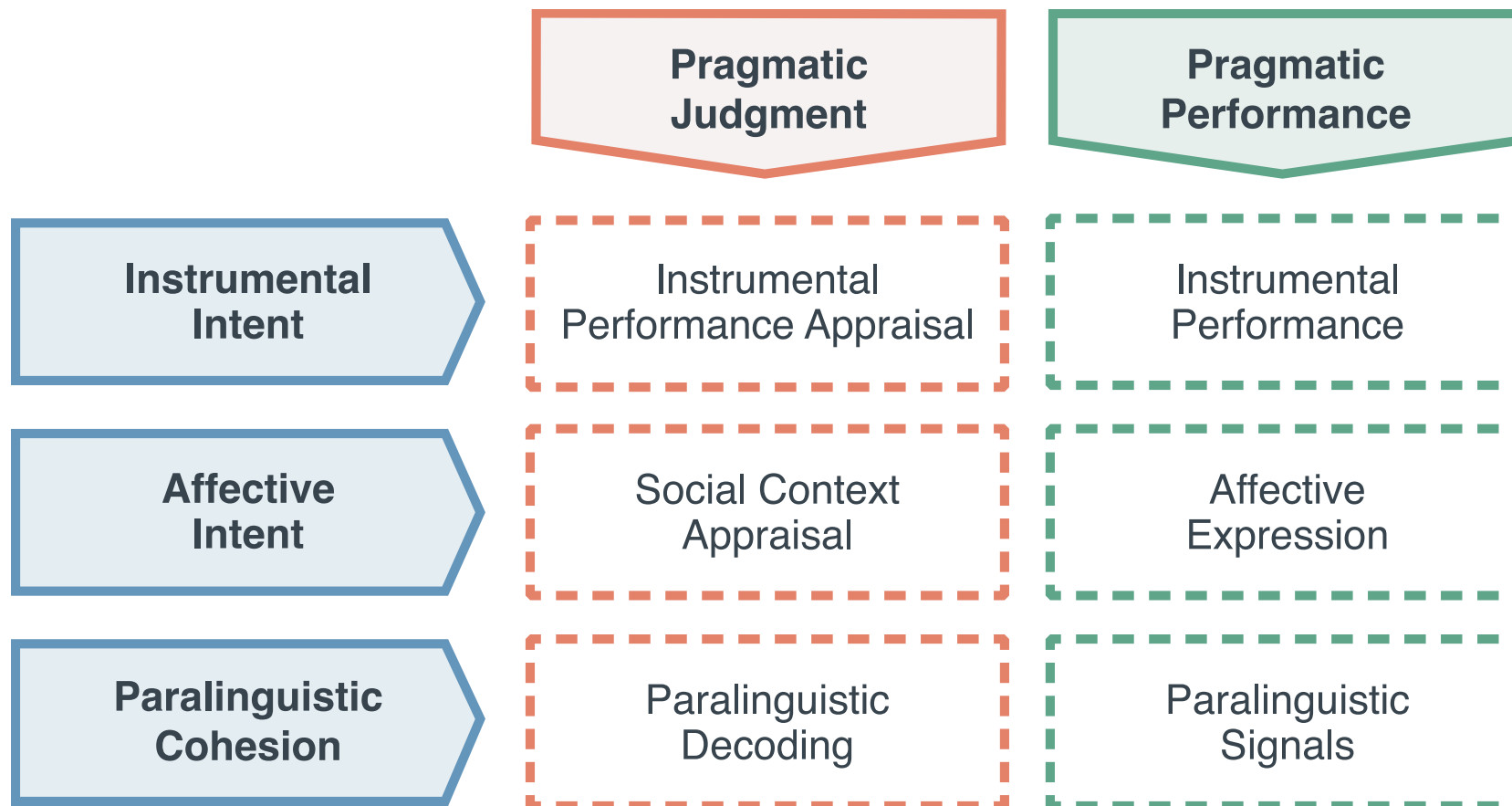Video-based assessment combines storytelling power of television

Authenticity of real-life social situations

Domains and Constructs

	Pragmatic Judgment	**Pragmatic Performance**
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Pragmatic Judgment Defined

- Ability to appropriately understand and use language

- Requires appropriate response at the appropriate time in a given social context

Pragmatic Judgment Defined *(cont.)*

- Pragmatic Judgment = receptive pragmatic skills

- Allows more detailed grasp of child's comprehension of social situations

- Distinguishes from broad definition of pragmatic language skills

Pragmatic Performance Defined

- Pragmatic Performance = expressive pragmatics

- Measured via responses given in social situations

- Responses vary, for example:

  - Answers to questions/ statements

  - Responses to expressed emotions

Receptive vs. Expressive Pragmatic Language Skills

Receptive:
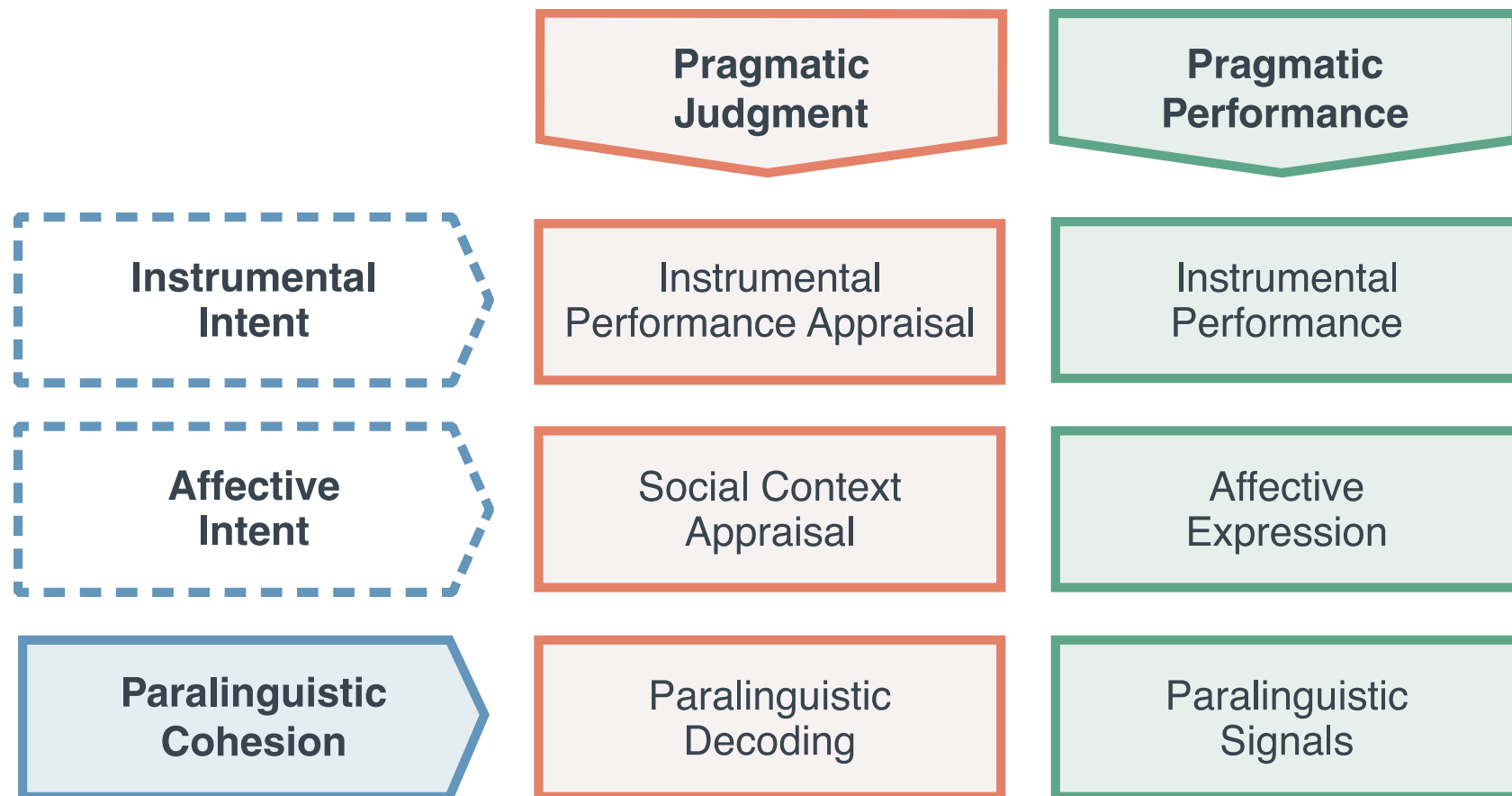Identifying correct & incorrect responses in a social context

