Screening in Practice: Investigating the Stability of Social-Emotional Learning Data

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Introduction

- Universal screening requires (Glover & Albers, 2007)
  - Appropriateness for intended use
  - Technical adequacy
    - Stability important part of technical adequacy (Glover and Albers, 2007)
      - Changes in stability can be both from error or actual individual changes
  - Usability
- Void in research-based practice guidelines for social-emotional screening (Cook, Volpe, & Livanis, 2010)
  - Uncertainty in how often to screen (Dowdy et al., 2014)

Method

- Two elementary buildings in 1 rural school district in a Midwestern state

School A
- 15 classrooms
- 247 students
- 48.2% female
- 73.7% free lunch
- 87.5% Caucasian, 9.7% African American, 1.7% Asian, 1% Hispanic/ Latino

School B
- 15 classrooms
- 243 students
- 51.4% female
- 61.7% free lunch
- 85% Caucasian, 12.3% African American, 2% Asian, .4% Hispanic/ Latino

Procedures

- University-school partnership with two primary schools implementing SEL screening

- Data collected in Fall, Winter, and Spring from all students for two school years

Fall ▸ Winter ▸ Spring

Measure

- DESSA-Mini
    - Brief SEL strengths-based measure
    - Assesses CASEL competencies plus optimistic thinking
    - Universal screening
    - 8-item teacher rating
    - Four equivalent forms recommended for progress monitoring

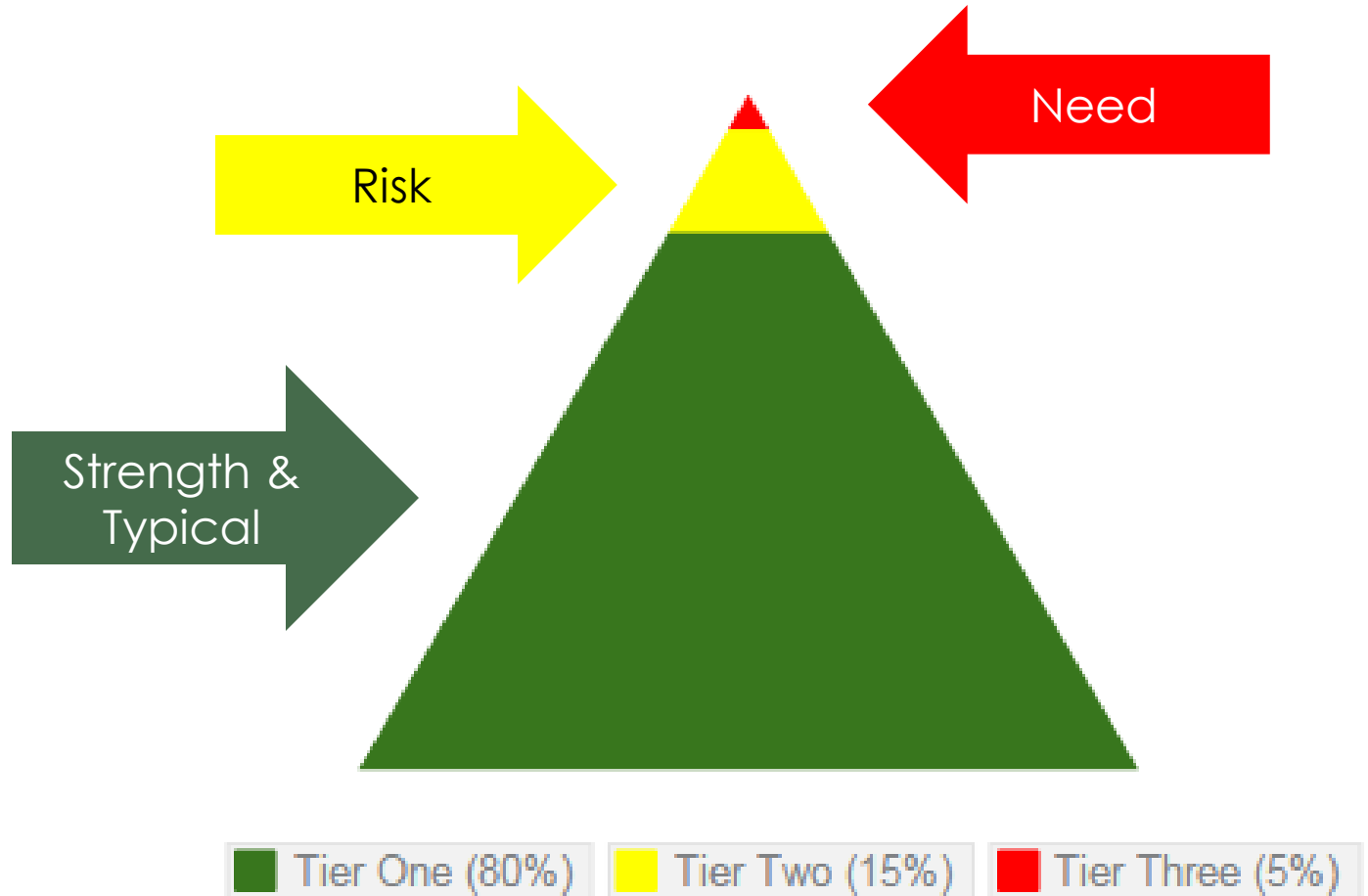(LeBuffe, Shapiro, & Naglieri, 2011; Devereux Suite, 2013)

