



# CSESA

The Center on Secondary Education for  
Students with Autism Spectrum Disorders

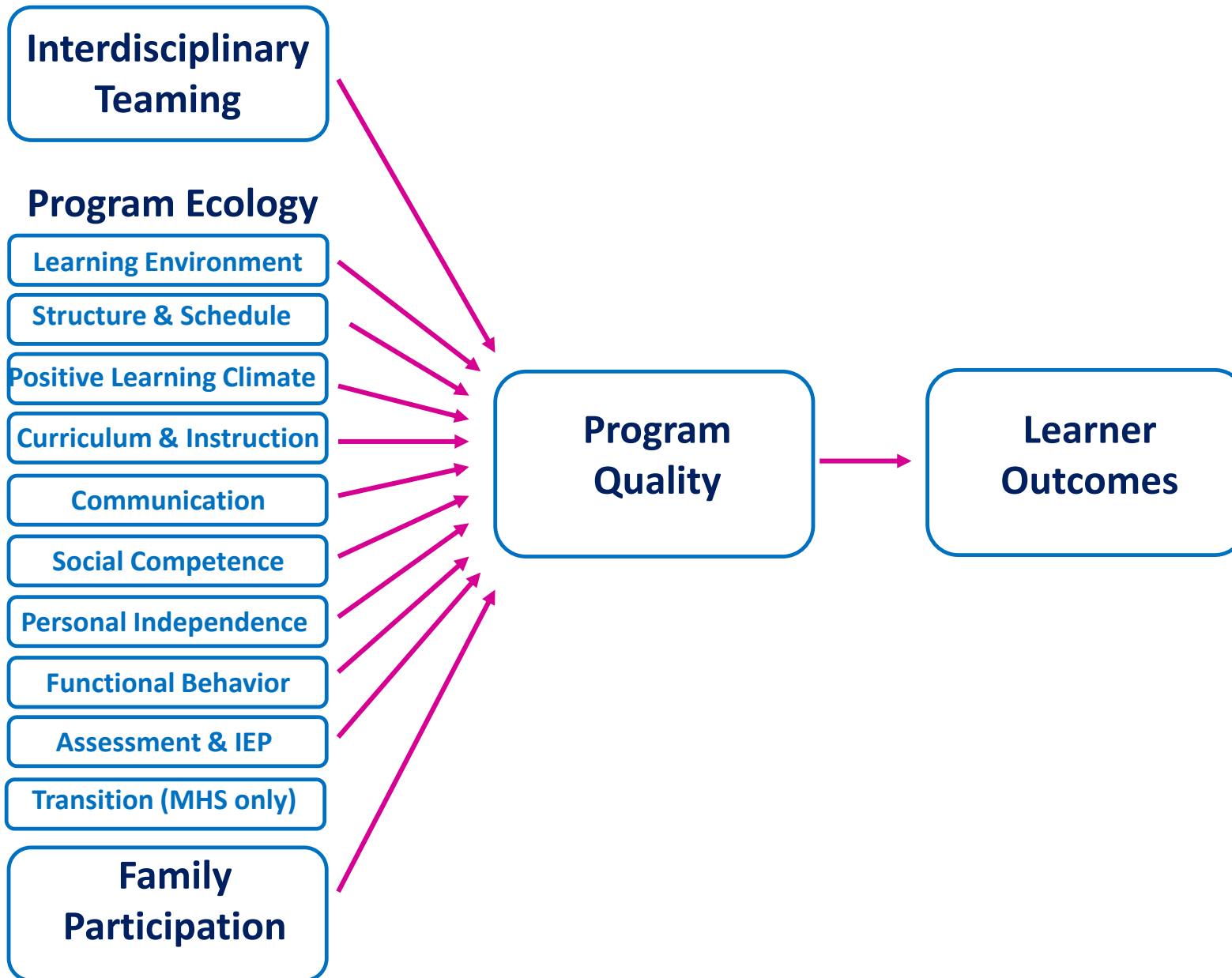
## Impact of a School-based Comprehensive Treatment Model for Adolescents with ASD on Program Quality in High Schools

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Laura J. Hall, and Bonnie Kraemer

A vibrant red brushstroke background with irregular, textured edges, resembling a hand-painted shape. The stroke is thick and has some white splatters and feathering at the edges, giving it a dynamic and artistic feel. It is centered on a plain white background.

QUALITY

MATTERS



# Autism Program Environment Rating Scale (APERS-M/H)

- **Purpose:** To look at environmental features and supports school has in place and areas for improvement
- **Instrument**
  - **63 Items organized into 10 domains**
  - **Items are on a five point rating scale**
  - **Ratings based on observations in programs, interviews, document analysis**
  - **Collected over a two-day visit to schools**
  - **Program staff collected—but could not collect APERS for the schools with which they worked.**
  - **Separate APERS calculated for diploma and modified programs**
  - **Single weighted APERS score could also be generated**