Expressive:
Verbally providing appropriate responses in a given situation

Pragmatic Judgment
# vs. Pragmatic Performance

- Assessing both skills can:
  - Provide more details for understanding pragmatic profiles
  - Result in a more individualized plan
  - Produce a more effective plan

Domains: Instrumental vs. Affective Intent

	Pragmatic Judgment	**Pragmatic Performance**
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Instrumental Intent

- Effective relay of information

- Communication used as means to an end

- Heavy focus on message

- Little focus on affective or emotional functions

- Often used in individuals with ASD

Instrumental Intent

Primary Goal
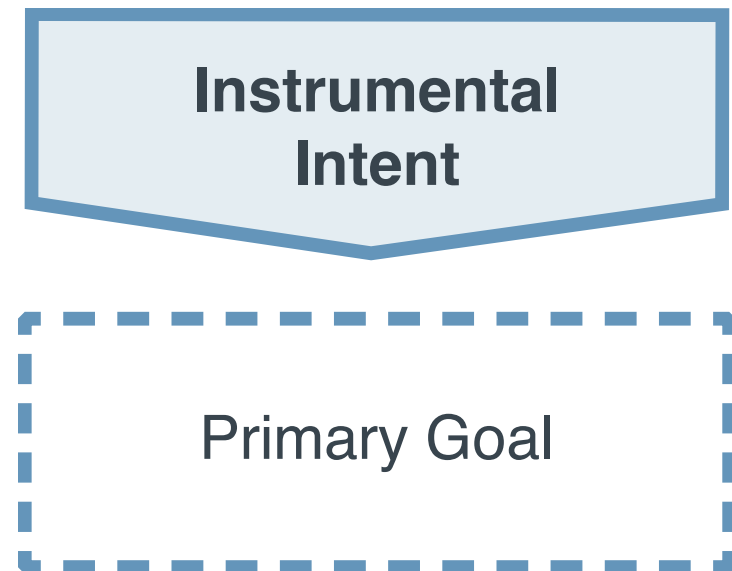
Affective Intent

- Expressing emotions to another person

- Key component of nonverbal communication

- Requires higher-level thought processing

Affective Intent

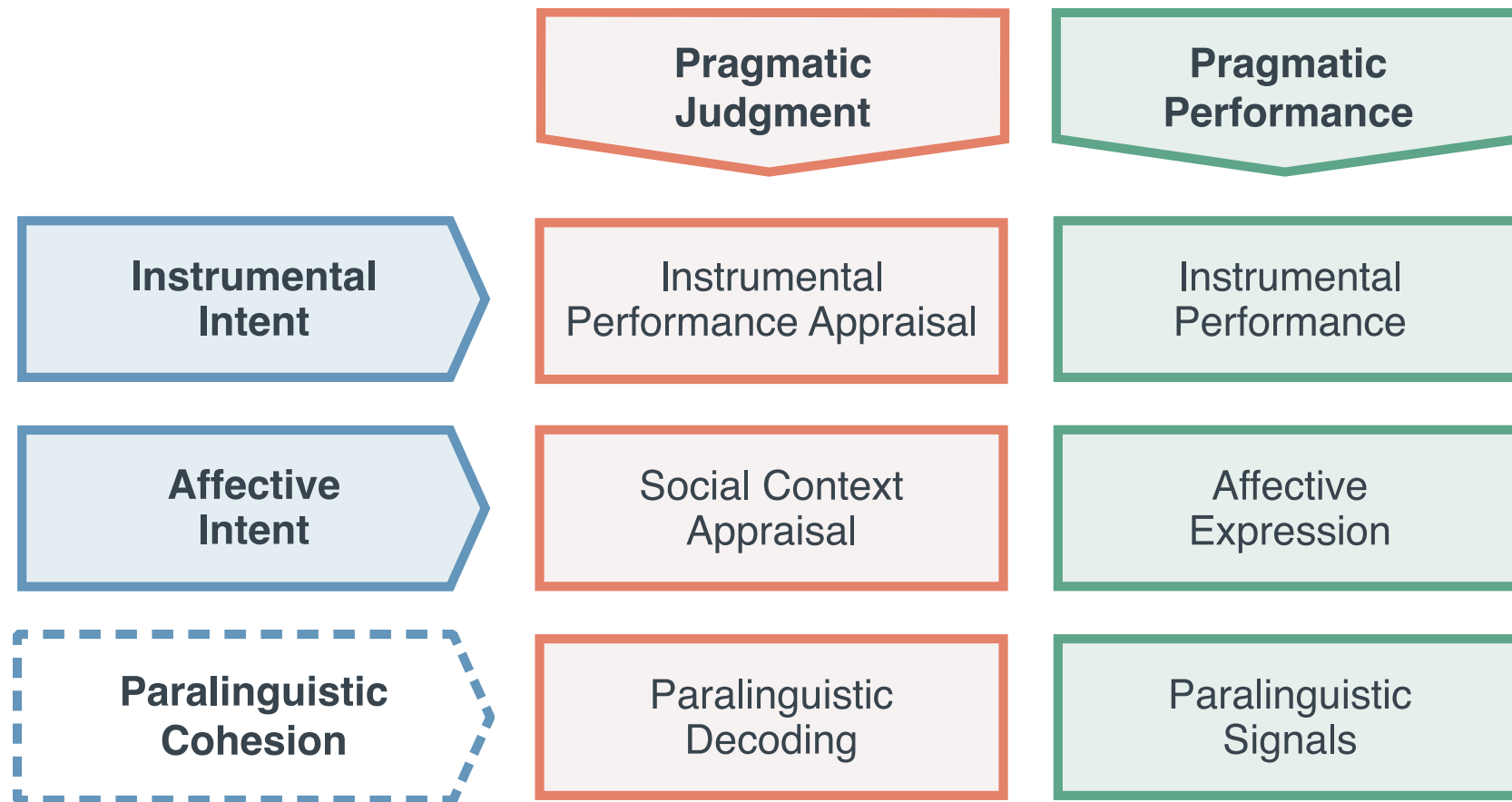Higher-Level Communication Skills

Affective Intent *(cont.)*

How does it differ from instrumental intent?

- Not used as means to an end

Domain: Paralinguistic Cohesion
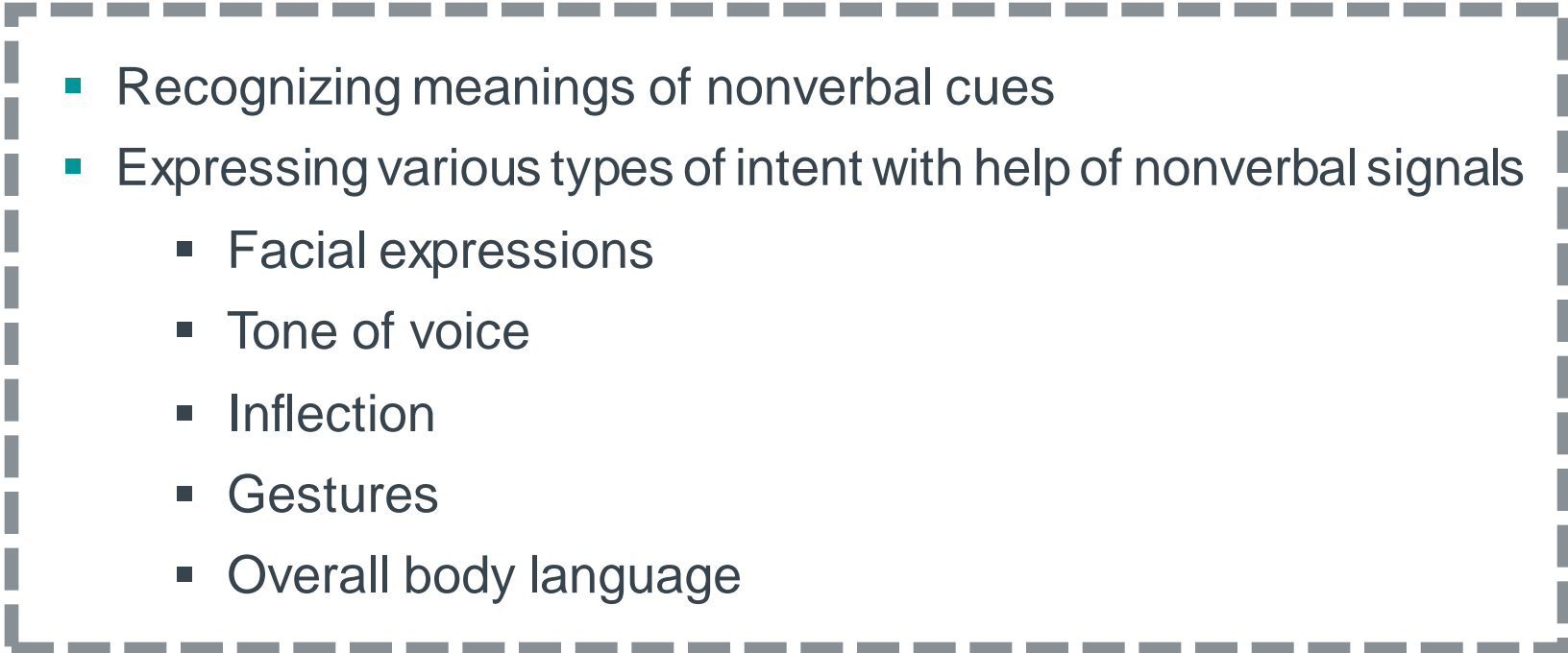
Domain: Paralinguistic Cohesion *(cont.)*

