



SCHOOL CLIMATE PERCEPTION AND ACADEMIC ACHIEVEMENT OF MIDDLE SCHOOL STUDENTS

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School Climate

School climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures. (The National School Climate Council, 2007)

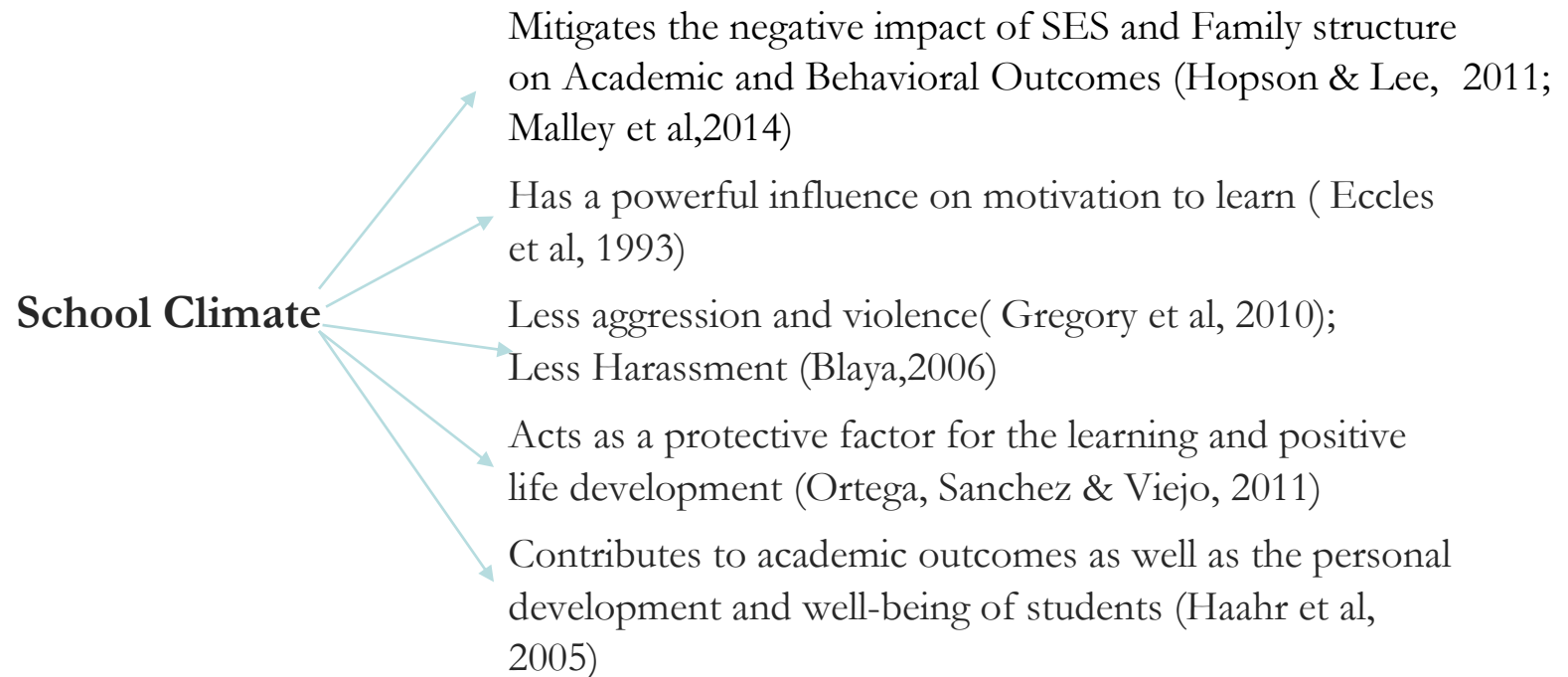
School climate (Marjoribanks, 2002) 29 items

- » **Imaginative Context-** Innovative context or degree to which children are encouraged to experiment
- » **Interpersonal** context- where children are made aware of affective states- own & others
- » **Regulative context-** nature of authority relationships in the school environment
- » **Instructional context-** teaching and learning relationships

School Quality

- » I feel very safe and secure in this school.
- » The physical surroundings in this school are pleasant.
- » This school is neat and clean.
- » The school building is designed appropriately for learning.
- » The school is too crowded with too many people.
- » The school needs more up-to-date equipment.

Past literature



Research Questions

- » Is there a relationship between perception of school climate and subsequent academic achievement among middle school students?
- » Is the association explained by gender, race/ethnicity, socioeconomic status and self esteem?