# Example

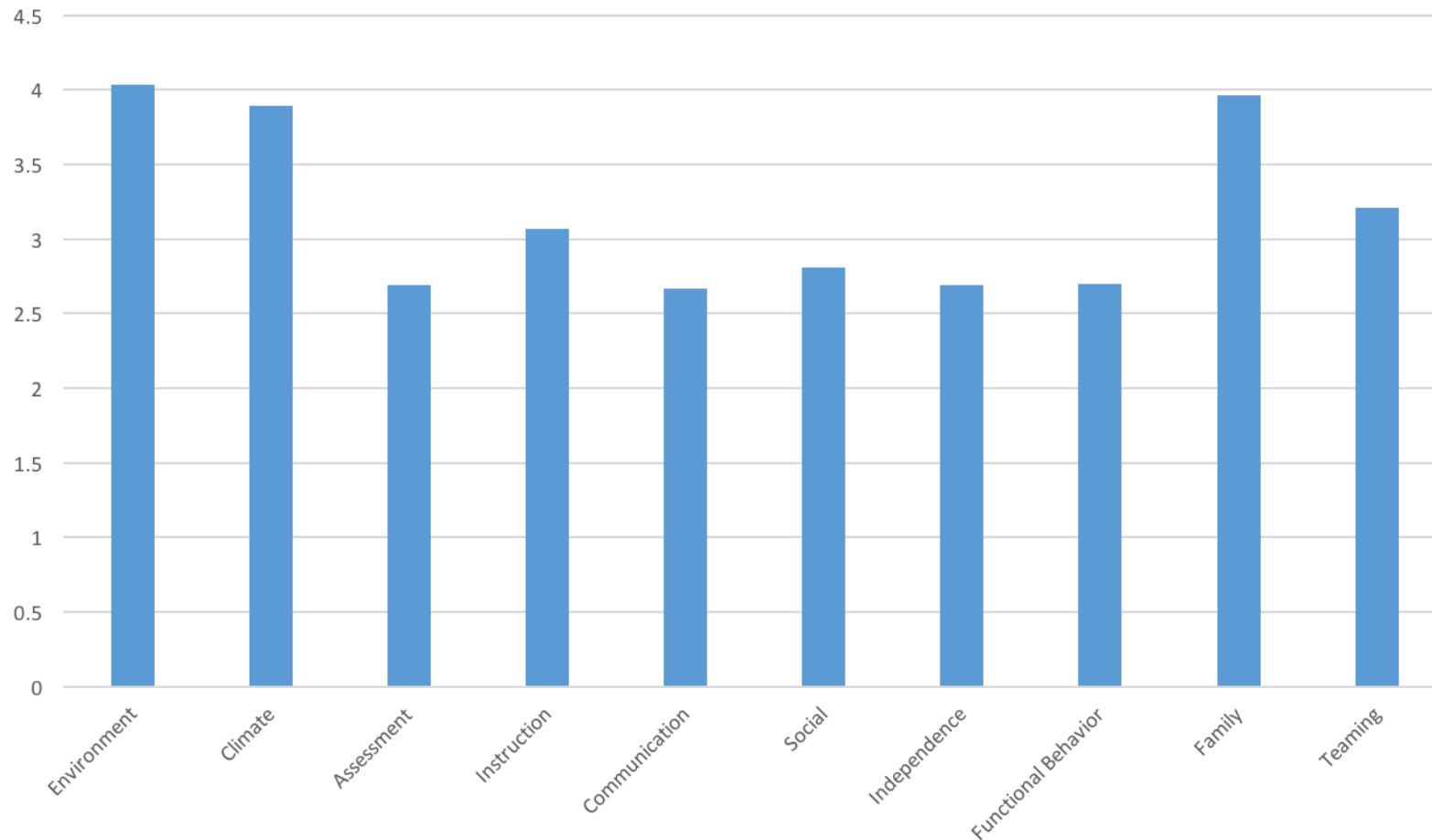
27\*

27*	<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Team members consistently over-prompt students during instruction.</li><li><input type="checkbox"/> Team members consistently under-prompt or use no prompts during instruction.</li><li><input type="checkbox"/> When team members use prompts only one form is used with students (e.g., physical, verbal, gestural).</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> When needed, key team member uses a clear prompting hierarchy during instruction (e.g., less intensive prompts followed by increased support as needed).</li><li><input checked="" type="checkbox"/> When needed, key team member uses a variety of prompts during instruction to meet individual student needs (e.g., physical, verbal, gestural).</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> When needed team members use a clear prompting hierarchy during instruction (e.g., less intensive prompts, graduated guidance, simultaneous instruction).</li><li><input type="checkbox"/> When needed, team members use a variety of prompts to meet individual student needs.</li></ul>
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Research Question 1: What is the quality of high school programs for adolescents with autism?