Represents integrative interaction between ability to detect speaker's intent by:

| Recognizing	Expressing

- Recognizing meanings of nonverbal cues
- Expressing various types of intent with help of nonverbal signals
    - Facial expressions
    - Tone of voice
    - Inflection
    - Gestures
    - Overall body language

Final Ingredient Needed for Appropriate and Effective Communication

Construct 1: Instrumental Performance Appraisal (IPA)

	Pragmatic Judgment	**Pragmatic Performance**
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals
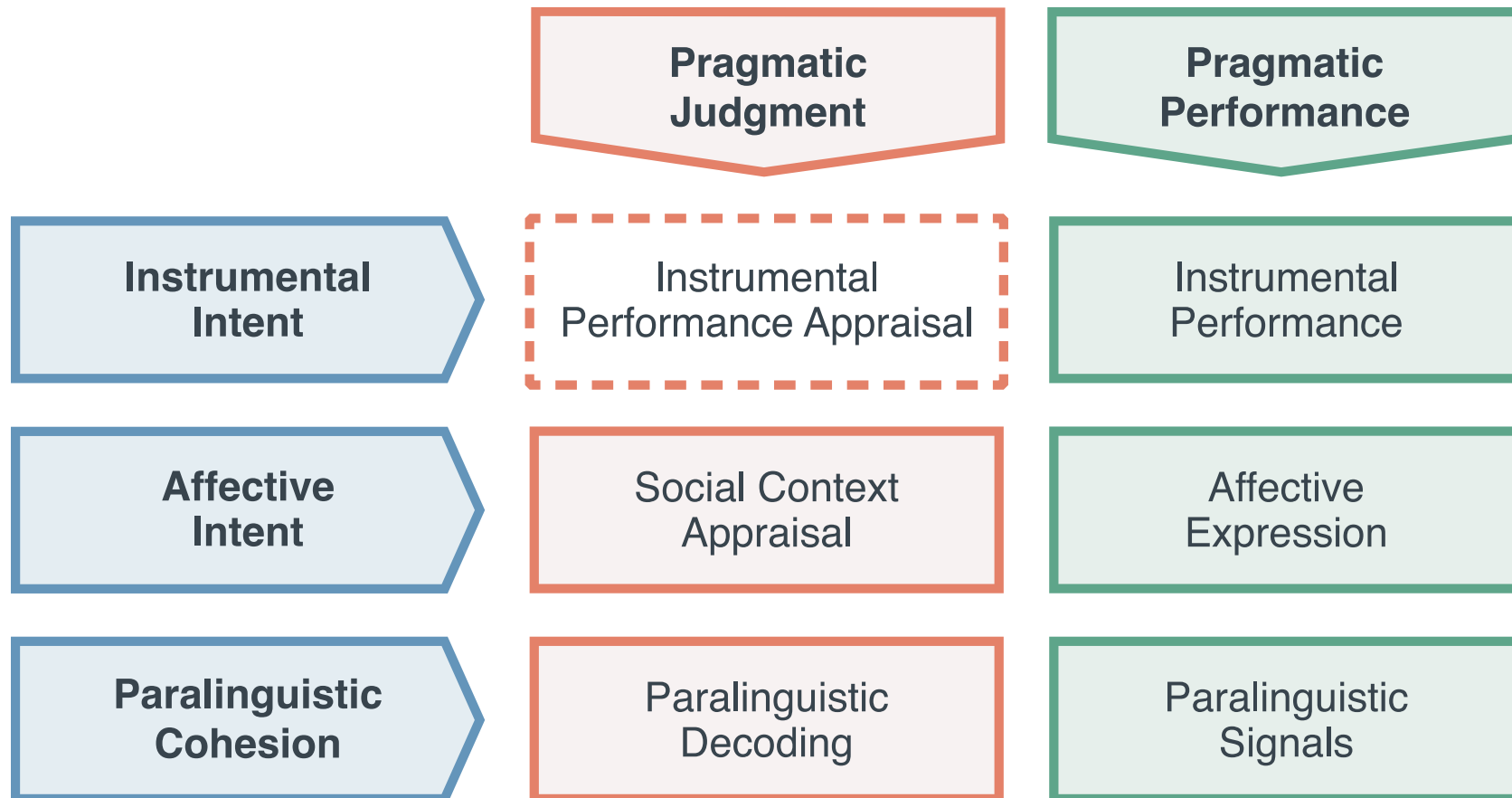
Construct 1: Instrumental Performance Appraisal (IPA) *(cont.)*

- Ability to judge appropriateness of:

  - Introductions

  - Farewells

  - Politeness

  - Making requests

  - Responding to gratitude

Instrumental Intent

Pragmatic Judgment

Instrumental Performance Appraisal
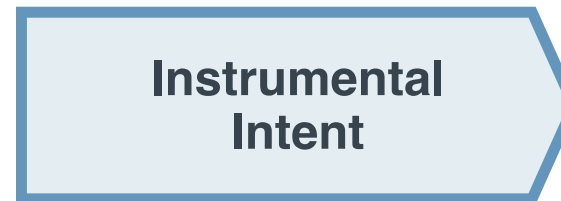
Ability to Discern Difference Between…

- Appropriate and inappropriate language

- When used in means-end or basic communication processes

- Includes (but is not limited to):
    - Introductions
    - Farewells
    - Politeness
    - Making requests
    - Responding to gratitude
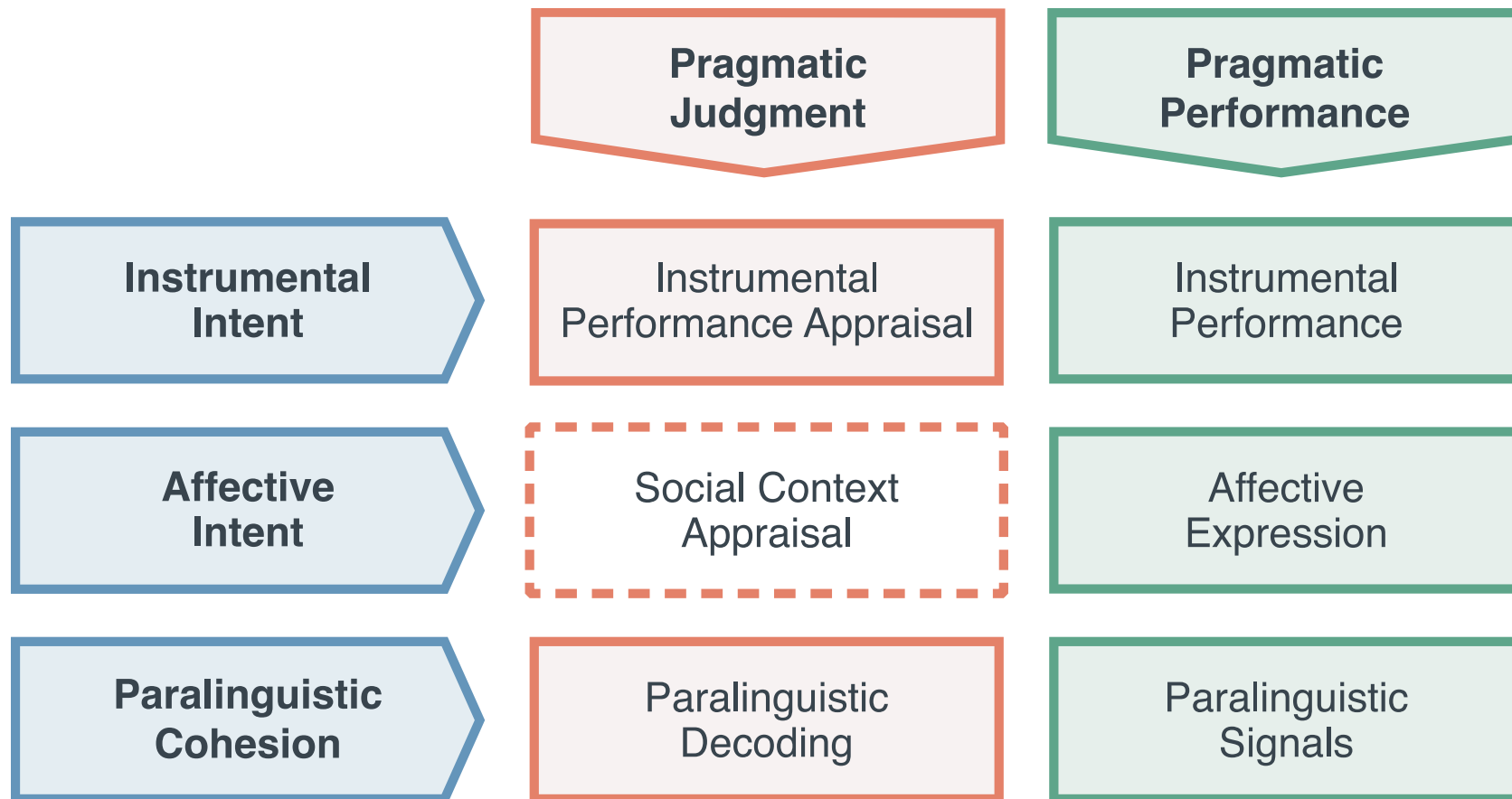   - Requesting information

