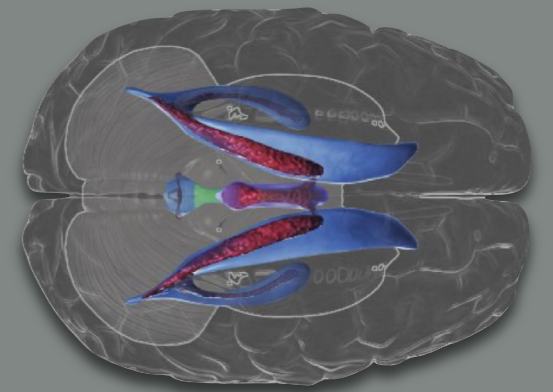
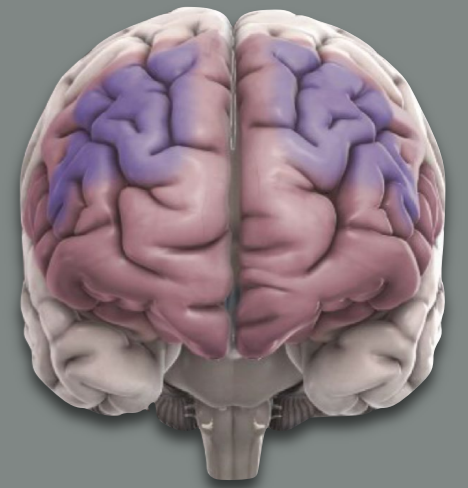




URBAN NATURE

Bringing out the best in us

William Sullivan, University of Illinois





Harney Trail, City of Omaha





THIS MORNING

Green
Landscapes → Attention

PAYING ATTENTION

Matters for:

- Learning
- Problem solving
- Planning & carrying out tasks
- Self monitoring & regulation
- Effective social functioning

ATTENTION FATIGUES



COSTS OF MENTAL FATIGUE

Inattentiveness



COSTS OF MENTAL FATIGUE

Irritability



COSTS OF MENTAL FATIGUE

Impulsiveness



GREEN LANDSCAPES MAY ACCELERATE RECOVERY FROM MENTAL FATIGUE





Predictions

More urban green leads to:

- Better self discipline
- Less domestic violence
- Better academic performance
- Better in high school

SELF-DISCIPLINE

An interview study

- 169 care-giver & child pairs (7-12 years old)
- Recruited door-to-door by interviewers
- Administered standardized tests of self-discipline to the children
- Compared answers from people living with and without nearby nature

Why might access to green spaces impact self-discipline? Is it because they:

- A. Tire children out so they get into less trouble?
- B. Distract children in a natural way?
- C. Reduce impulsivity and improve concentration?
- D. Put that naughty part of the brain at ease?









SELF-DISCIPLINE

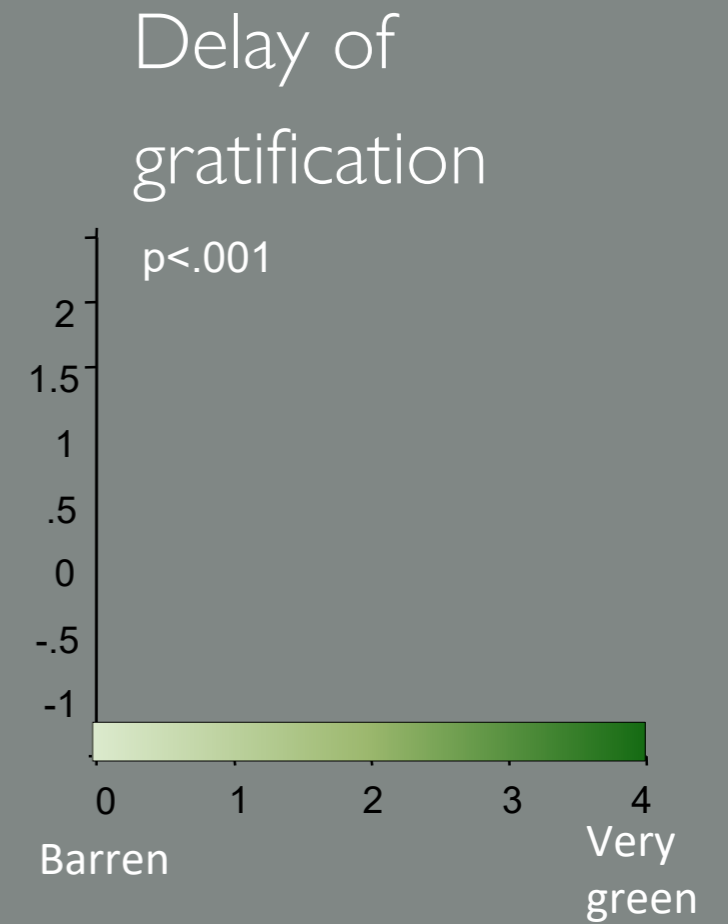
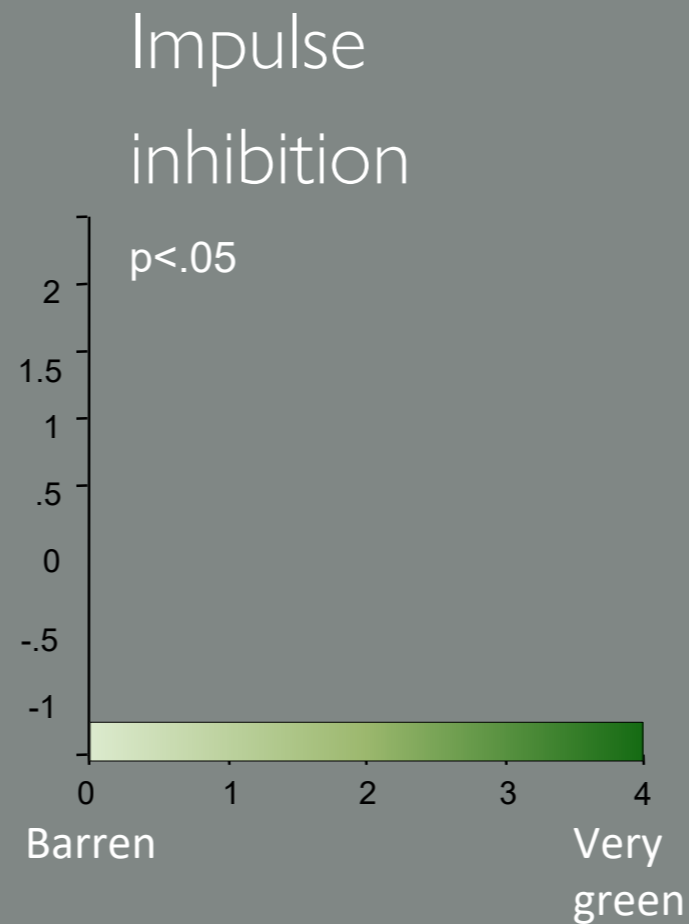
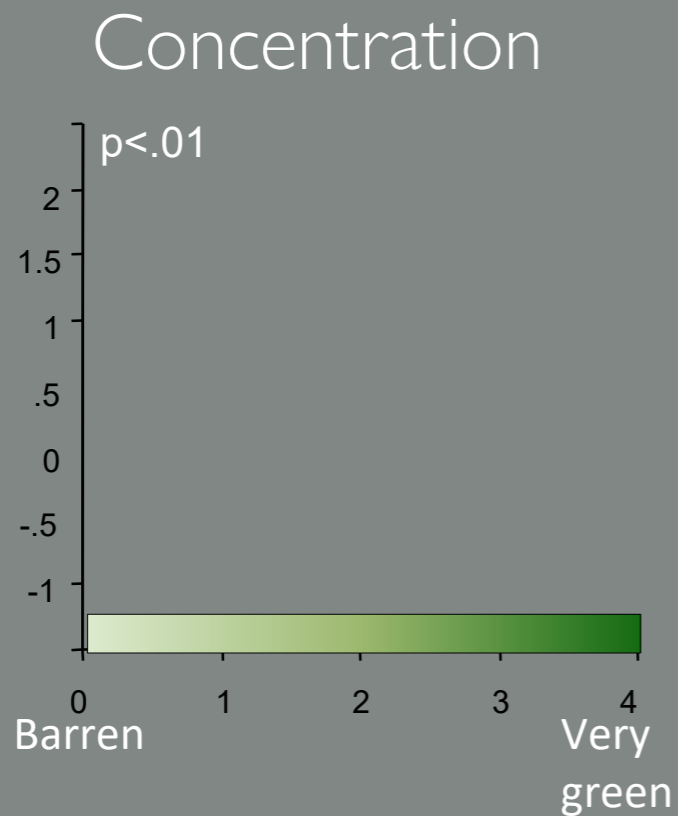
Concentration