- Gathered this from pretest data

# Current State of Program Quality in U. S. n = 60 High Schools



# Urbanicity

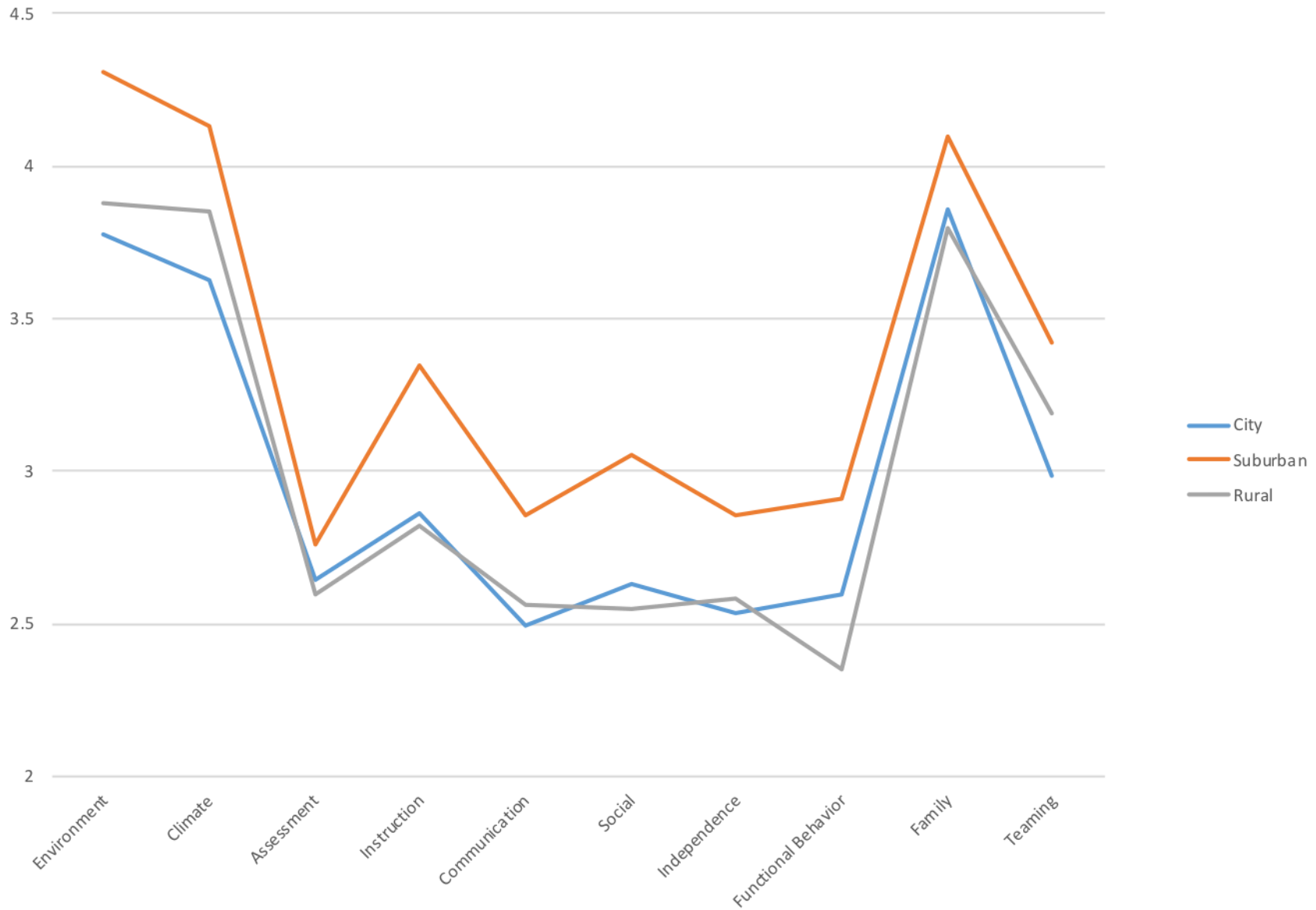


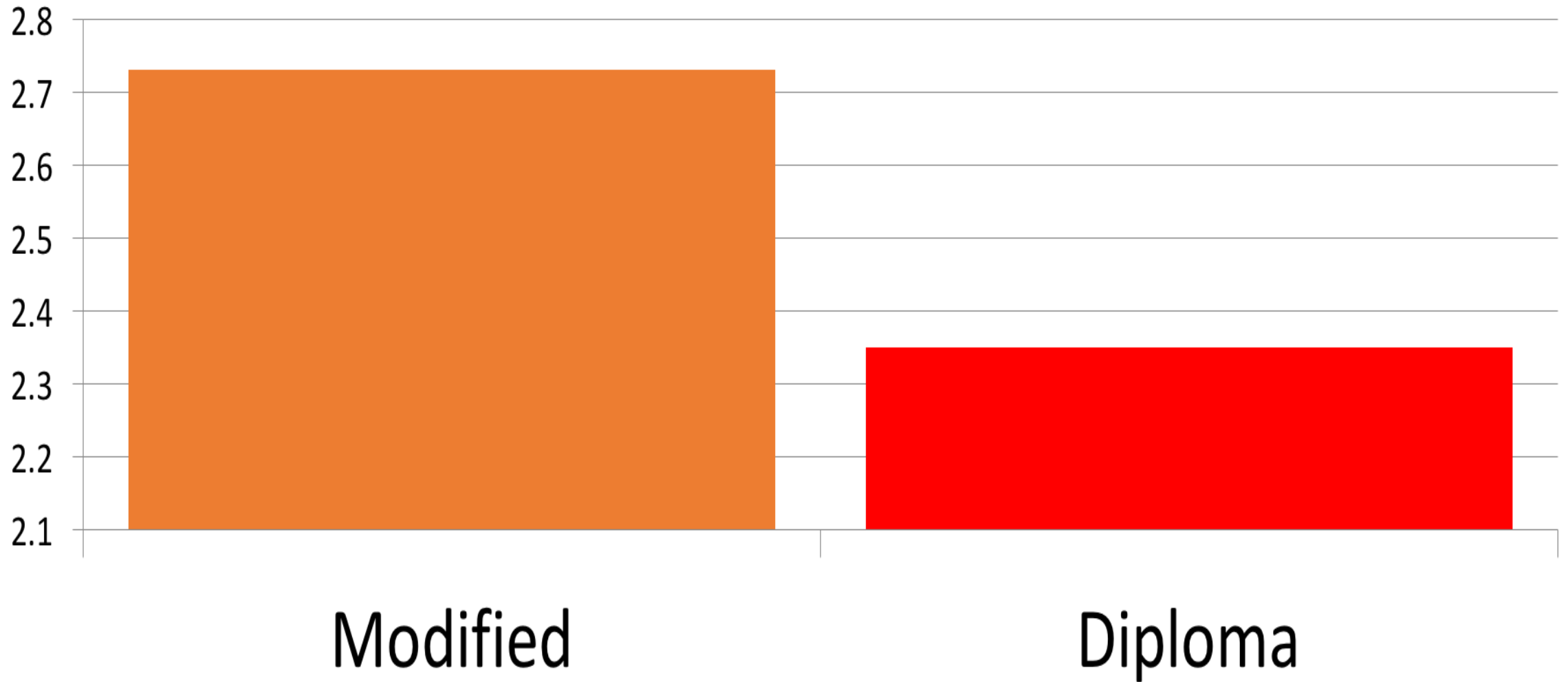


Table 3 APERS Means by Program

<b>APERS Domain</b>	<b>Diploma Program Mean(SD)(N=60)</b>	<b>Modified Diploma Program Mean(SD)(N=47)</b>
Total	3.17(.462)	3.24(.536)
Environment	4.13(.620)	4.01(.665)
Climate	3.87(.802)	3.96(.778)
Assessment	2.62(.534)	2.87(.645)
Instruction	3.04(.671)	3.15(.729)
Communication	2.72(.806)	2.65(.765)
Social	2.77(.647)	2.84(.720)
Independence	2.79(.623)	2.65(.739)
Functional Behavior	2.70(.806)	2.74(.722)
Family	3.77(.880)	4.03(.818)
Teaming	3.10(.541)	3.30(.527)
CSESA Transition*	2.36(.526)	2.72(.681)