These Skills Are Necessary to…

- Satisfy individual's basic needs
- Behave appropriately in social situations

Construct 2: Social Context Appraisal (SCA)

	Pragmatic Judgment	**Pragmatic Performance**
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Construct 2: Social Context Appraisal (SCA) *(cont.)*

- Ability to understand dynamic nature of social context
- Adequately process interactions among these contextual variables:
  - Physical setting and environment
  - Communication partners
  - Communicative intent
  - Conflict/solution, etc.
- Requires ability to demonstrate **perspective-taking**

Pragmatic Judgment

Affective Intent

Social Context Appraisal
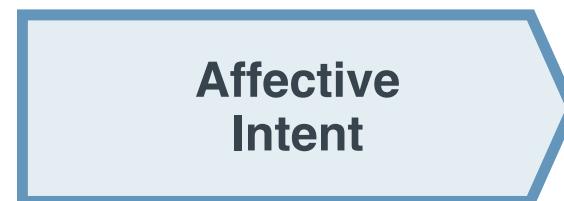
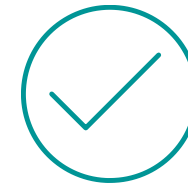# Construct 2: Social Context Appraisal (SCA) *(cont.)*

Ability to understand intent of others

Infer what others are thinking

Includes interpreting irony, sarcasm, idioms, humor

Ability to understand social context
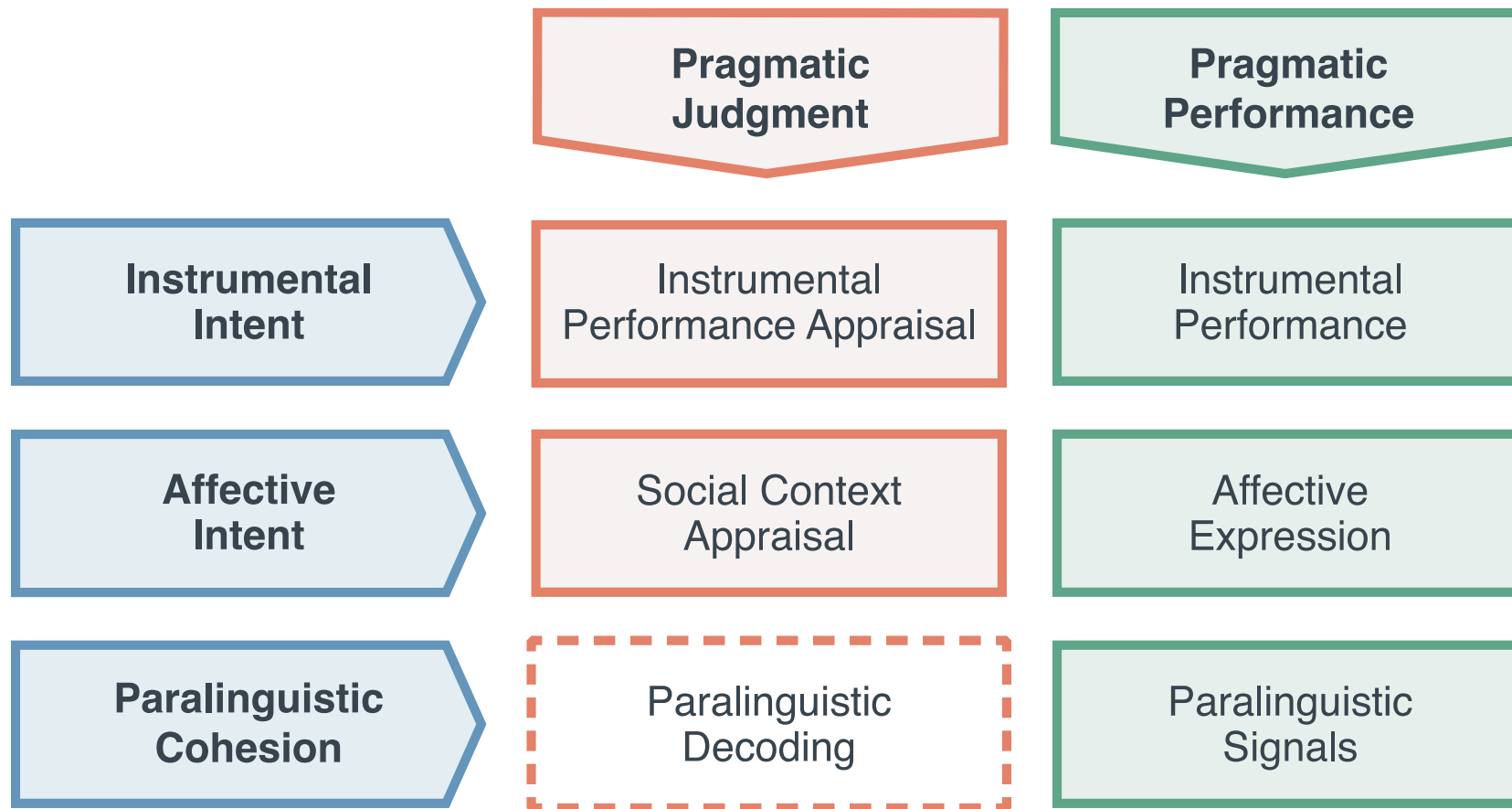
Settings

Changes in settings

Disruption in routines

Flexibility in disruption of routines

Construct 3: Paralinguistic Decoding (PD)

	Pragmatic Judgment	Pragmatic Performance
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Construct 3: Paralinguistic Decoding (PD) *(cont.)*