Impulse
inhibition

Delay of
gratification

SELF-DISCIPLINE

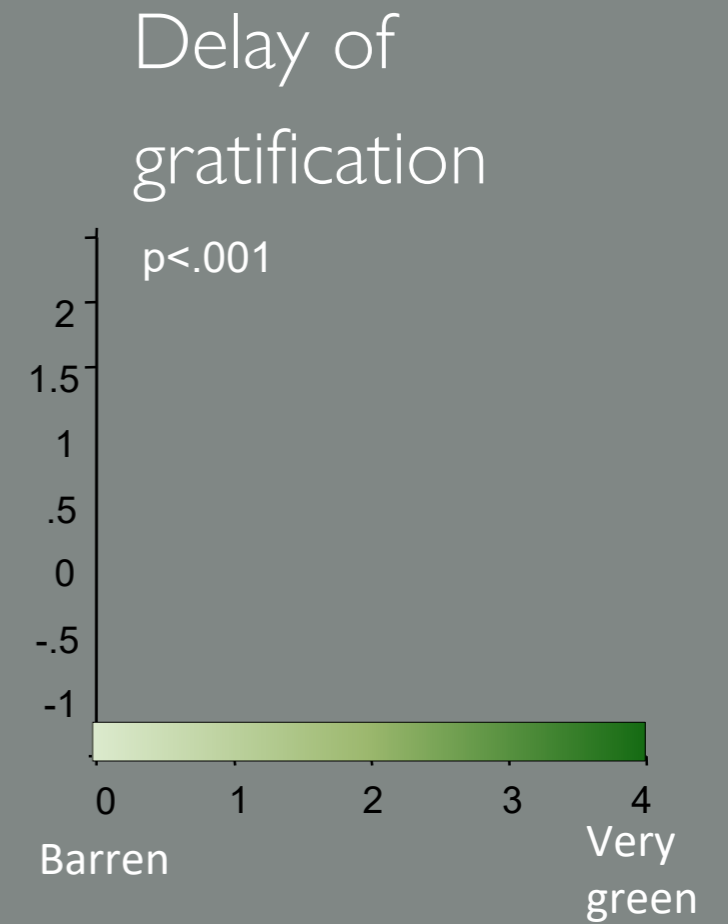
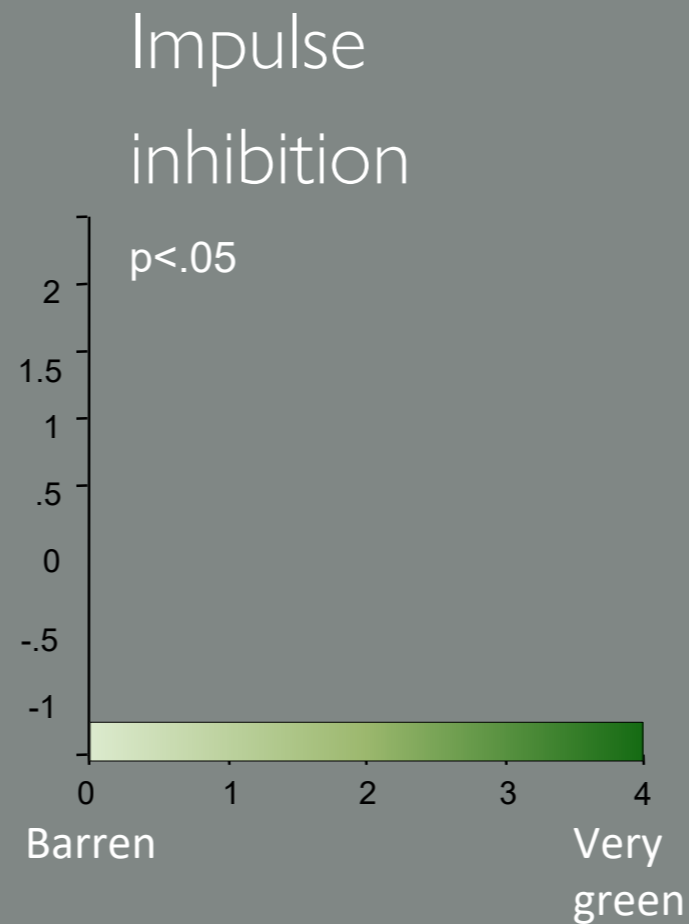
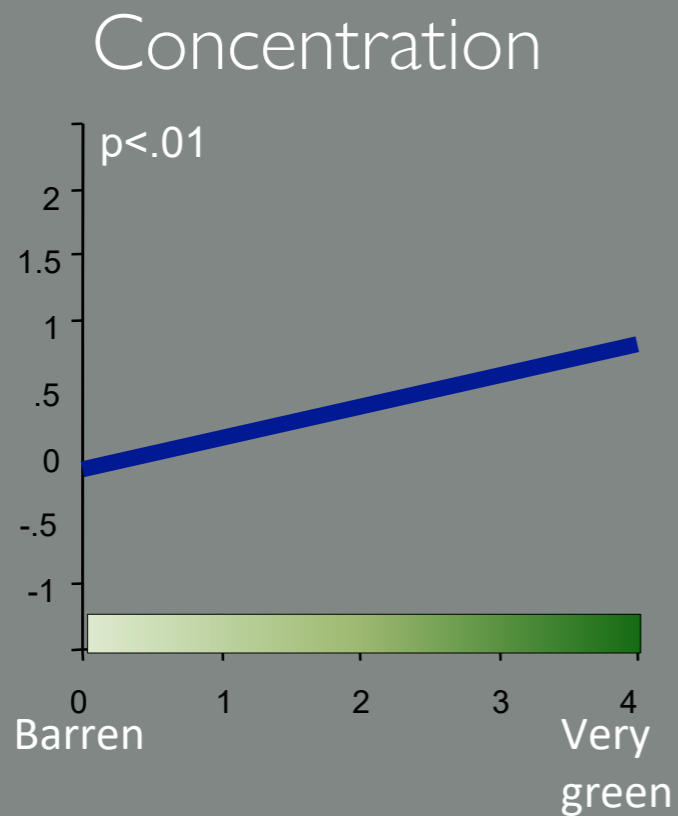
Test scores