Measure Cont.

- Reliability
  - a =.92
  - Test-Retest over 4-8 days .88-.94
- Validity
  - Correlated to full DESSA .94-.96
- Social-Emotional Total T-Scores
- Developmentally normed

T-Score	Raw Score Sum	Percentile
71	32	98
67	31	95
65	30	39
63	29	90
61	28	86
59	27	82
57	26	76
55	25	69
53	24	62
51	23	54
49	22	46
48	21	42
46	20	34
45	19	31
43	18	24
42	17	21
41	16	18
39	15	14
38	14	12
37	13	10
36	12	8
34	11	5
33	10	4
32	9	4
31	8	3
29	7	1
28	<7	1

STRENGTH

TYPICAL

RISK

NEED

Introduction

Assessing Change with DESSA-Mini

TABLE 5.1

Interpretation and Guidance for Change on OPM

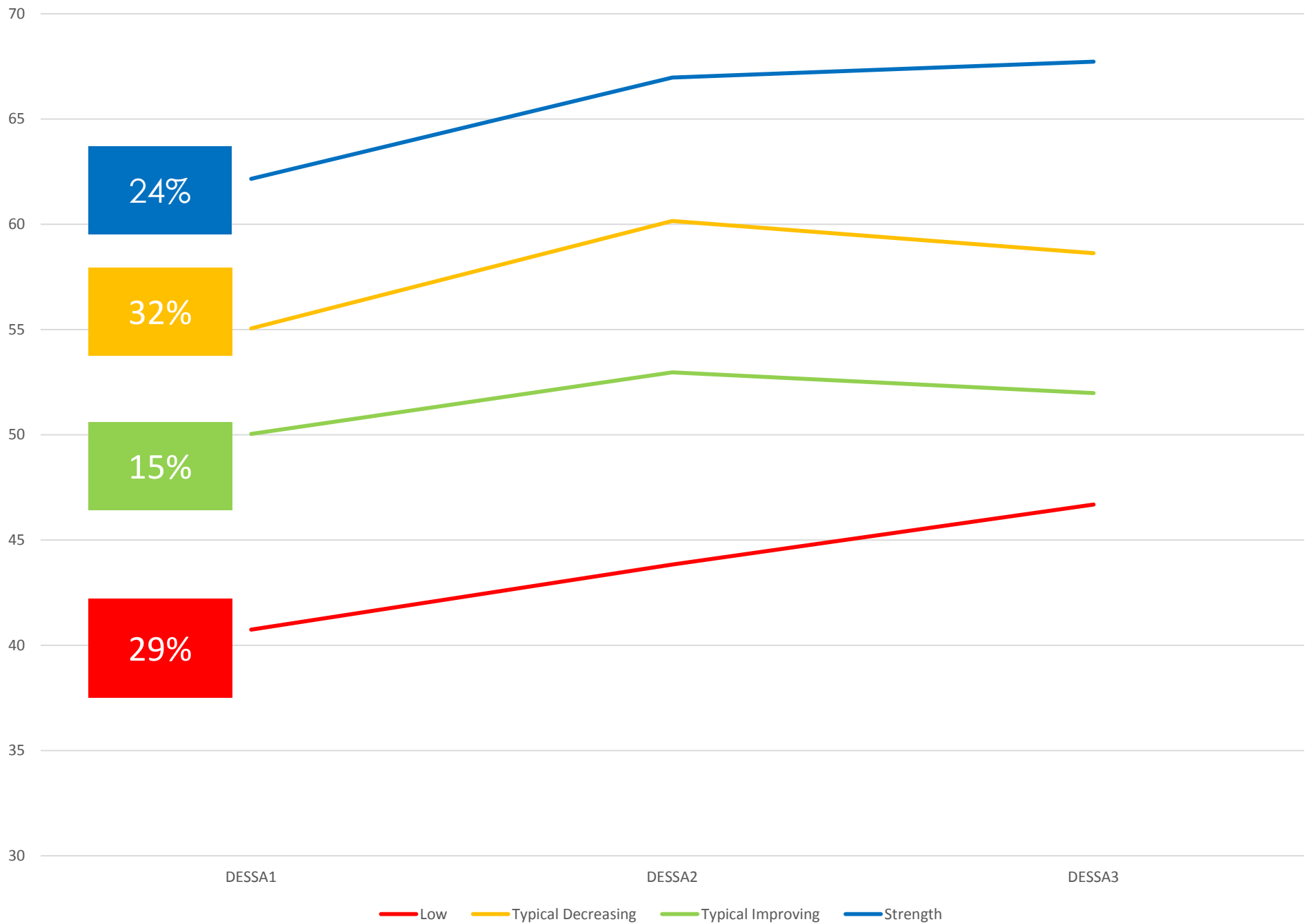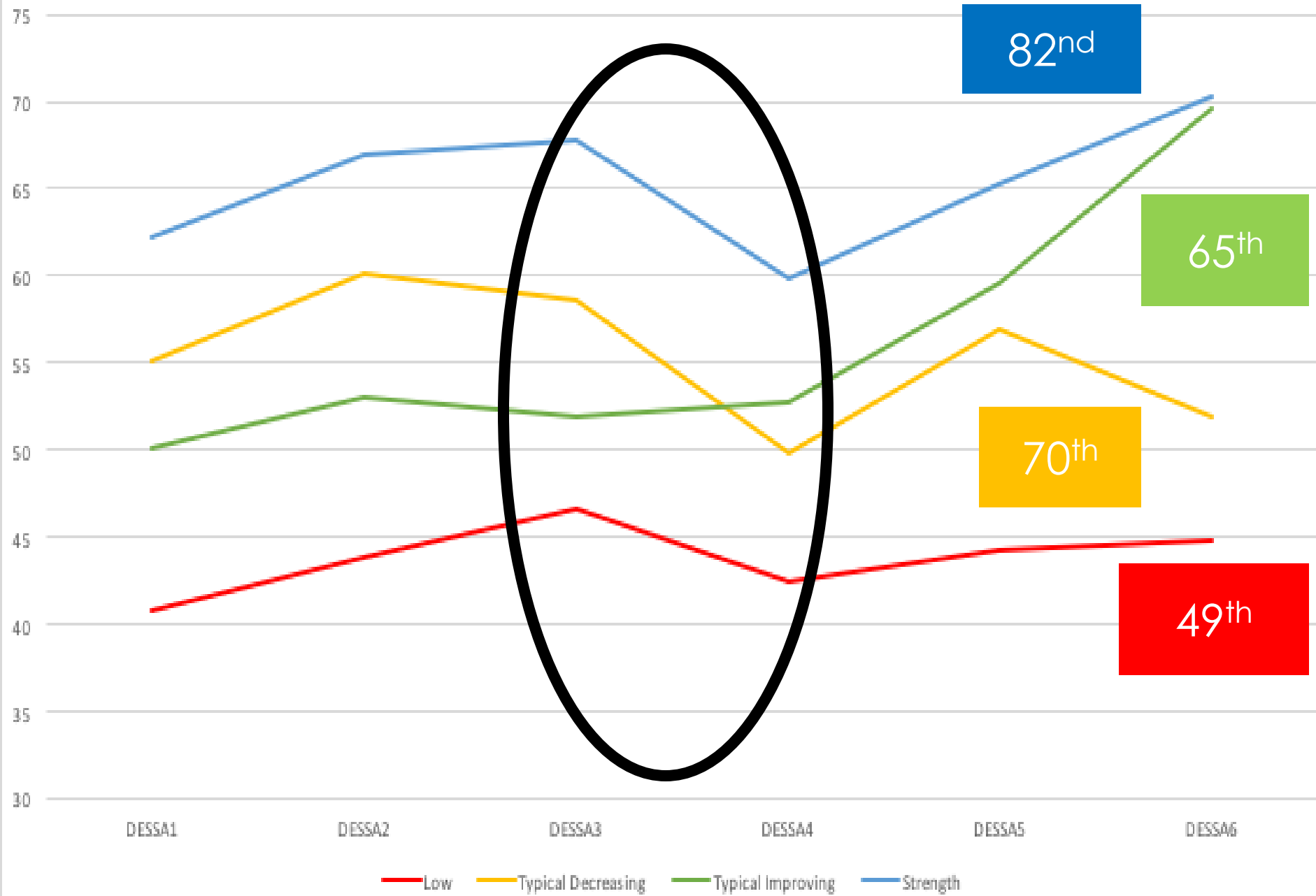| Magnitude of the Difference	Standard Deviation Unit	T-score Units	Guidance
Negligible/ None	Less than .20	Less than 2	Supports are ineffective, try new supports & strategies. Consult with student assistance personnel.
Small	.20 to .49	2 to 4 inclusive	Supports are minimally effective. Increase frequency, duration, intensity or try new strategies. If using only group interventions/supports, consider individualized supports.
Medium	.50 to .79	5 to 7 inclusive	Supports are moderately effective. Consider enhancing if resources, including time and personnel, permit.
Large	Greater than or equal to .80	8 or higher	Supports are working well. Continue current plan.
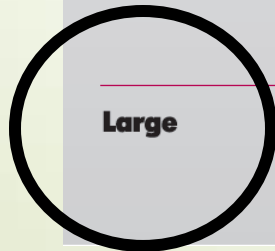
Method