Data

- » Adolescents Academic Context Study (AACCS)
- » Ohio Education Data
- » Wave One (Fall 2009) – school climate & student characteristics
- » Wave Eight (Spring 2013)- Standardized test scores for: Reading, Math & Science

Variables

- » Dependent Variables: Reading Math and Science 2013 Test Scores
- » Independent Variables:
 - » School Climate,
 - » School Climate four subscales (Imagination, Interaction, Regulation, Instruction),
 - » School Quality,
 - » Gender, Race, Socioeconomic Status, and Self Esteem

Table 2. 2013 Test Scores
(N=209)

	Reading 2013	Math 2013	Science 2013
Limited	1.9%	5.3%	5.3%
Basic	9.1%	7.2%	17.2%
Proficient	38.8%	24.9%	33.0%
Accelerated	33.5%	27.3%	26.8%
Advanced	16.7%	35.4%	17.7%
	100%	100%	100%
Mean	3.54	3.80	3.34
Total	209	209	209

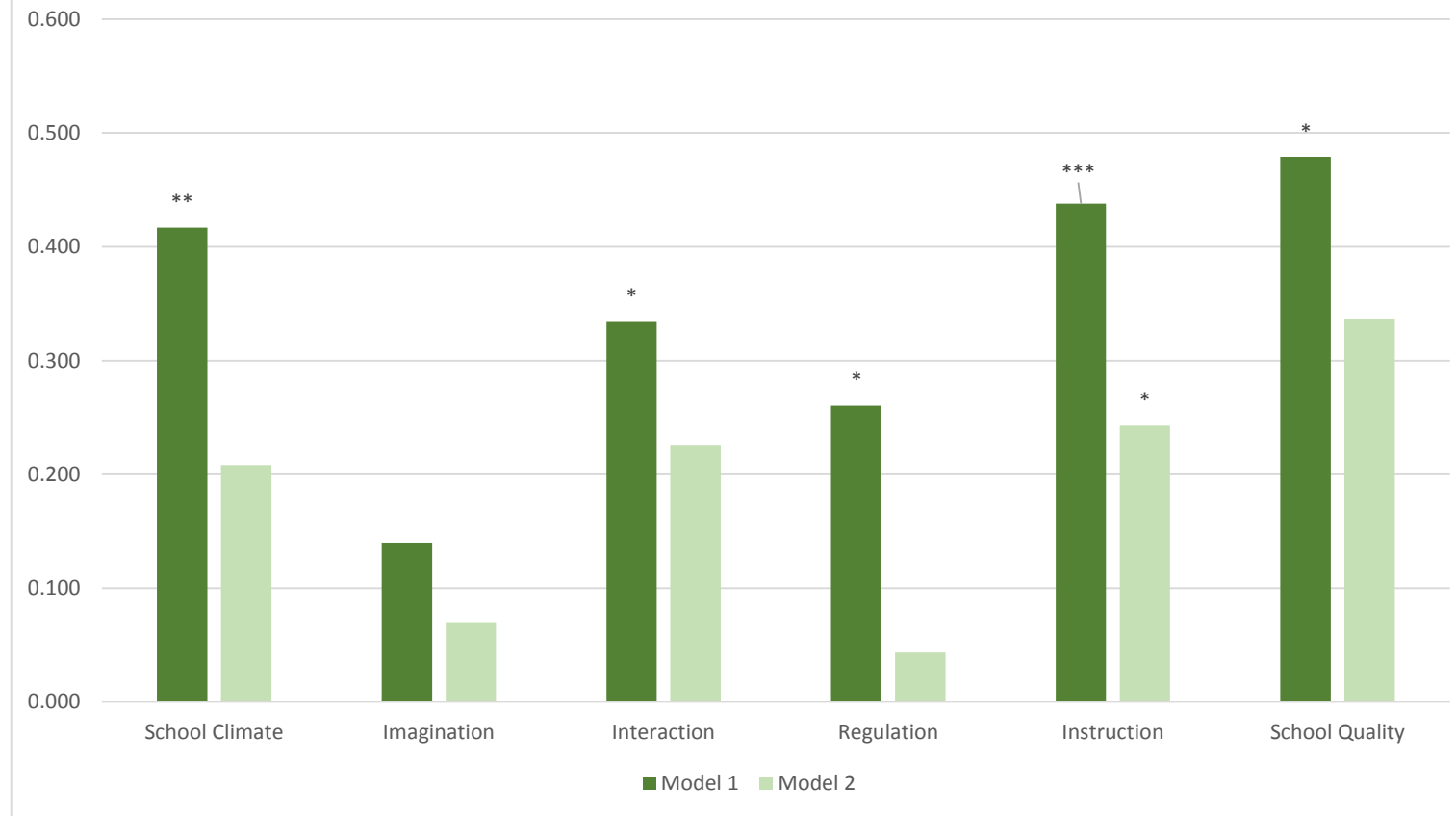
Table 2. School climate, Subscales and School Quality of Middle School Students 2009 (N=209)