Greenness of Apartment Views

SELF-DISCIPLINE

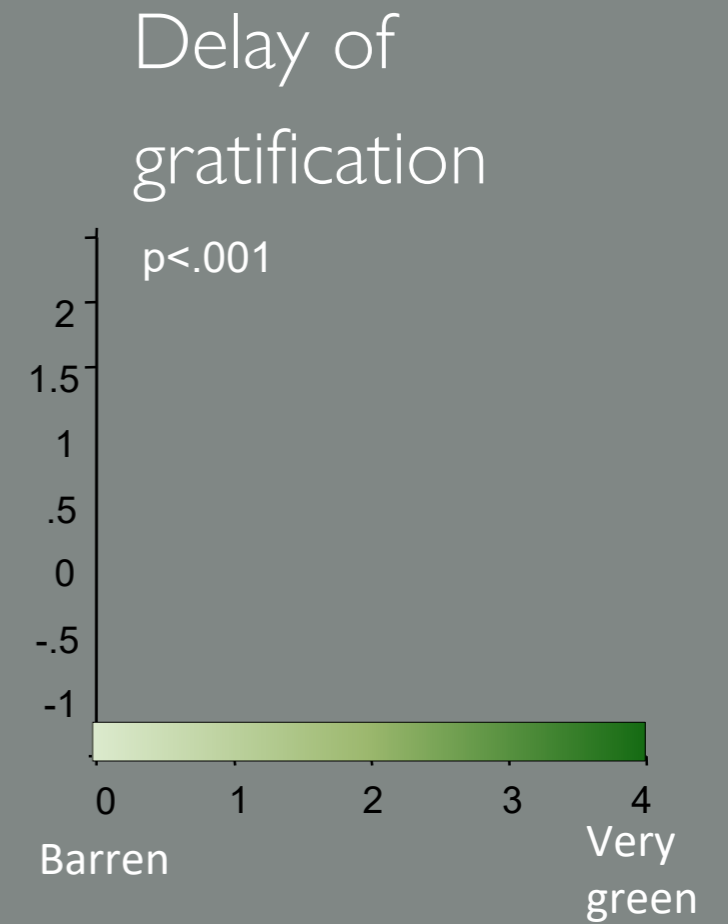
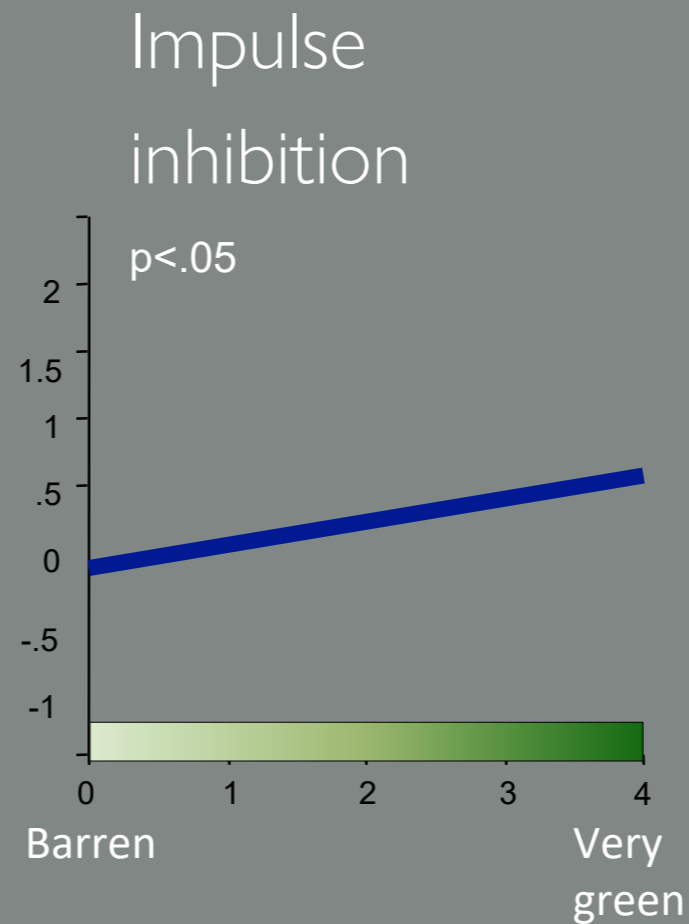
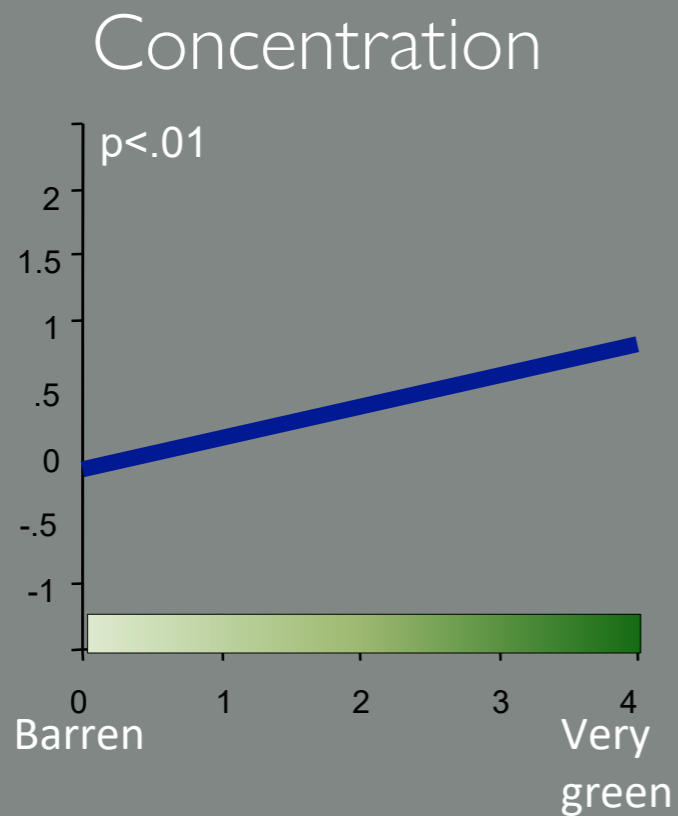
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Greenness