- Ability to read and understand facial expressions and nonverbal language

Pragmatic Judgment

Paralinguistic Cohesion
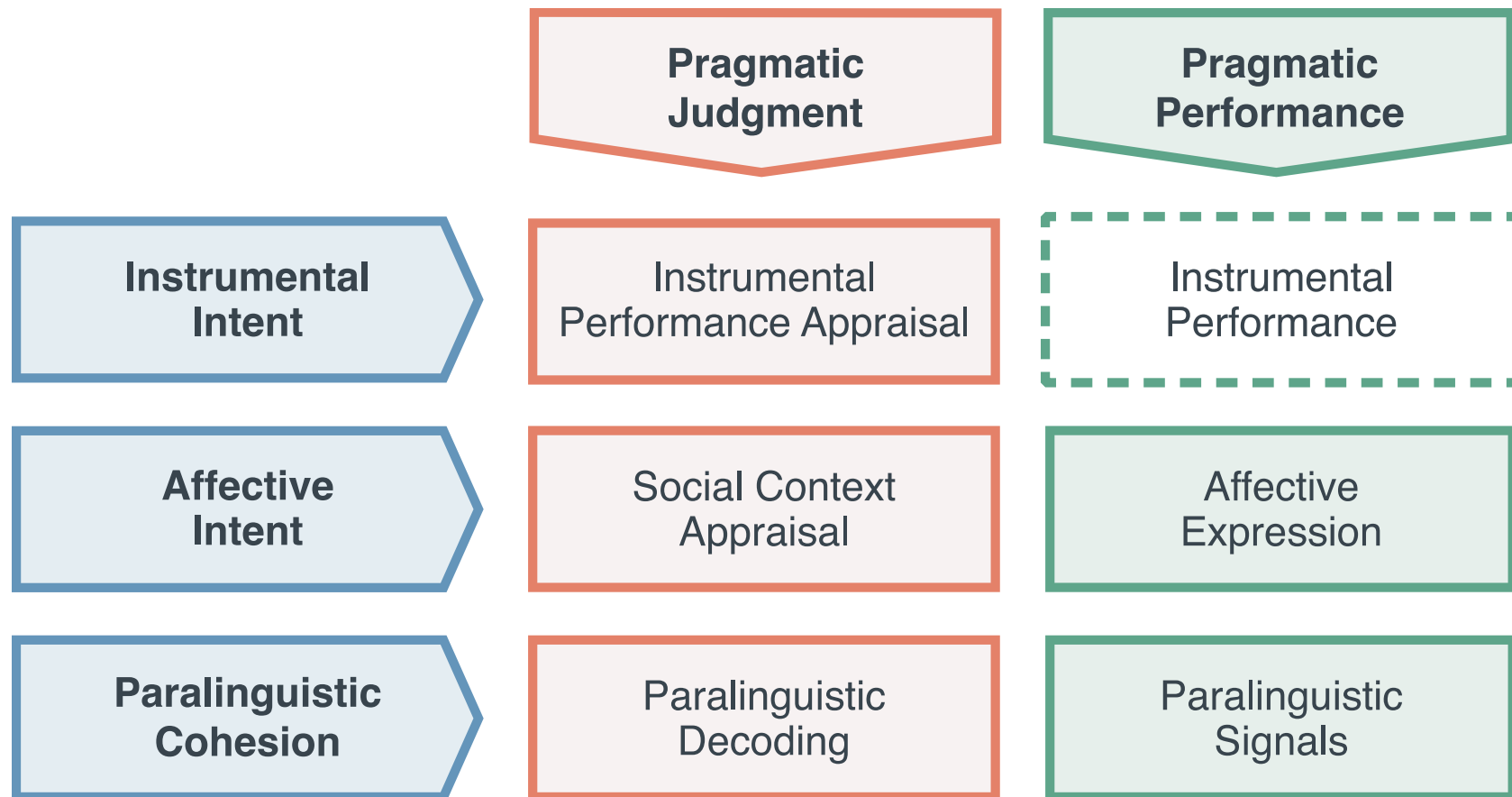
Paralinguistic Decoding
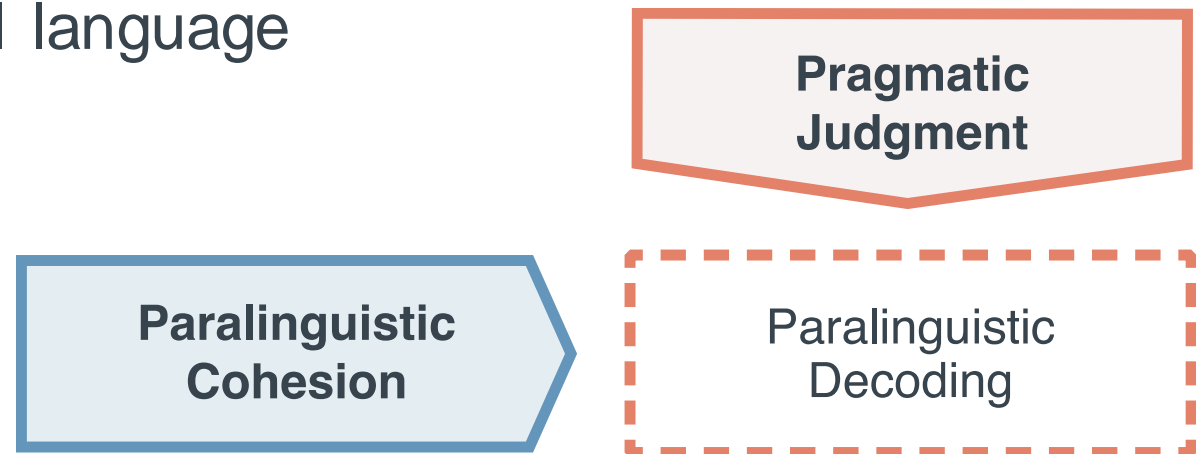
Construct 3: Paralinguistic Decoding (PD) *(cont.)*

- Is a form of Pragmatic Judgment

- Measures ability to read microexpressions and nonverbal language

- Can suggest what a person is feeling and thinking without use of words

- Can reveal how a person feels despite contradictory verbal message

- Appropriate reading of nonverbal language is critical in understanding another person

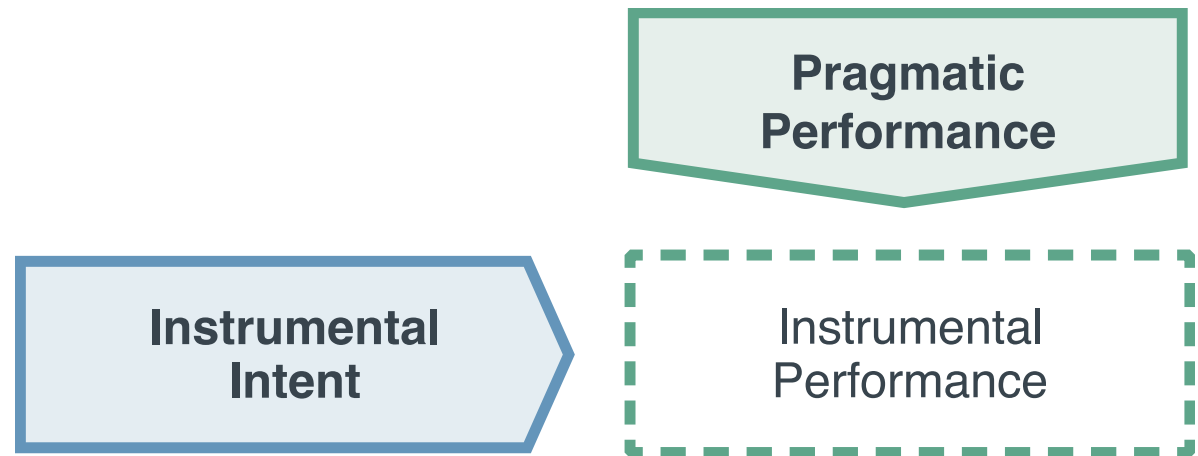 - Leads to an appropriate verbal response

Construct 4: Instrumental Performance (IP)

	Pragmatic Judgment	Pragmatic Performance
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Construct 4: Instrumental Performance (IP) *(cont.)*

- Includes:
  - Introductions
  - Farewells
  - Politeness
  - Making requests
  - Responding to gratitude
  - Requesting help
  - Answering phone calls
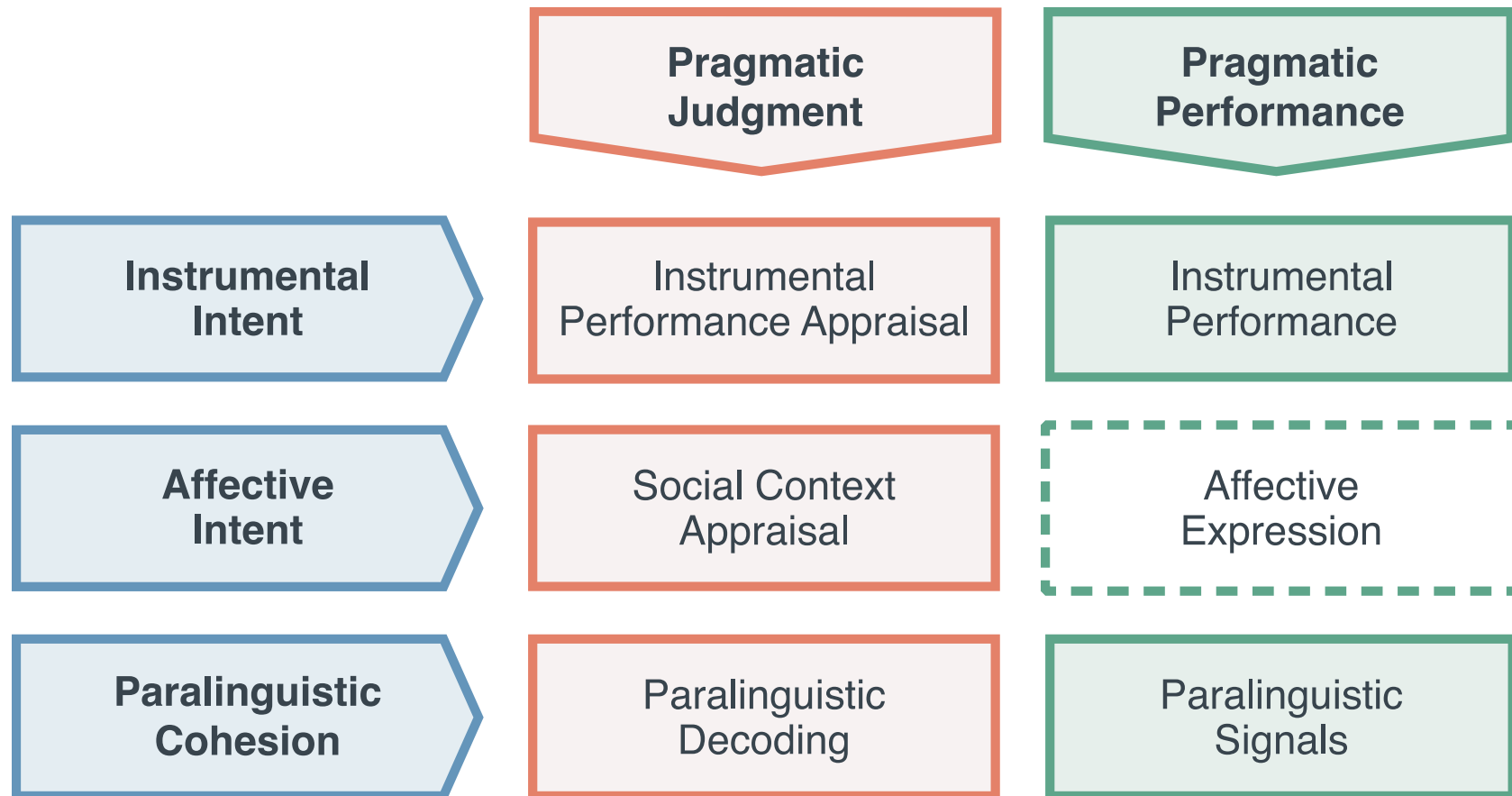 - Requesting info (e.g., directions)
  - Asking permission