\* $p < .001$

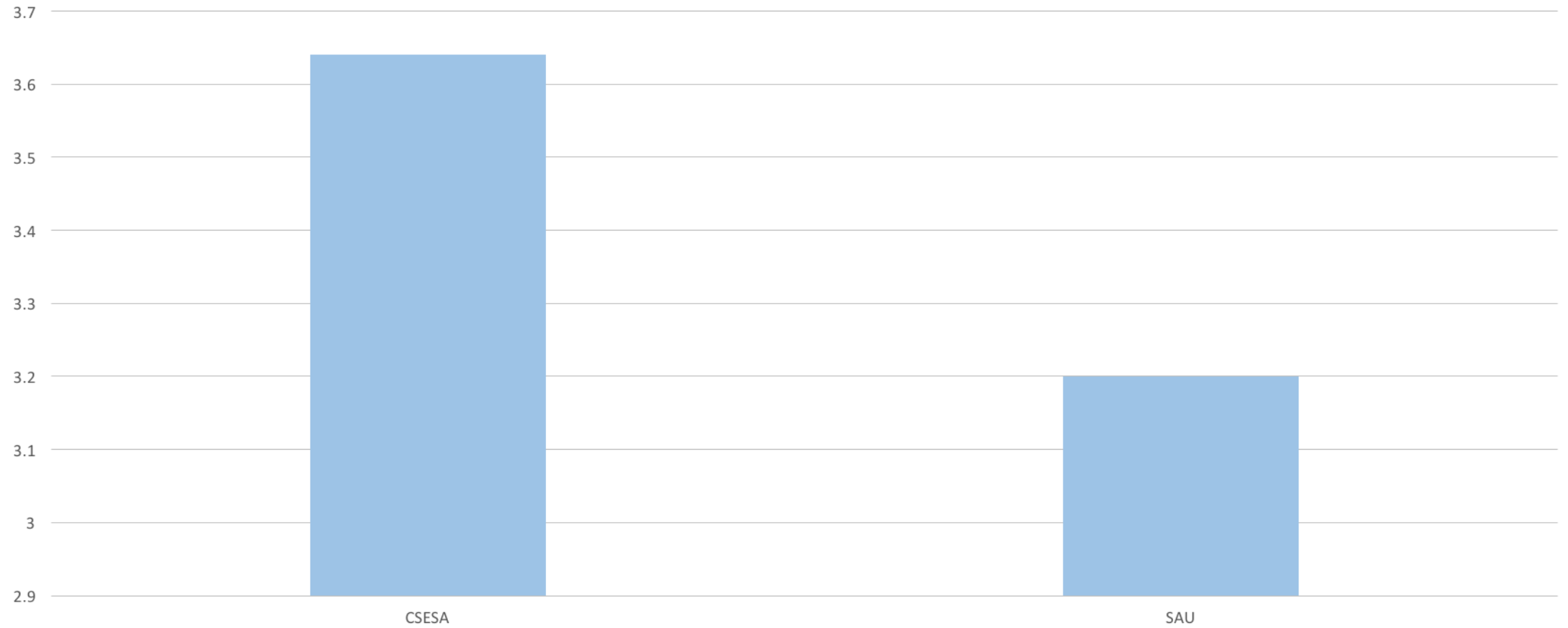
# APERS Scores Transition



$p < .001$ ,  $d = .54$

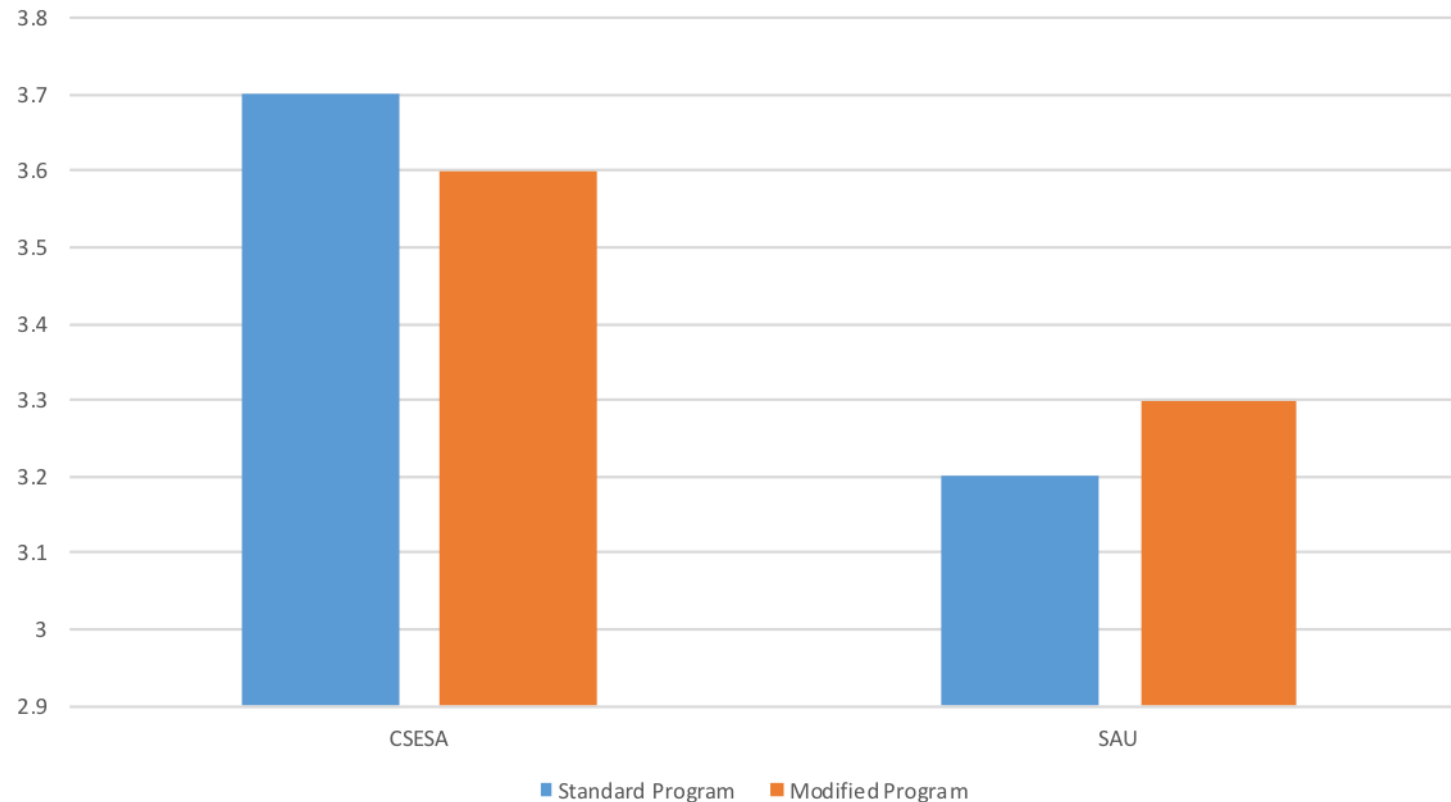
Research Question 2: Does CSESA have an effect on program quality in high schools?