of Apartment Views

SELF-DISCIPLINE

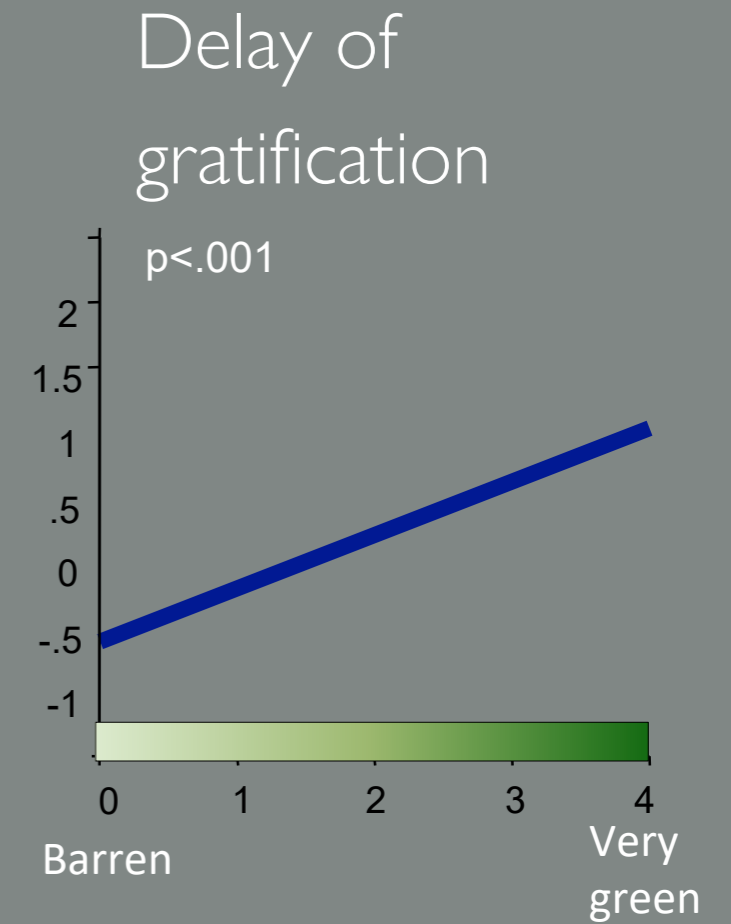
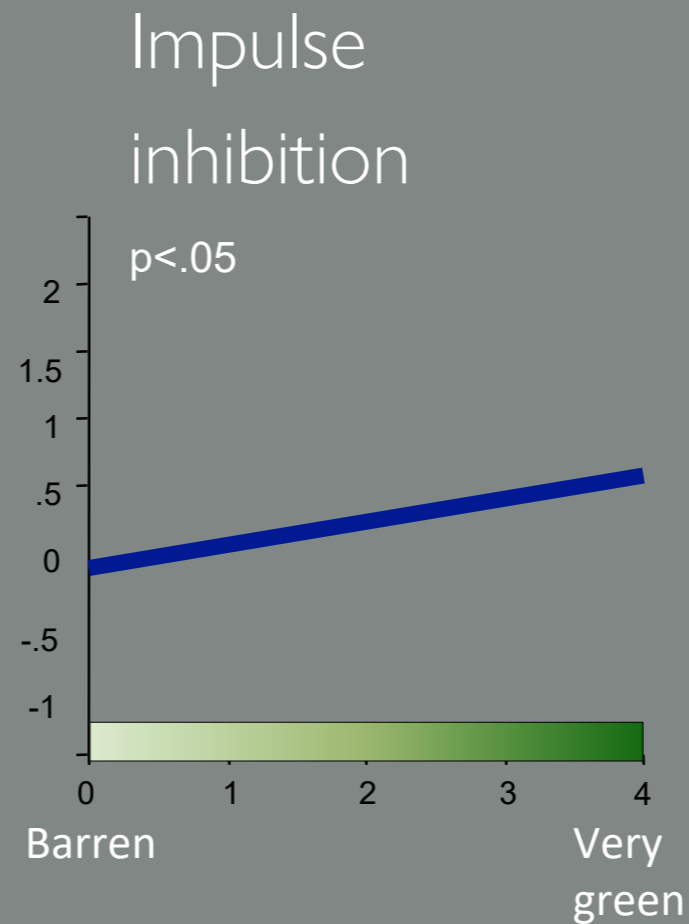
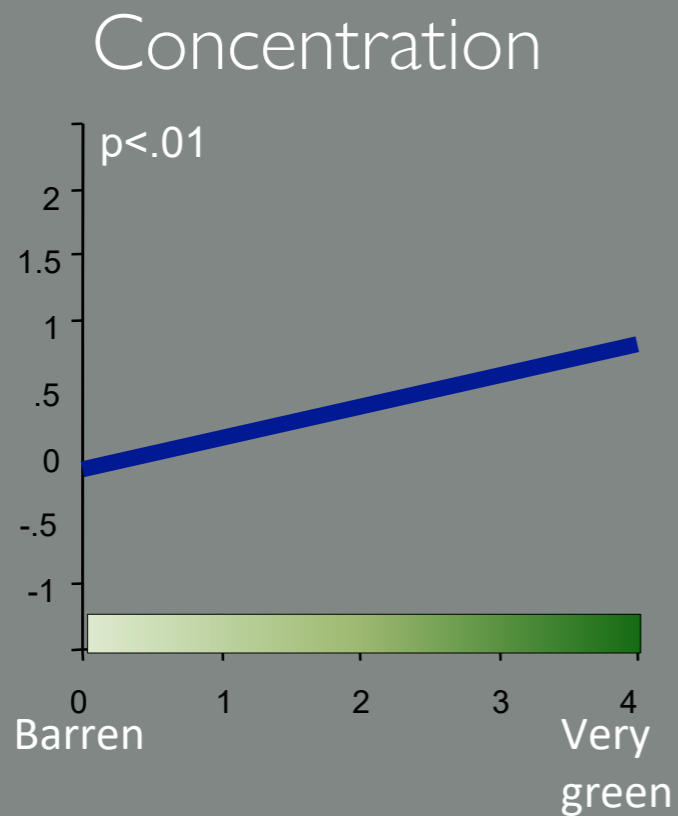
Test scores