Variable	Mean	Std. Dev.
School Climate	2.83	0.45
Imagination	2.93	0.50
Interaction	2.89	0.49
Regulation	2.45	0.60
Instruction	2.97	0.52
School Quality	2.68	0.34

Table 2. Distribution of Student Characteristics of Middle School Students
(N=209)

Gender	
Male	53.1%
Female	46.9%
Race/Ethnicity	
White	55.0%
Black	8.6%
Hispanic	10.5%
Multiracials	22.5%
Others	3.4%
Disadvantage	
Yes	57.9%
No	42.1%
Self Esteem	3.13

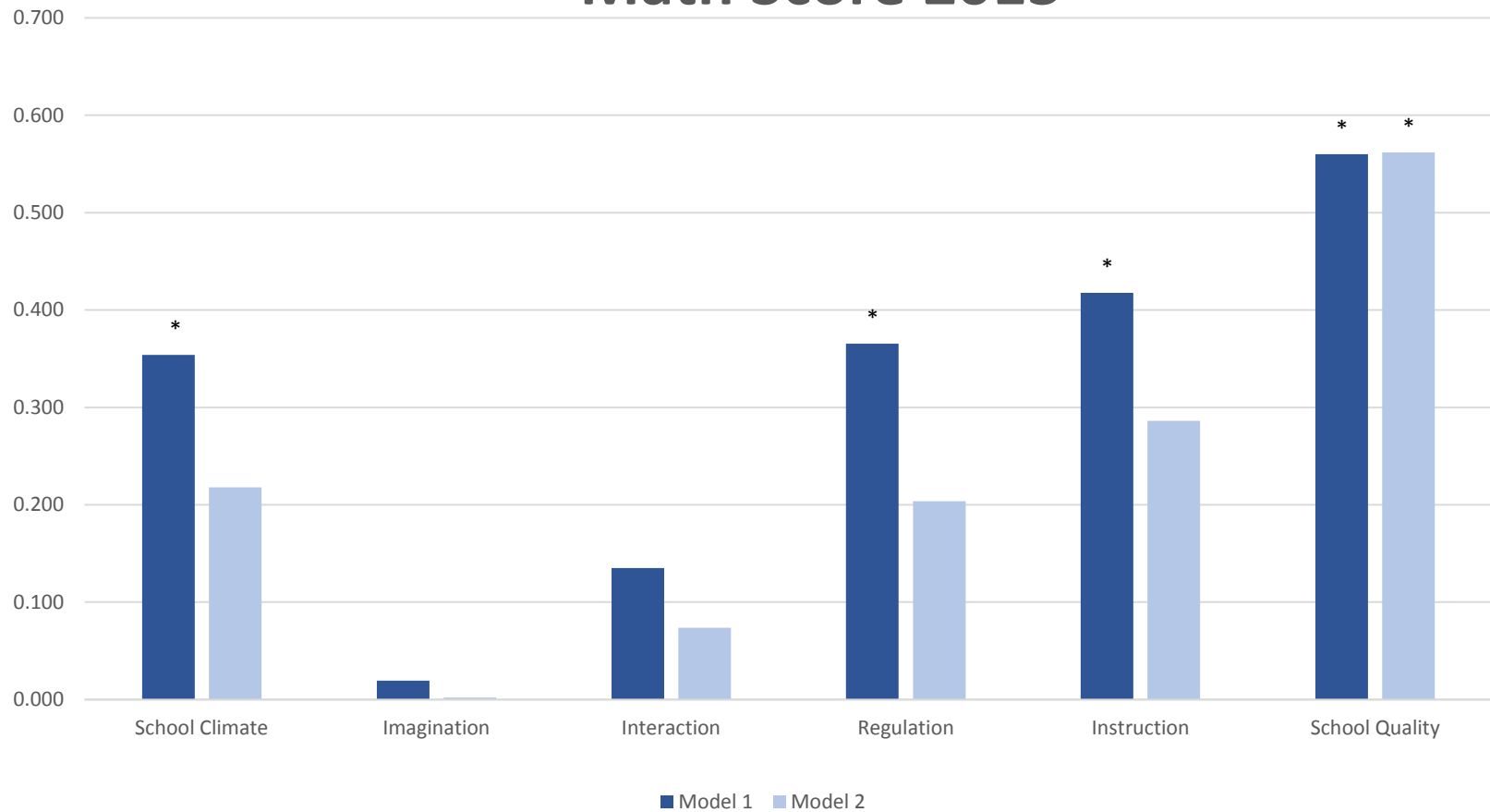
Reading Score 2013



Notes:

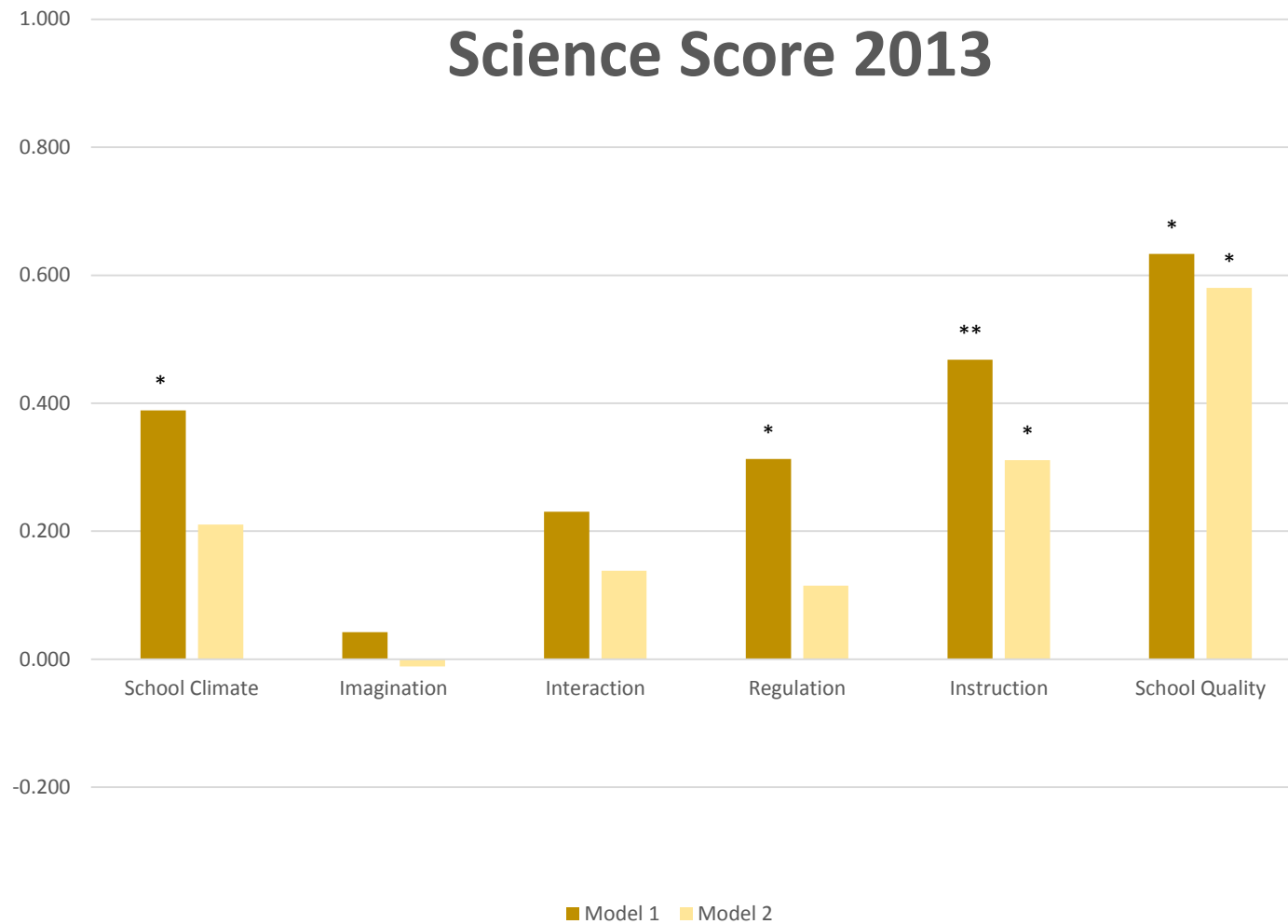
1. Model 1 shows the unit change in Reading Score due to change in School climate perception
2. Model 2 shows the unit change in Reading Score after controlling for Race, Gender, Disadvantaged, and Self Esteem.
3. The "*" at the top of the bar means that those values are statistically significant ($P < .05$)
4. The sample size includes 209 middle school students who participated in the first wave survey of Fall 2009 and who had valid test scores on Eight wave, Spring 2013.

Math Score 2013



Note: The unit value of Imagination for Model 2 is 0.002, too low to be displayed.

Science Score 2013



THANK YOU!

» Comments or queries email: wmannin@bgsu.edu