# Overall Effect for APERS From RCT?



**$F(1, 52) = 16.6, p < .001, \eta^2 = .24, d = 1.12$**

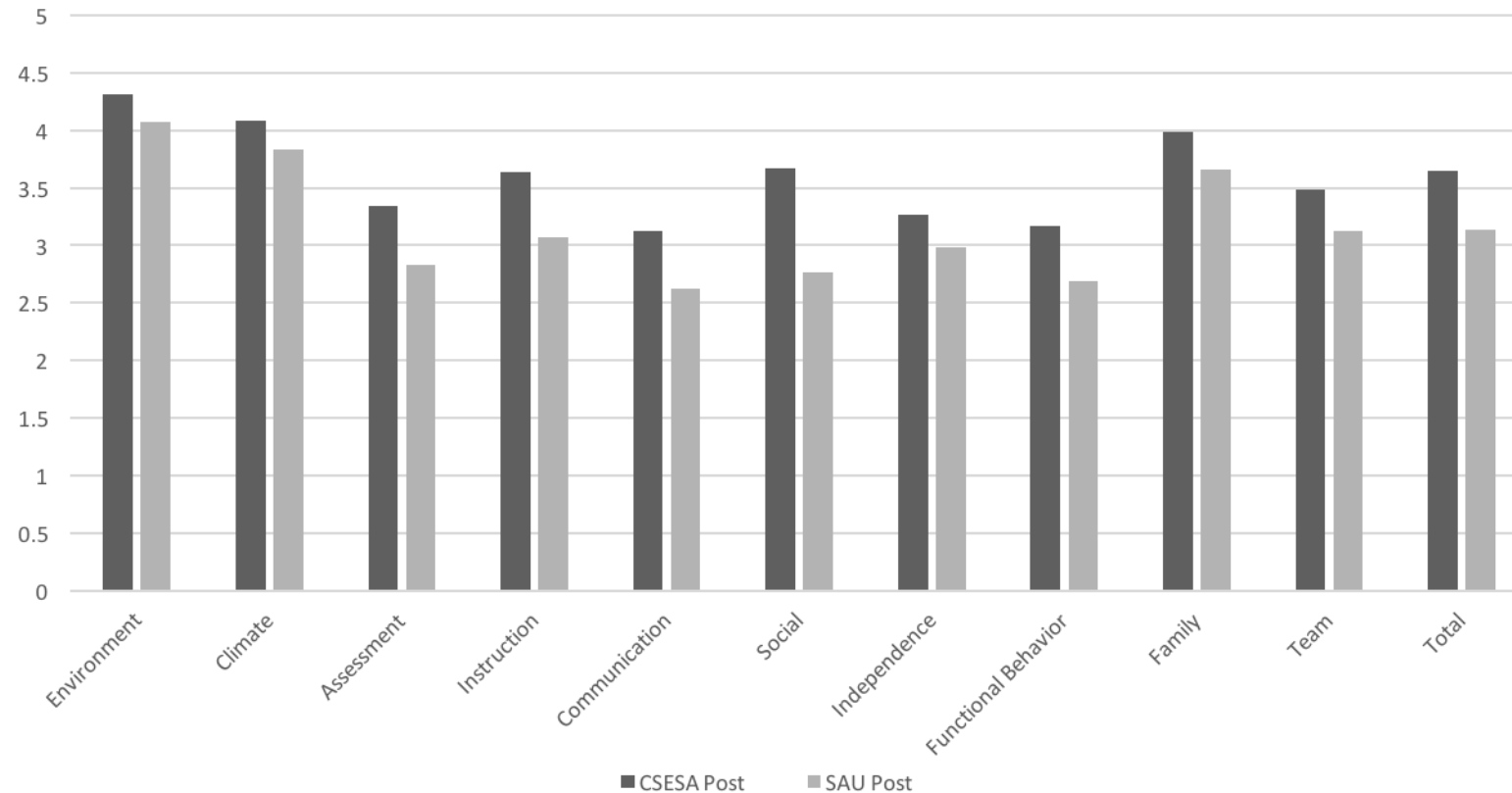
# Did the CSESA Program Affect Quality?