Greenness of Apartment Views

SELF-DISCIPLINE

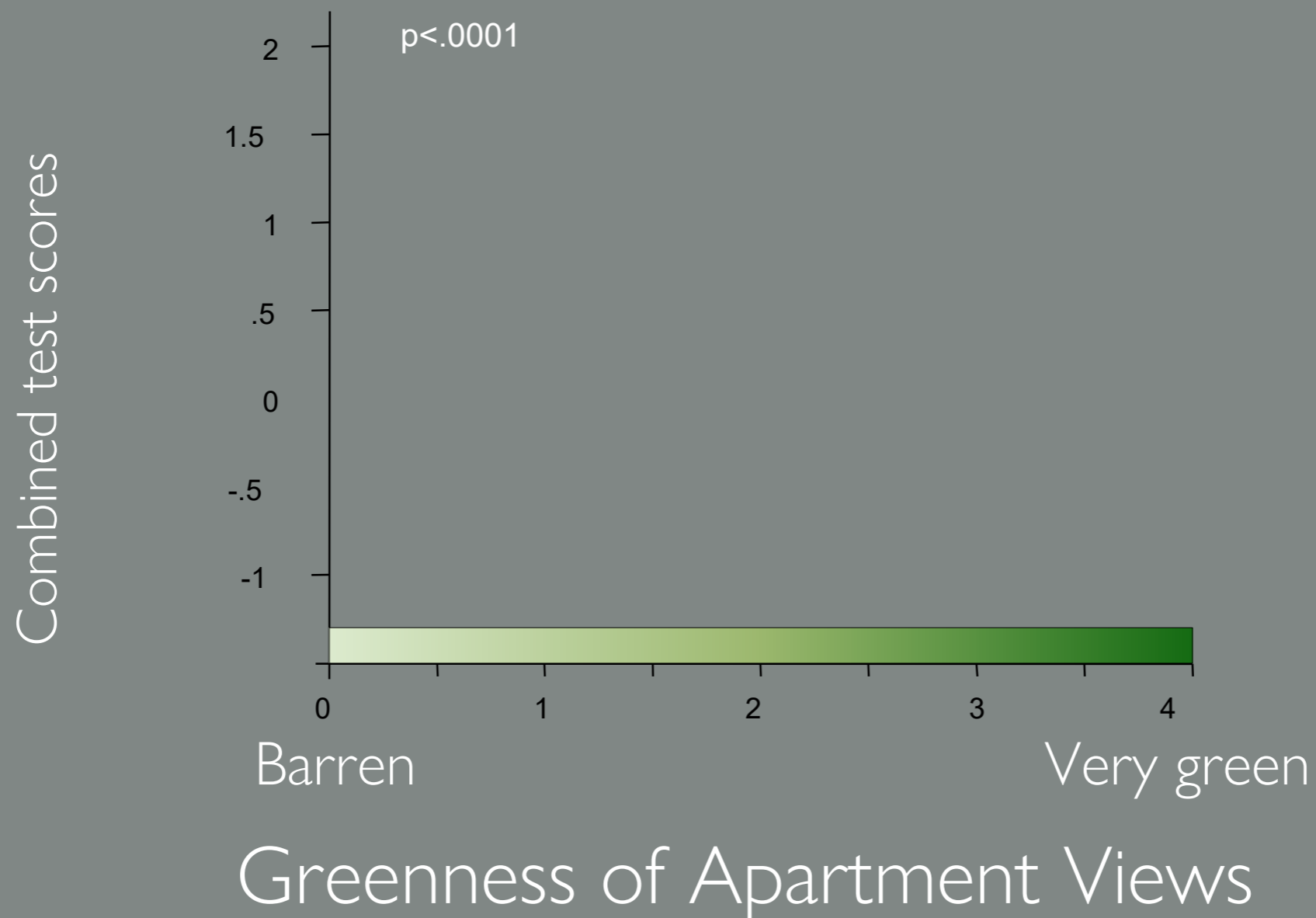
Test scores



Greenness of Apartment Views

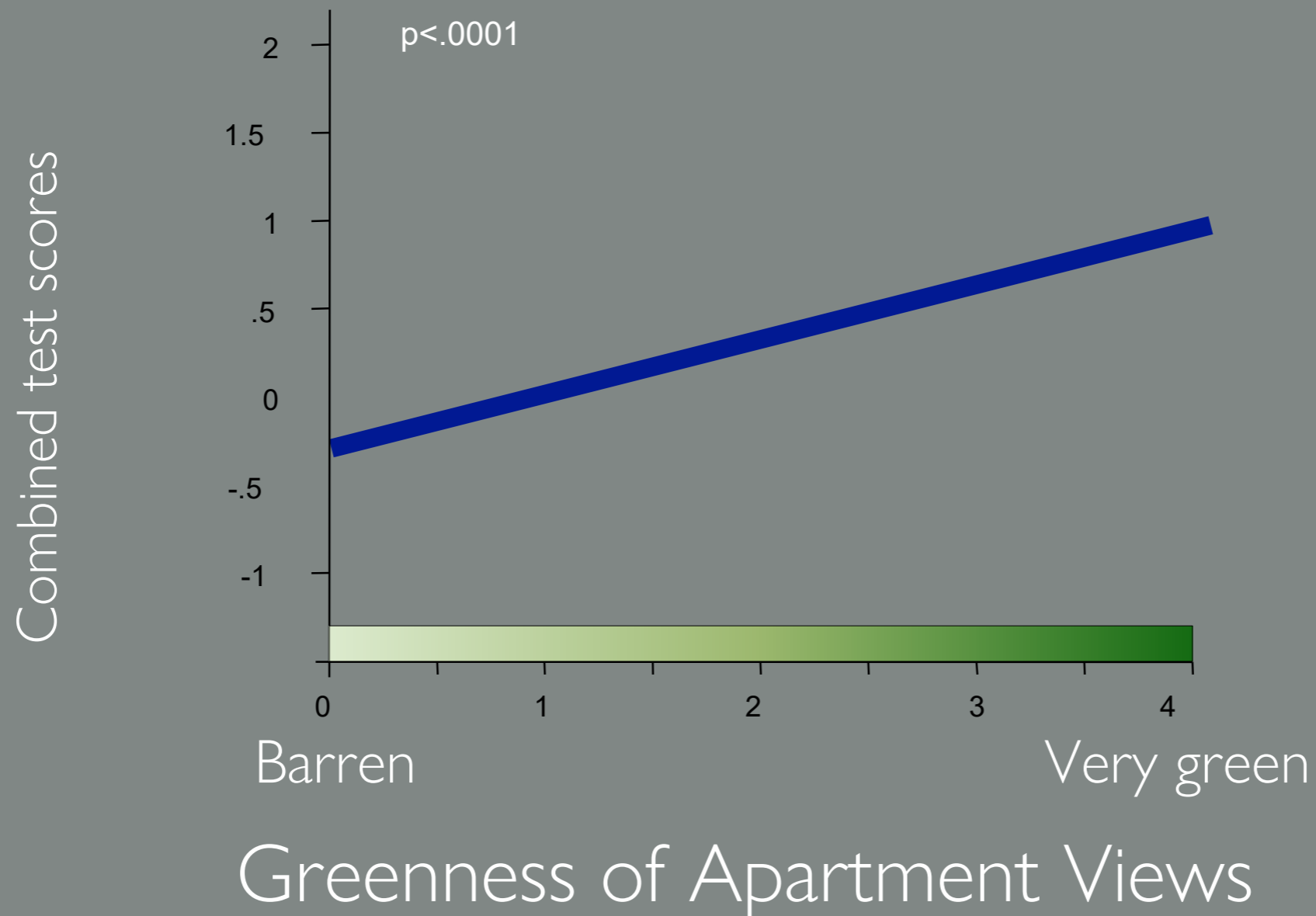
SELF-DISCIPLINE

Self-discipline increases as greenness increases



SELF-DISCIPLINE

Self-discipline increases as greenness increases



DOMESTIC VIOLENCE



An interview study

- 145 residents
- Compared answers from people living with and without nearby nature