- Analyses limited to participants with 2 years of data (K-1, 1-2; exclusion of participants with missing data)

- Latent Profile Analysis (LPA) used to identify patterns in screening data over 6 separate time points

- Fit indices suggest a 4 class model

- Used STAR Reading data to validate LPA (scores below 50th percentile → risk)

SEL Screening Profiles Year 1

	DESSA1	DESSA2	DESSA3

24%

32%

15%

29%

Legend: ■ Low ■ Typical Decreasing ■ Typical Improving ■ Strength

SEL Screening Profiles – Years 1 and 2

82nd

65th

70th

49th

Low   Typical Decreasing   Typical Improving   Strength

Limitations

- Results are preliminary and additional analyses are needed
  - Use demographic variables as covariates
  - Examine differences in K-1 and 1-2 groups
  - Further validation with behavioral data

- Sample limited to two elementary buildings in one district

- Need to reconsider approach to missing data

- Need to explore teacher change between Year 1 and Year 2

Discussion

- Results suggest 4 distinct profiles validated by reading scores
- Value-added for Year 2 data, particularly in considering summer backslide and varying stability in Year 2
- Need to expand/diversify use of population-level screening data within MTSS
  - Research and practical implications
- Need to consider state of the science when disseminating and advocating for SEL screeners

Questions? Ideas?

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