**Diploma:  $F(1, 54) = 13.9, p < .001, \eta^2 = .205, d = 1.02,$**

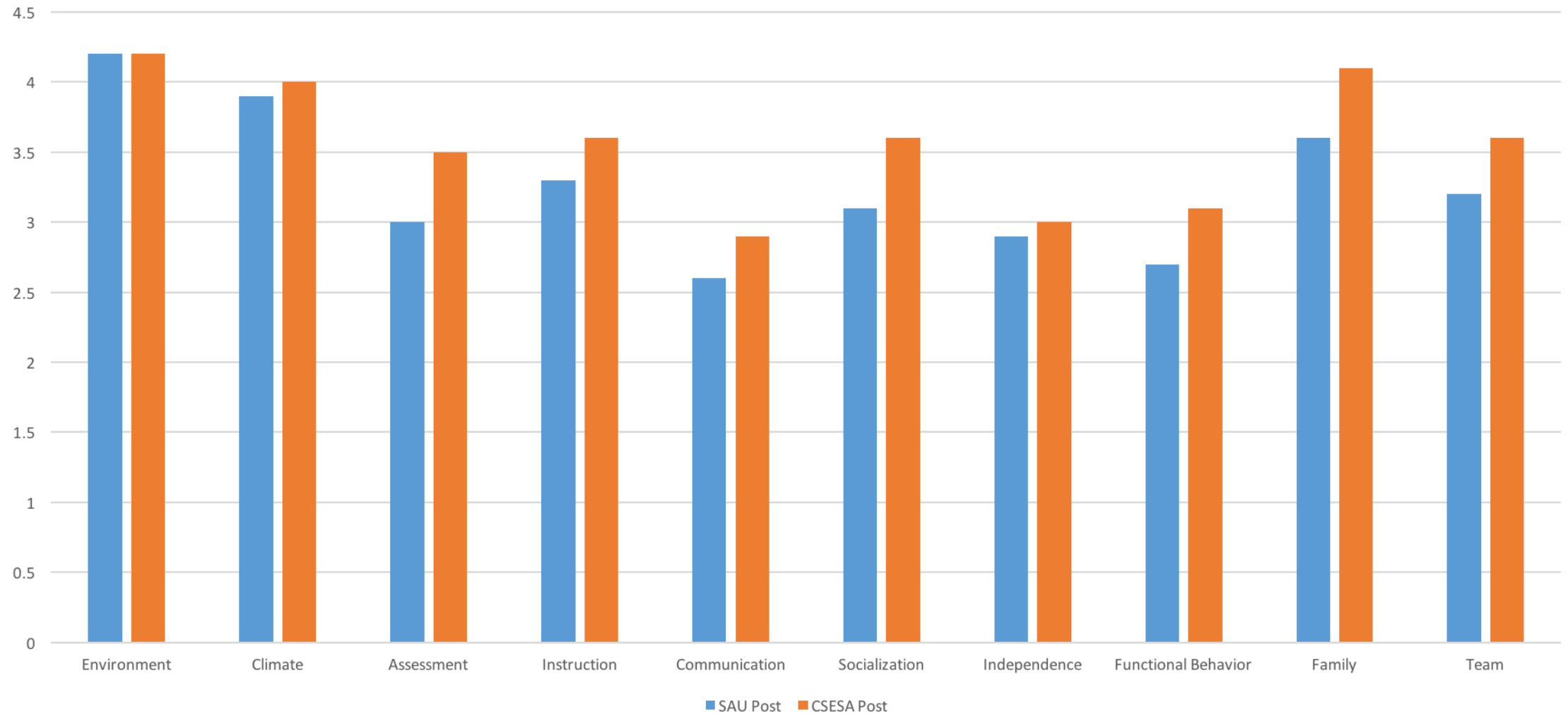
**Modified:  $F(1, 45) = 3.66, p = .063, \eta^2 = .080, d = .590,$**