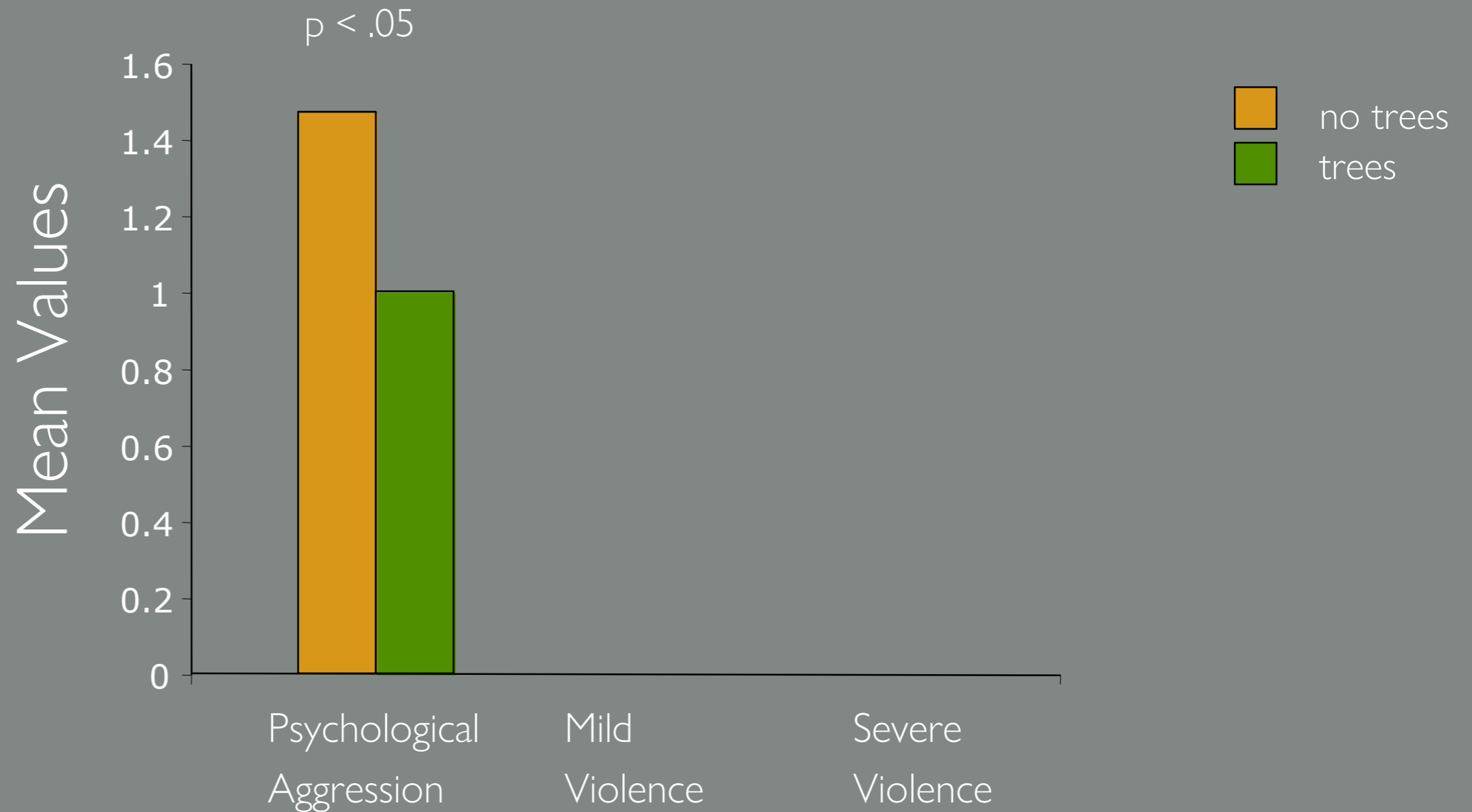


AGGRESSION AGAINST PARTNER DURING PAST YEAR



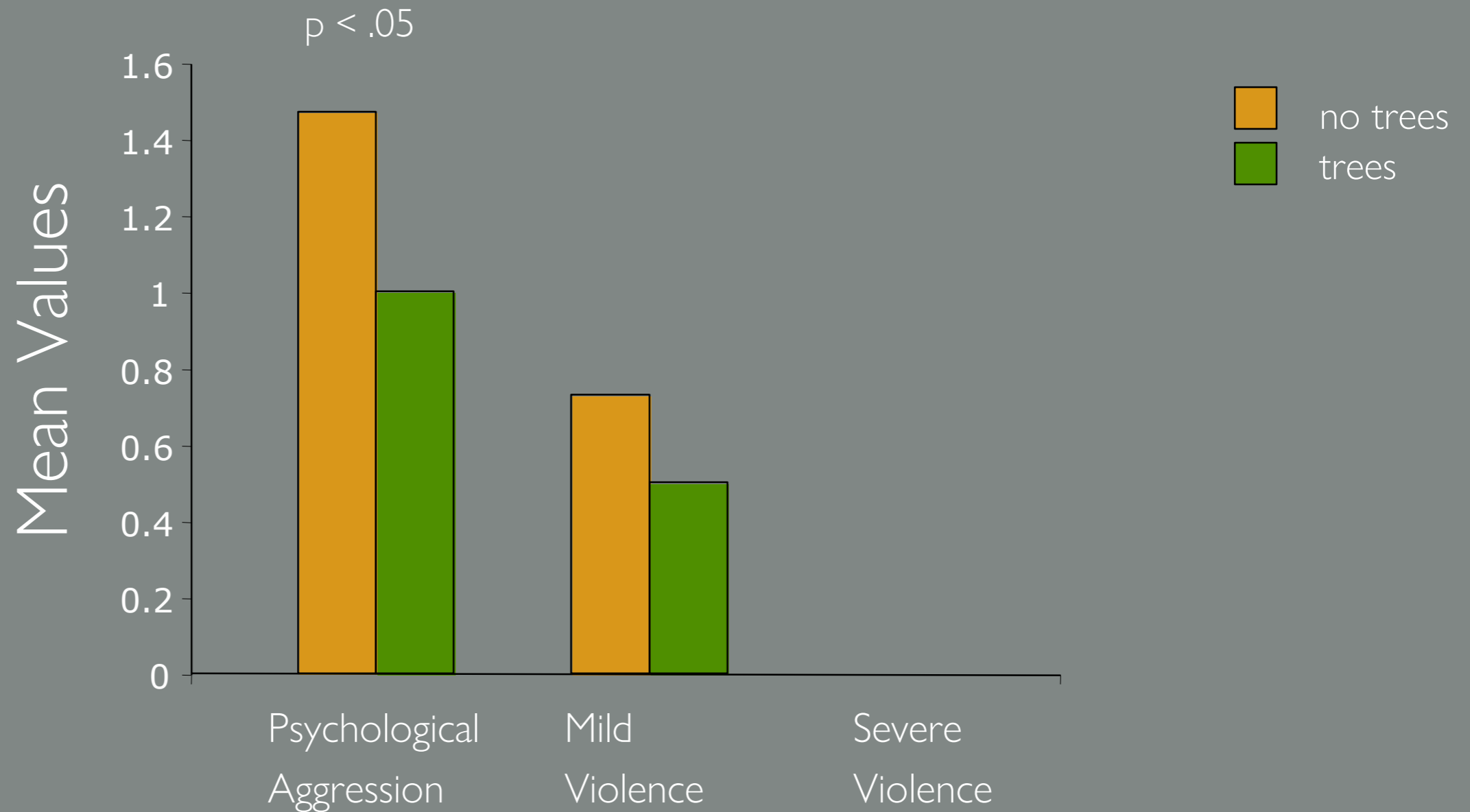
Aggressive & Violent Behavior

AGGRESSION AGAINST PARTNER DURING PAST YEAR



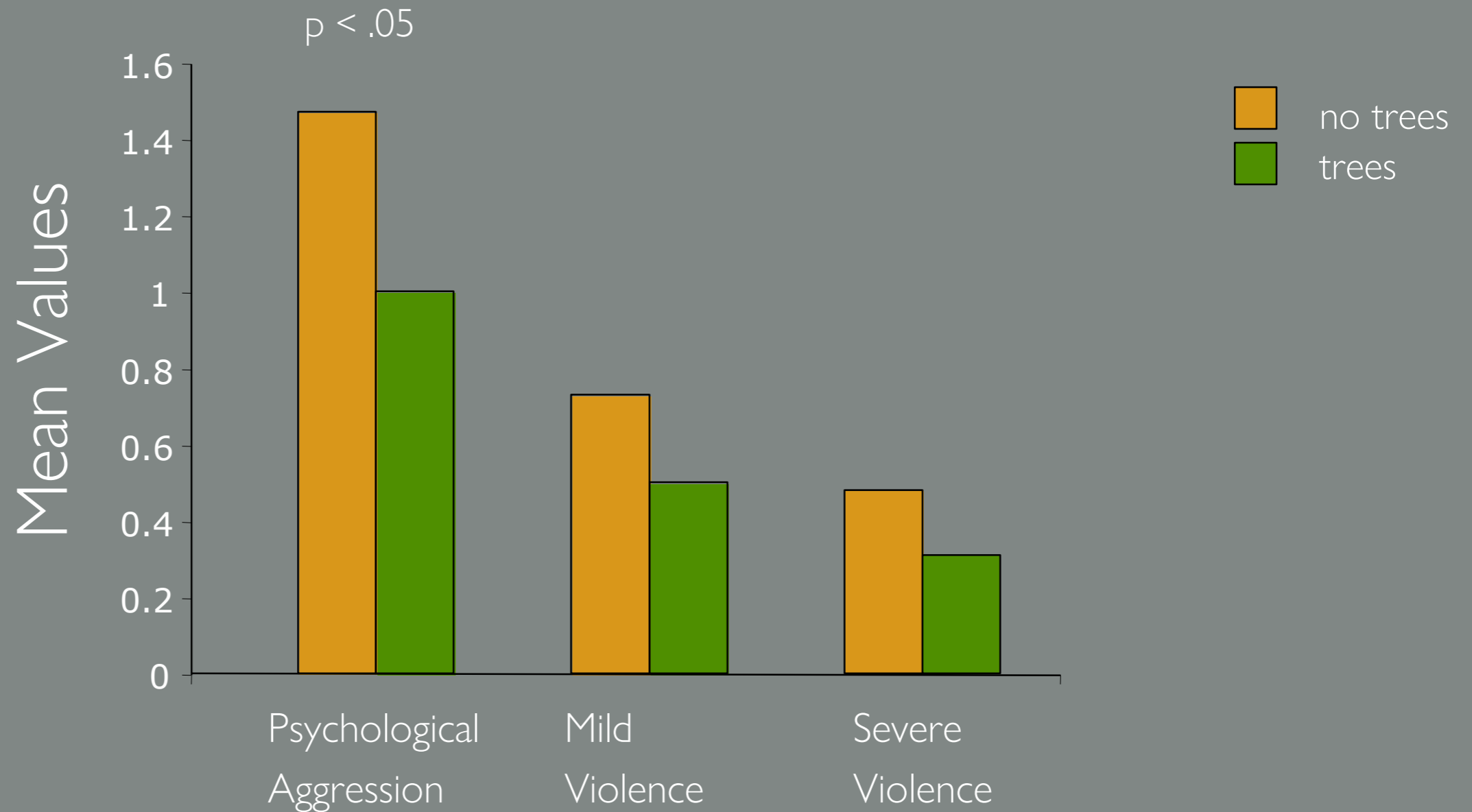
Aggressive & Violent Behavior