Pragmatic Performance

Instrumental Intent

Instrumental Performance

Construct 4: Instrumental Performance (IP) *(cont.)*

- Defined in the same manner as Instrumental Performance Appraisal

- But instead of comprehension, assesses ability to adequately and appropriately <u>express</u> or use verbal means-end processes

Construct 5: Affective Expression (AE)

	Pragmatic Judgment	Pragmatic Performance
Instrumental Intent	Instrumental Performance Appraisal	Instrumental Performance
Affective Intent	Social Context Appraisal	Affective Expression
Paralinguistic Cohesion	Paralinguistic Decoding	Paralinguistic Signals

Construct 5: Affective Expression (AE) *(cont.)*

- Ability to appropriately express:
  - Polite refusal
  - Regret
  - Support of peers
  - Empathy
  - Gratitude
  - Compliments
  - Encouragement
  - Humor

Pragmatic Performance

Affective Intent

Affective Expression

Construct 5: Affective Expression (AE) *(cont.)*

- Is a noninstrumental pragmatic performance form of communication

- Examines ability to appropriately express emotions or higher-order language

  - Polite refusal
  - Regret
  - Support of peers
  - Compliments

  - Humor
  - Empathy
 - Gratitude
  - Encouragement

Construct 5: Affective Expression (AE) *(cont.)*

- Requires higher-level thinking as purpose not designed to fulfill basic needs

- References to emotional states indicate deeper understanding of mind and emotion

- Crucially affects
    - Flow of conversation
    - Ability to understand others' point of view

- Is essential in relationship building

Construct 5: Affective Expression (AE) *(cont.)*

- Can affect conversational techniques, such as:

  - Topic selection

  - Maintenance

  - Introduction

  - Transition

  - Closure

  - Responsiveness to conversational partner

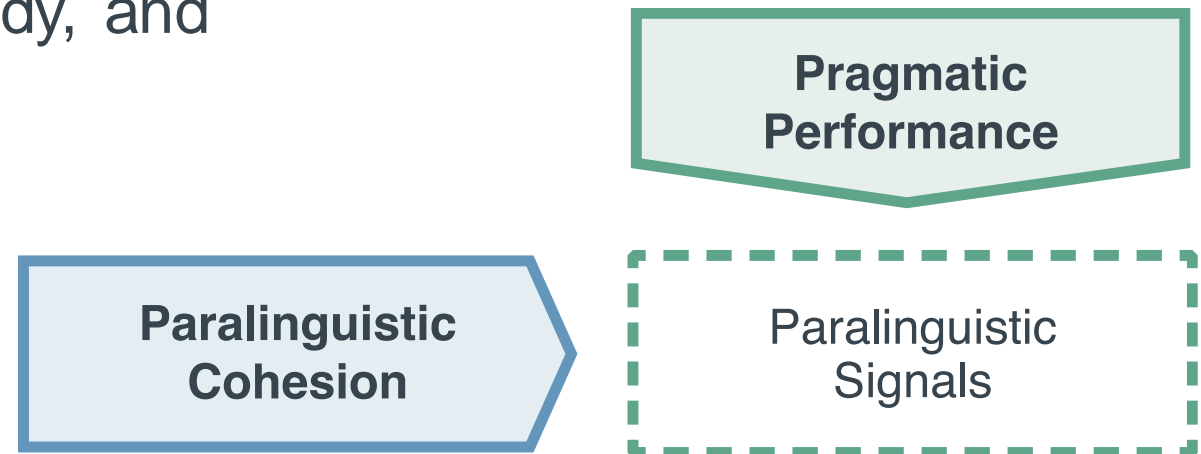- Expressed through verbal feedback or affective expression
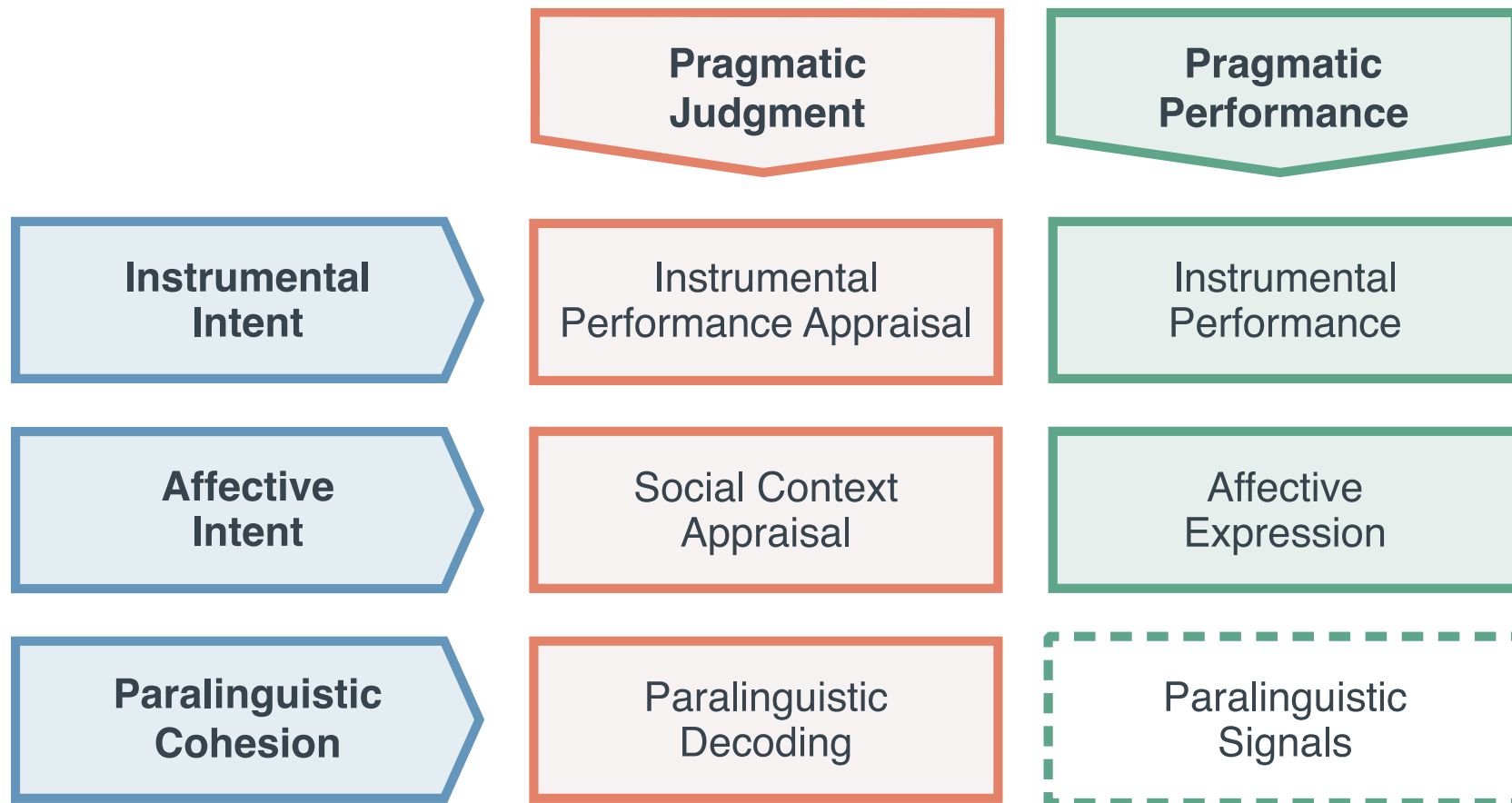
Construct 6: Paralinguistic Signals (PS) *(cont.)*