# Post-test Scores for Domains

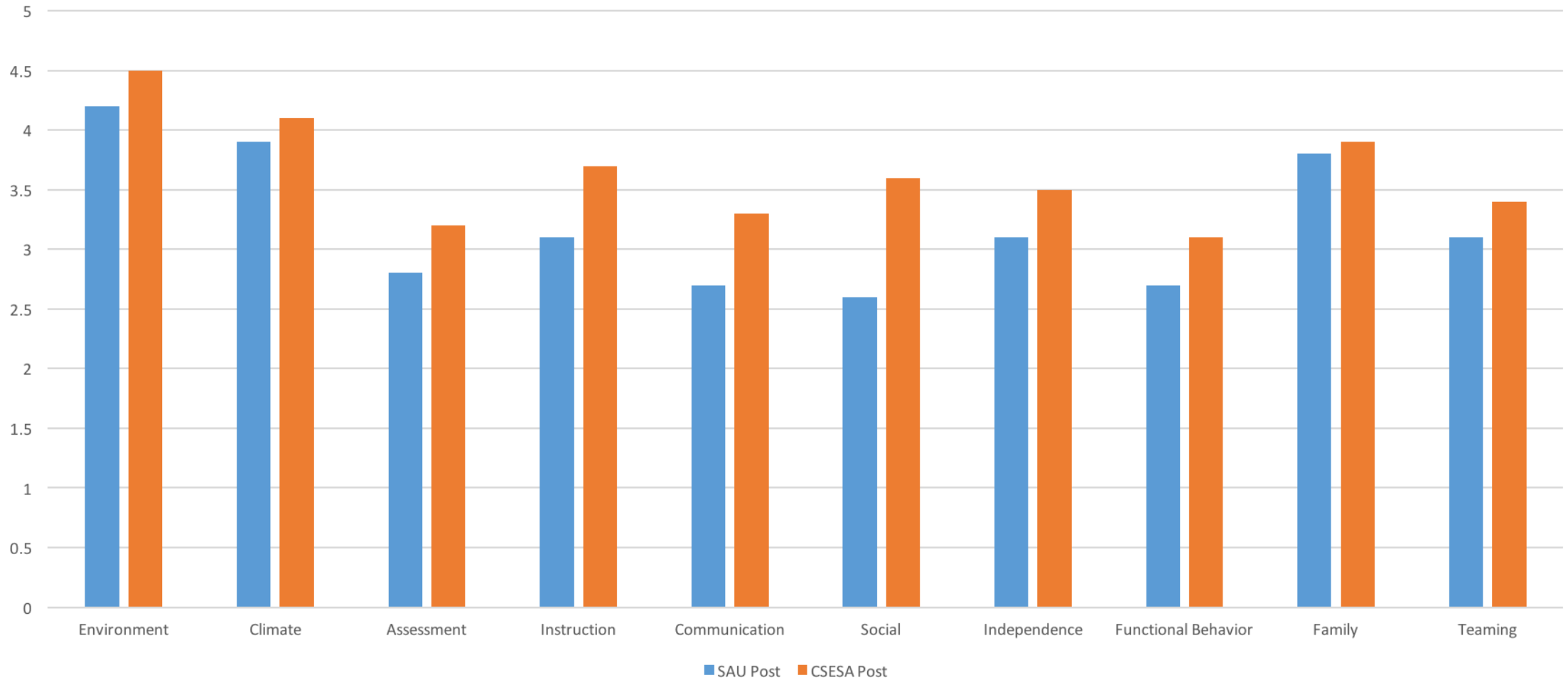


**Assessment ( $p = .003$   $d=.793$ ), Instruction ( $p < .001$   $d=.974$ ), Communication ( $p = .009$   $d=.688$ ), Social ( $p < .001$   $d=1.43$ ), Functional Behavior ( $p = .016$   $d=.683$ ), Teaming ( $p = .010$   $d=.701$ ), Academic ( $p < .002$   $d=.846$ ), Independence ( $p < .010$   $d=.686$ ).**

# Post-test Scores for Diploma

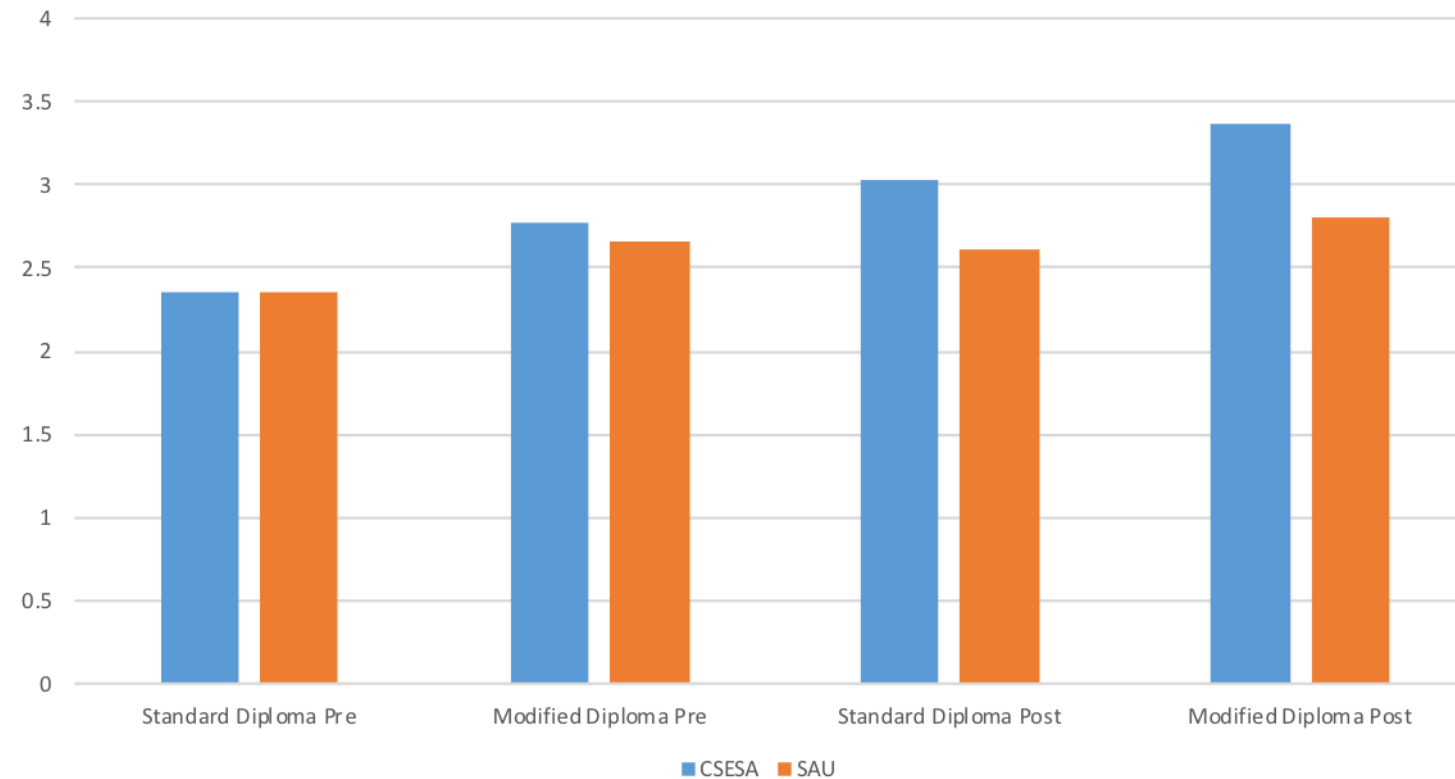


# Post-test APERS Scores for Modified





# Transition Composite: Diploma and Modified



Standard :  $F(1, 57) = 15.8, p = .010, \eta^2 = .116, d = .724$

Modified:  $F(1, 42) = 5.71, p = .021, \eta^2 = .120, d = .739$

# Conclusions

- CSESA appears to have a main effect on quality of high school program for student with ASD
- Strongest effect is for the intervention areas
- Next step is to examine mediational effects on student outcome