AGGRESSION AGAINST PARTNER DURING PAST YEAR

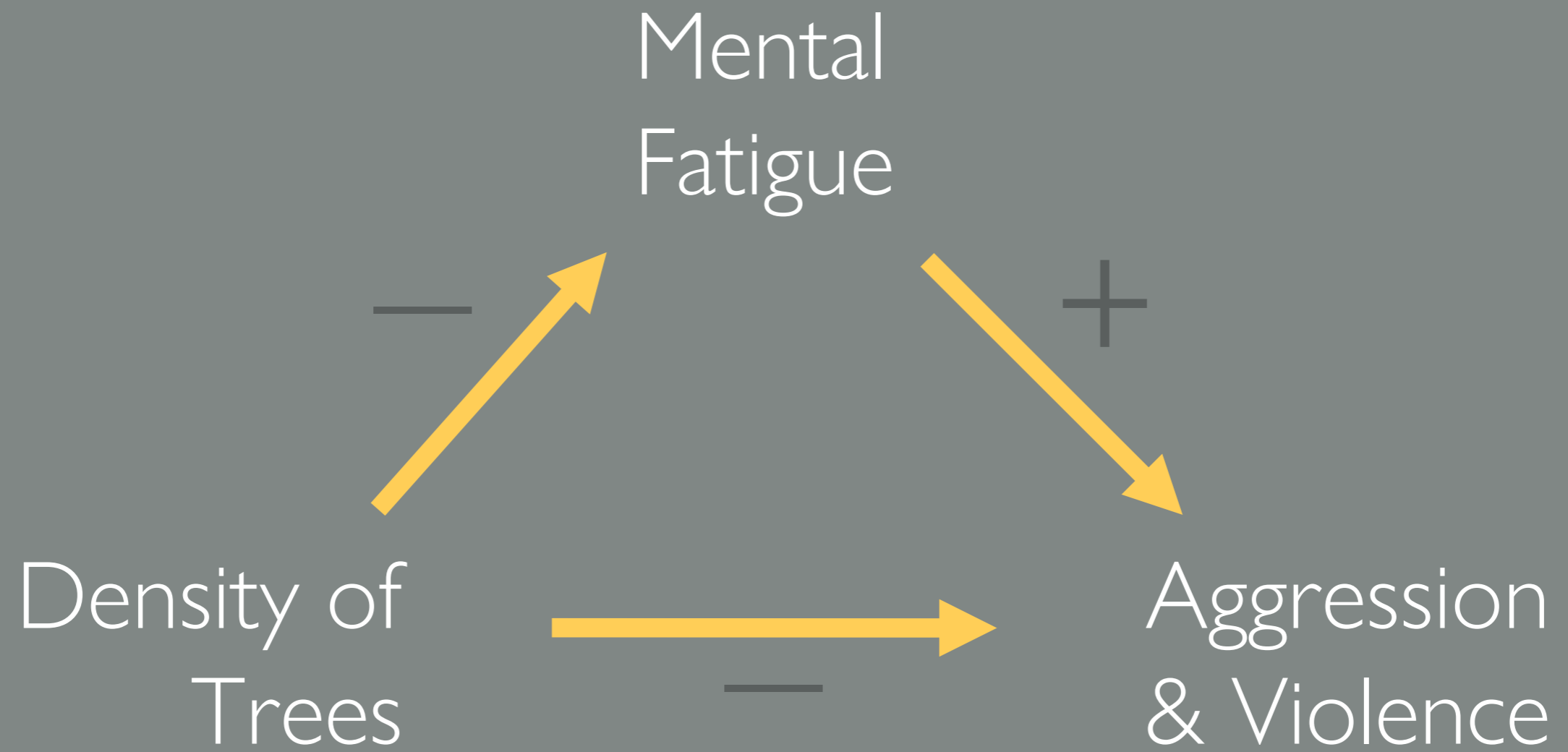


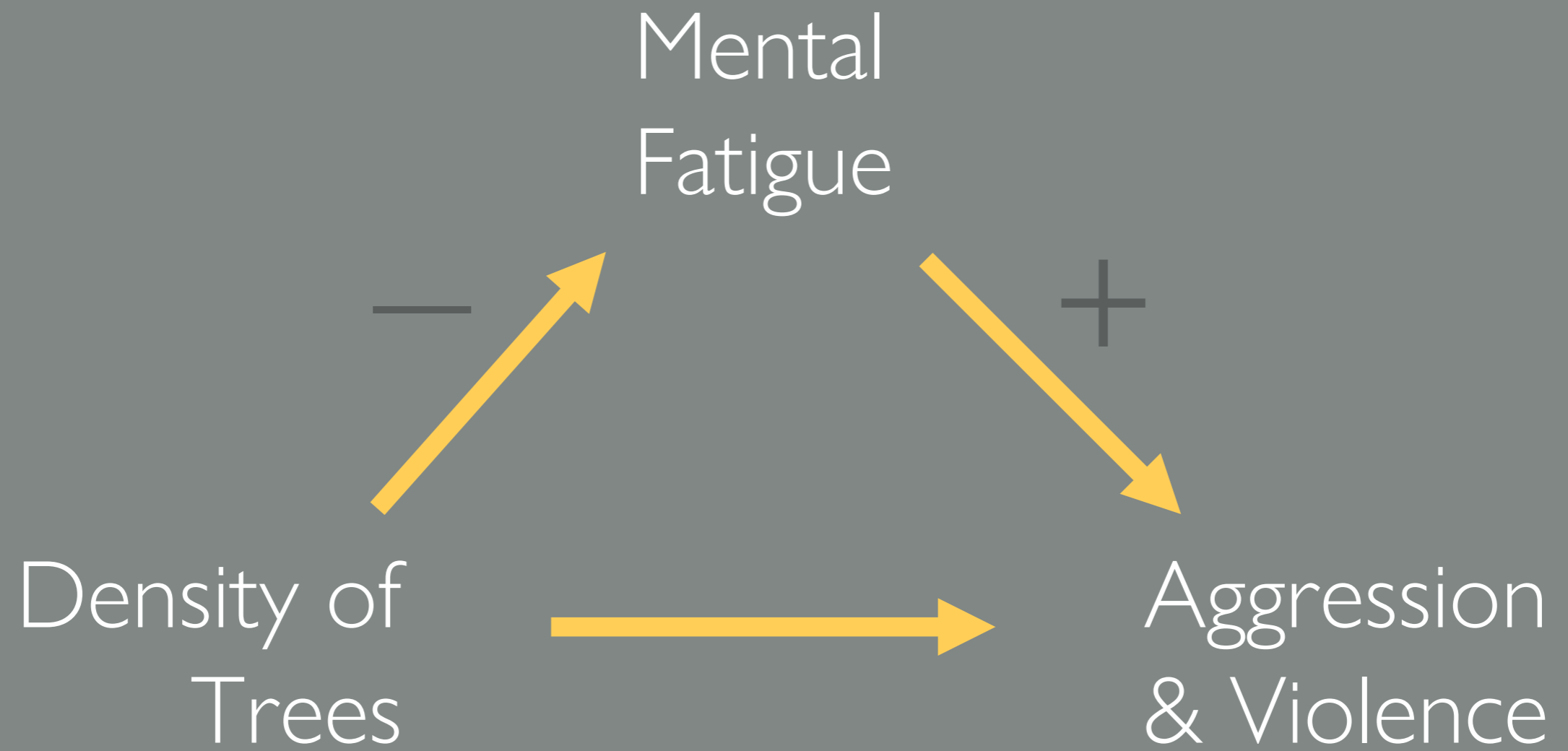
Aggressive & Violent Behavior

AGGRESSION AGAINST PARTNER DURING PAST YEAR



Aggressive & Violent Behavior





Do you have to be *in* a green space for it to impact you?