- Ability to use facial expressions, nonverbal language, prosody, and intonation appropriately

Pragmatic Performance

Paralinguistic Cohesion

Paralinguistic Signals

# **Construct 6:** Paralinguistic Signals (PS) *(cont.)*

- A noninstrumental form of communication:

    - Assesses ability to appropriately use microexpressions

    - Gestures

    - Prosody

- In contrast to Paralinguistic Decoding, this is the *acting out* of the microexpressions and gestures

Construct 6: Paralinguistic Signals (PS) *(cont.)*

Impacts speaker's:

- Choice of language
- Flow of conversation
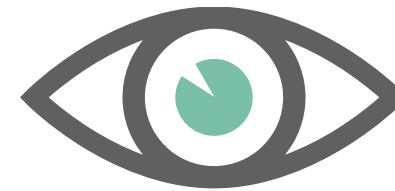
Often noted in:

- Facial expressions
- Body posture
- Tone of voice
- Eye contact

Review 6 Constructs

Instrumental Performance Appraisal

The IPA subtest measures awareness of basic social routines and the ability to judge their appropriateness. This includes the ability to judge appropriateness of introductions, politeness, making requests, requesting help, answering phone calls, asking for permission, identifying rude tone in requests, identifying polite language, understanding when interruptions are appropriate, and understanding rules of conversational turn-taking.

Social Context Appraisal

The SCA subtest measures awareness of social cues and the ability to understand the intent of others and to infer what others are thinking (perspective-taking). This also includes detecting nonverbal cues, understanding indirectly implied requests and/or statements (idioms, expressions), making appropriate inferences (sarcasm), and making judgments about social context when situation cues change.

Paralinguistic Decoding

The PD subtest measures the ability to detect a speaker's intent by recognizing meanings of various nonverbal cues, such as facial expression, tone of voice, inflections in prosody, gestures, and overall body language.

Instrumental Performance

The IP subtest measures language skills that are necessary to satisfy an individual's basic needs and to express communicative intent that is instrumental in nature. This includes the ability to use social routine language, such as expressing greetings, making introductions, being polite, making requests, responding to gratitude, requesting help, requesting information (directions), and asking for permission.

Affective Expression

The AE subtest measures the ability to appropriately express higher-order pragmatic language that is emotive in nature, such as regret, sorrow, peer support, praise, empathy, gratitude, and encouragement.

Paralinguistic Signals

The PS subtest measures the ability to use various nonverbal cues, such as facial expressions, tone of voice, inflections in prosody, gestures, and overall body language, to express various communicative intents.

CAPs™
Clinical Assessment of Pragmatics

Adriana Lavi, PhD, CCC-SLP

CAPs Overview

- Individually administered performance test for individuals ages 7 through 18 years measuring comprehensive pragmatic language skills using a video-based format.

- The CAPs measures judgment (comprehension) and performance (expression) of pragmatic language and yields scores across six areas of pragmatic skills.

- Published by author in 2018 (item content remains the same for WPS version, 2019).
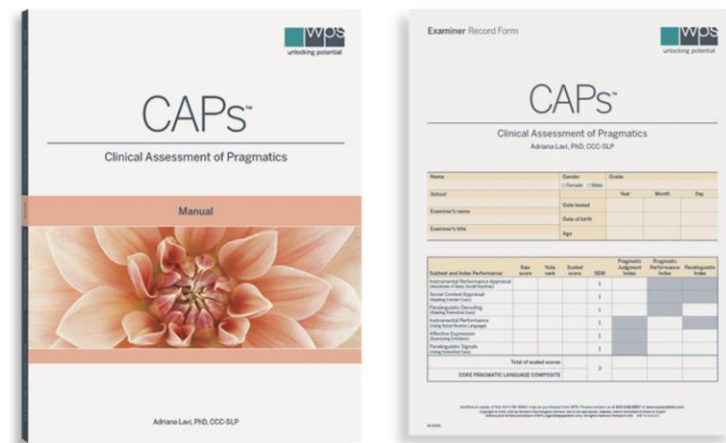
Video-Based Assessment

- Uses video narrative for eliciting pragmatic language responses from individuals

- **Purpose:** To analyze and measure individual's ability to

  - Understand real-life social situations

  - Respond to real-life social situations

wps
unlocking potential

Video-Based Assessment
(cont.)

Combines storytelling power of television

Authenticity of real-life social situations

To obtain as naturalistic responses as possible

Powerful and prolific testing tool

Both effective and time-efficient

Key Features

- Unique test design uses videos that show true-to-life interactions of social situations.
  - The CAPs videos display real-life situations and social environments and ask the examinee to describe either what is going on or how they would respond.
  - Other current pragmatic language tests use hypothetical scenarios that are read aloud to the examinee.

Key Features *(cont.)*

- The CAPs measures the examinee's *understanding* of social situations and their ability to *express* themselves in the appropriate way given a variety of situations.

    - Measures verbal and nonverbal responses (voice inflection, tone of voice, facial cues) as well as superficial social norms (greetings, introductions) and high-level emotions (grief, support, surprise).

Key Features *(cont.)*

- The CAPs is useful for distinguishing problems in understanding and using pragmatic language, particularly in those individuals with autism and pragmatic language impairment.

  - These individuals can score within the average range on other language measures and even pragmatic tests because they know what the answers "should be."

  - But when they are put in a social situation, they often cannot demonstrate this knowledge. The CAPs videos mimic actual social exchanges and identify strengths and weaknesses in higher-level language expression, inferential thinking, and understanding the mind of others when given verbal and nonverbal cues.

CAPs Purposes

- The results of the CAPs test provide comprehensive information on pragmatic language skills and social language development of children and young adults. It has four essential purposes:

1. To help identify pragmatic language deficits and determine the degree of such deficits (e.g., initial IEP-based evaluations)

2. To help determine strengths and weaknesses within a variety of pragmatic language domains (e.g., pragmatic judgment vs. performance; instrumental communication vs. performance; instrumental communication vs. affective communication, comprehension, and use of paralinguistic cues)

CAPs Purposes *(cont.)*

3. To help document progress in pragmatic language skills, measure treatment efficacy, and reevaluate overall pragmatic language profiles as part of triennial IEP-based reviews

4. To help analyze social pragmatic language skills in children and young adults for research purposes

Informal Assessment Data – Optional

Conversation Adaptation Checklist

- Instrumental Performance Appraisal (Awareness of Basic Social Routines)

- Social Context Appraisal (Reading Context Cues)

- Paralinguistic Decoding (Reading Nonverbal Cues)

- Instrumental Performance (Using Social Routine Language)

- Affective Expression (Expressing Emotions)

- Paralinguistic Signals (Using Nonverbal Cues)

Administration and Scoring

Administration and Scoring
(cont.)

- Full administration takes about 45 minutes to complete.

- Select the "CAPs Full Version" to administer all of the introduction, examples, and six subtests.

  - Digitally through the WPS® Online Evaluation System™ (OES) platform

  - USB drive

- If administering in multiple sessions or after a break, you may select specific subtests but must still select the Full Version first to administer the examples for the subtest of interest.

Administration and Scoring *(cont.)*

- Videos may not be repeated, paraphrased, or explained by the examiner, though the examiner can repeat item questions one time if requested.

- Examinees are never penalized for grammar and/or articulation errors.

- All scoring instructions are provided in the Record Form.

- The Record Form is available in two different options:

  - Digitally through the WPS OES platform, or

  - Paper/printed version

CAPs Total Scores and Indexes

The CAPs yields a standard score and percentile for the overall composite score and three index scores; the six subscale scores are given as scaled scores and percentiles.

- **Core Pragmatic Language Composite**—most accurate measure of the examinee's pragmatic competence, based on all six subtests.

- **Pragmatic Judgment Index**—ability to detect, comprehend, and interpret contextualized social cues.

- **Pragmatic Performance Index**—ability to express pragmatic knowledge across contexts from simple routine social exchanges to complex emotional encounters.

- **Paralinguistic Index**—ability to detect and interpret the intent of a speaker by recognizing nonverbal cues.

Scores

- Standard and scaled scores are interpreted according to ranges based on the standard deviations of the normative sample.

Table 4.1. Descriptive Ratings for CAPs Normative Scores

Scaled score	Descriptive ratings	Composite score
17–20	Very Superior	>125
15–16	Superior	120–125
13–14	Above Average	110–119
8–12	Average	90–109
6–7	Below Average	80–89
4–5	Poor	70–79
1–3	Deficient	<70

Pragmatic Judgment

Examinees who score poorly in this area exhibit rigidity in their understanding of the fluidity of social situations and display difficulty when uncertainty/variability is likely, making engagement in successful reciprocal communication at school challenging.

Pragmatic Performance

Examinees who score poorly in this area struggle with using socially acceptable greetings and expressing elaborate sentiments, reducing their ability to follow expected social routines in school and to communicate their feelings throughout the day.

Paralinguistic

Examinees who score poorly in this area exhibit reduced use of facial expressions, inappropriate use of inflection in prosody across various types of communicative intent, and reduced eye contact. All of these difficulties result in breakdowns during reciprocal communication at school.

WPS® Online
Evaluation System™

https://platform.wpspublish.com

WPS Regional Map
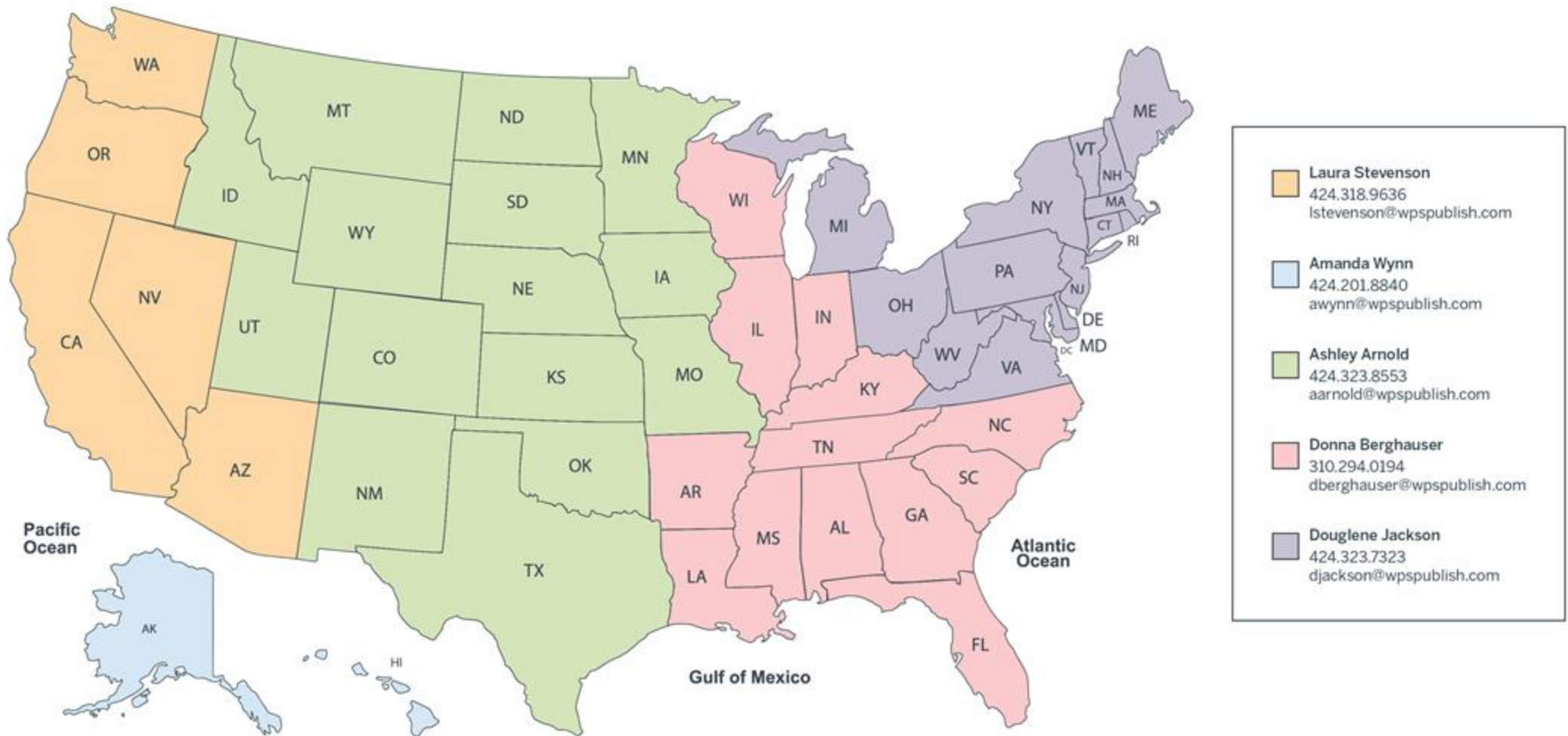
WPS Assessment Consultants

Ashley Arnold,
MA, LSSP, NCSP

aarnold@wpspublish.com
424.323.8553

Douglene Jackson,
PhD, OTR/L, LMT, ATP, BCTS

djackson@wpspublish.com
424.323.7323

Laura Stevenson,
MS, CCC-SLP

lstevenson@wpspublish.com
424.318.9636

Donna Berghauser,
PsyD, NCSP

dberghauser@wpspublish.com
310.294.0194

Amanda Wynn,
MSc

awynn@wpspublish.com
424.201.8840

References

- Acar, C., & Diken, I. H. (2012). Reviewing instructional studies conducted using video modeling to children with autism. *Educational Sciences Theory and Practice, 12*(4), 2731–2735.

- Bates, E. (1976). *Language and context: The acquisition of pragmatics*. Academic Press.

- Bieberick, A. A., & Morgan, S. B. (1998). Affective expression in children with autism or Down syndrome. *Journal of Autism and Developmental Disorders, 28*, 333–338.

- Carrow-Woolfolk, E. (1999). *Comprehensive Assessment of Spoken Language (CASL)* [Manual]. Western Psychological Services.

References *(cont.)*

- Carrow-Woolfolk, E. (2017). *Comprehensive Assessment of Spoken Language, Second Edition (CASL-2)* [Manual]. Western Psychological Services.

- Chandler, D., & Munday, R. (2011). *A dictionary of media and communication*. Oxford University Press.

- Colich, N. L., Wang, A. T., Rudie, J. D., Hernandez, L. M., Bookheimer, S. Y., & Dapretto, M. (2012). Atypical neural processing of ironic and sincere remarks in children and adolescents with autism spectrum disorders. *Metaphor and Symbol, 27*(1), 70–92. https://doi.org/10.1080/10926488.2012.638856

- Hymes, D. (1971). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269–293). Penguin.

References *(cont.)*

- Lavi, A. (2019). *Clinical Assessment of Pragmatics (CAPs)* [Manual]. Western Psychological Services.

- Liscombe, J. (2007). Prosody and speaker state: Paralinguistics, pragmatics, and proficiency [Doctoral dissertation, Columbia University]. http://www.cs.columbia.edu/nlp/theses/jackson_liscombe.pdf

- Luczynski, K. C., & Hanley, G. P. (2013). Prevention of problem behavior by teaching functional communication and self-control skills to preschoolers. *Journal of Applied Behavior Analysis, 46*(2), 355–368. https://doi.org/10.1002/jaba.44

- Nguyen, N. T., Trawinski, B., & Jung, J. (Eds.). (2011). *New challenges for intelligent information and database systems.* Springer Verlag.

References *(cont.)*

- Paul, R., Norbory, C., & Gosse, C. (2017). *Language disorders from infancy through adolescence* (5th ed.). Mosby.

- Ryder, N., & Leinonen, E. (2014). Pragmatic language development in language impaired and typically developing children: Incorrect answers in context. *Journal of Psycholinguistic Research, 43*(1), 45–58.

- Simmons, E. S., Paul, R., & Volkmar, F. (2014). Assessing pragmatic language in autism spectrum disorder: The Yale in vivo Pragmatic Protocol. *Journal of Speech, Language, and Hearing Research, 57*, 2162–2173.

References *(cont.)*

- Tesink, C. M., Buitelaar, J. K., Petersson, K. M., van der Gaag, R. J., Kan, C. C., Tendolkar, I., & Hagoort, P. (2009). Neural correlates of pragmatic language comprehension in autism spectrum disorders. *Brain: A Journal of Neurology, 132*(7), 1941–1952. https://doi.org/10.1093/brain/awp103