A. Yes

B. Yes, but you have to spend enough time in it

C. Not really, you can benefit from a view of green space

D. No, just knowing it is there is enough

TREES & TEST SCORES



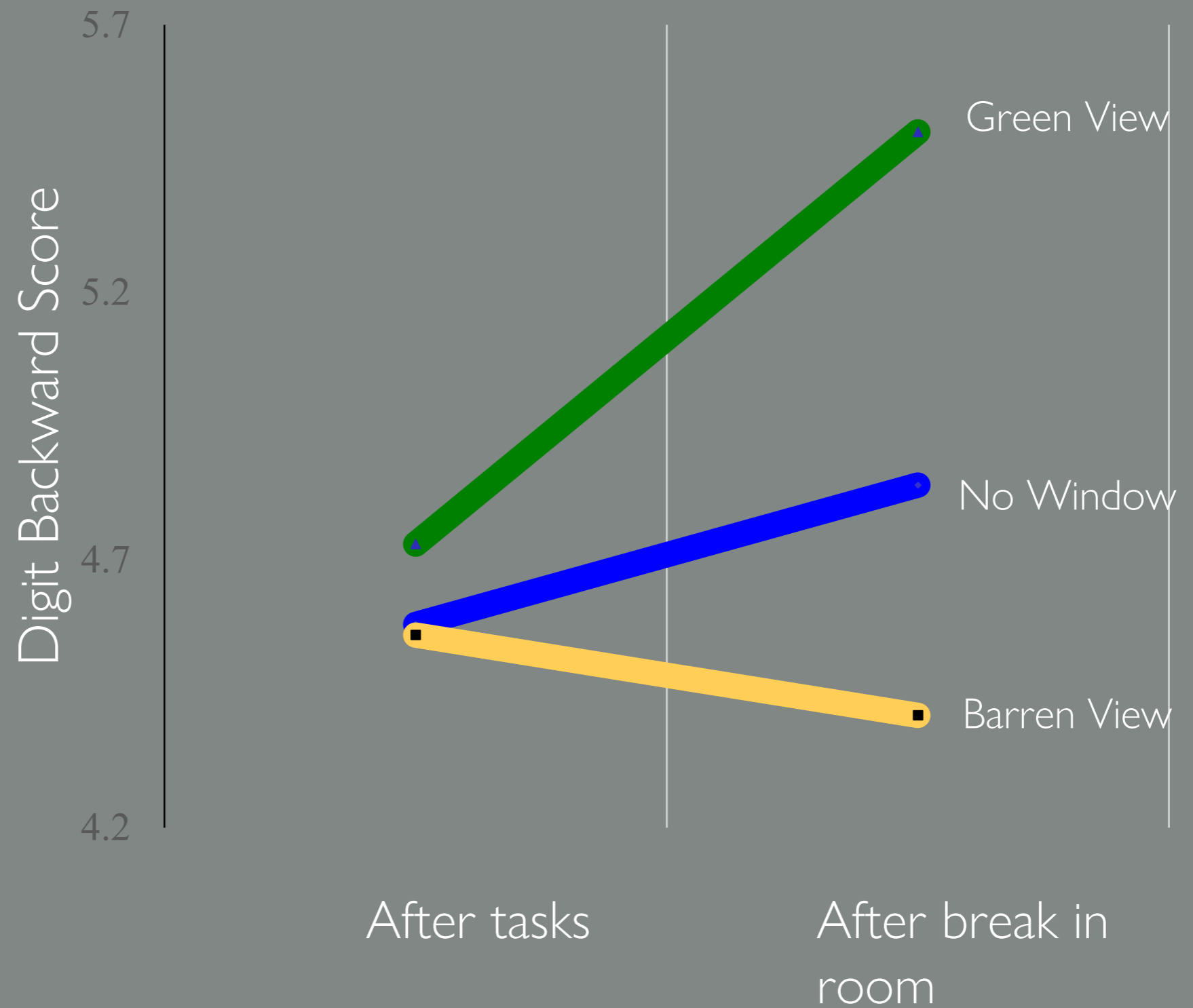




EFFECT OF WINDOW VIEW ON ATTENTION

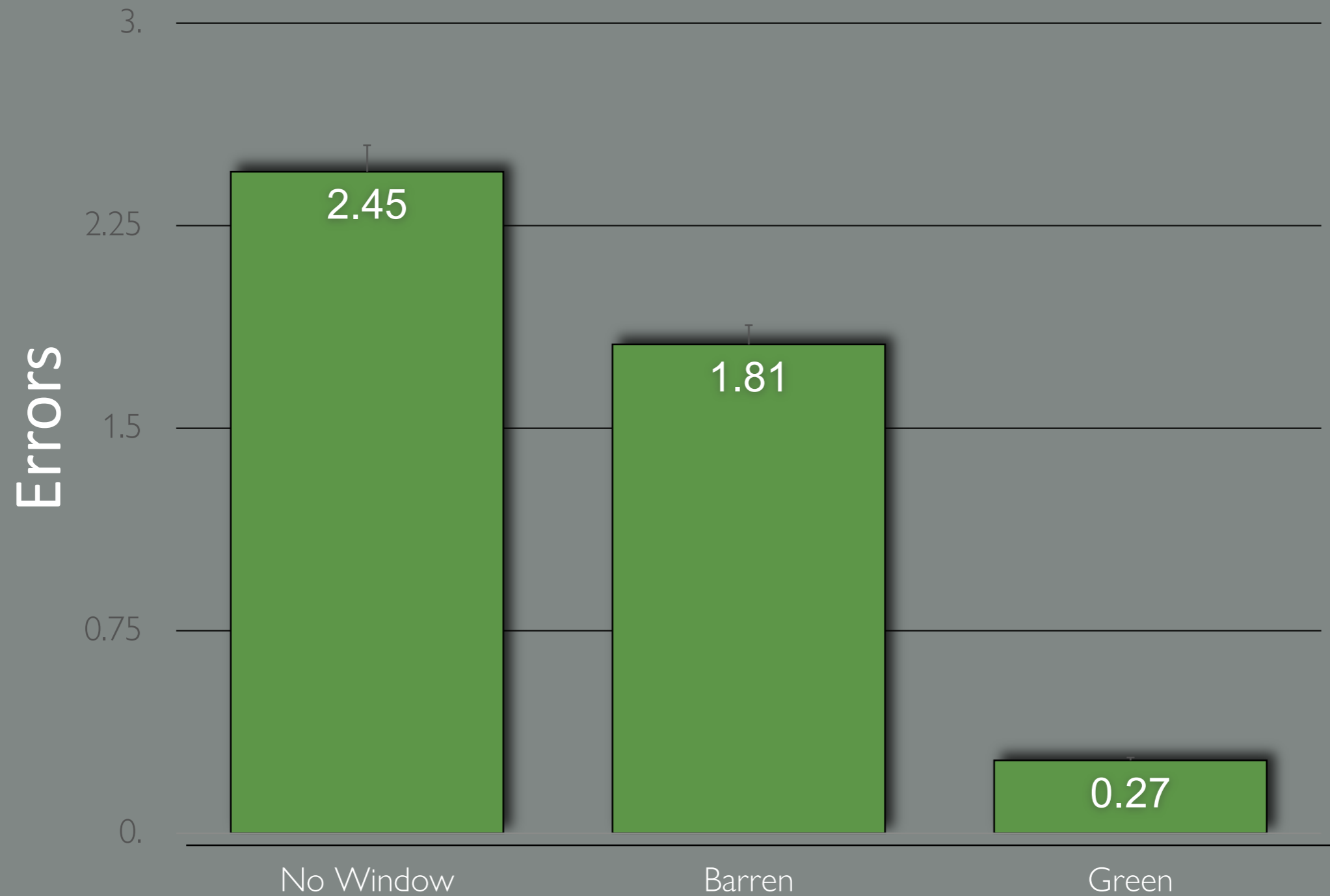


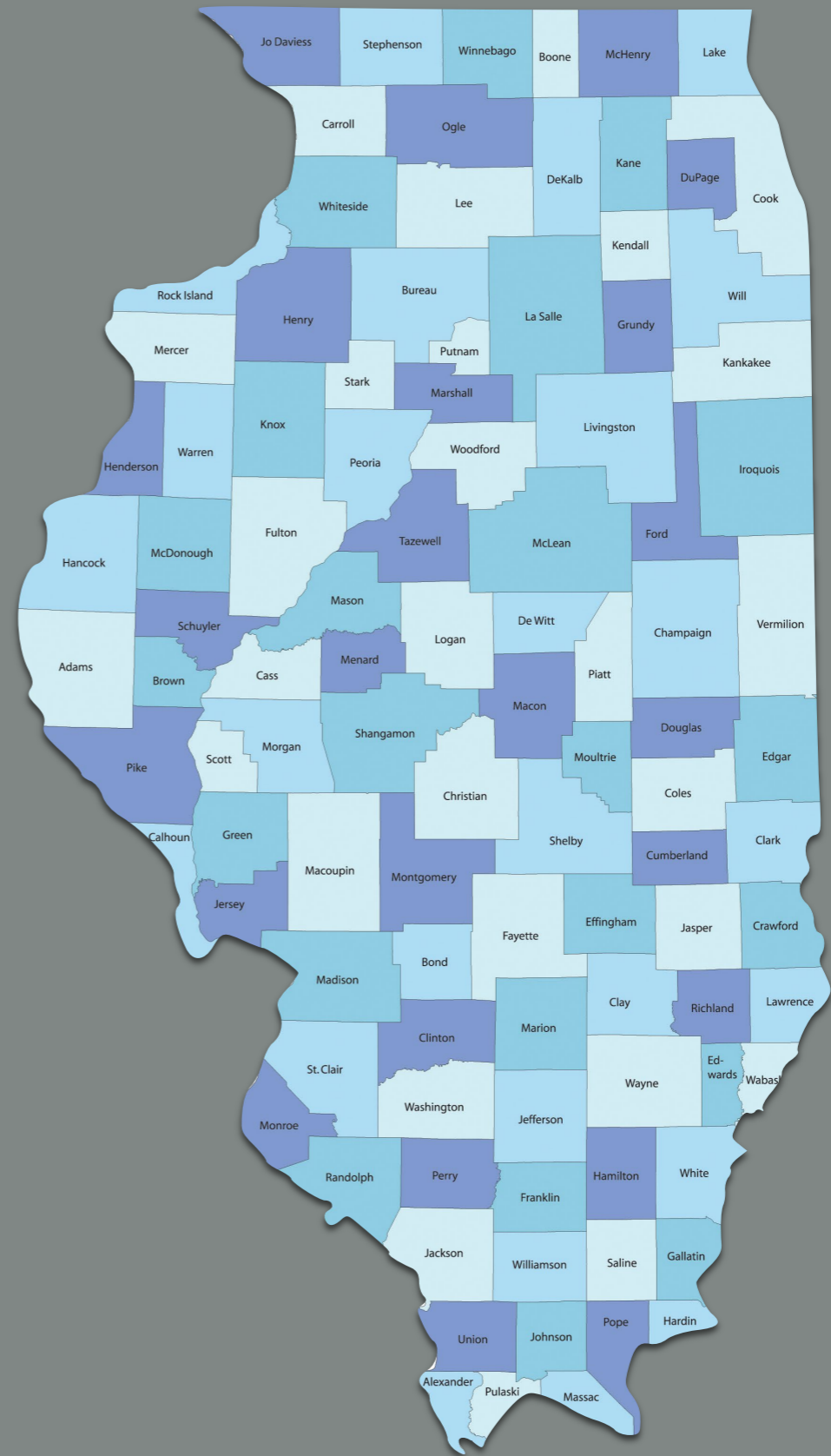
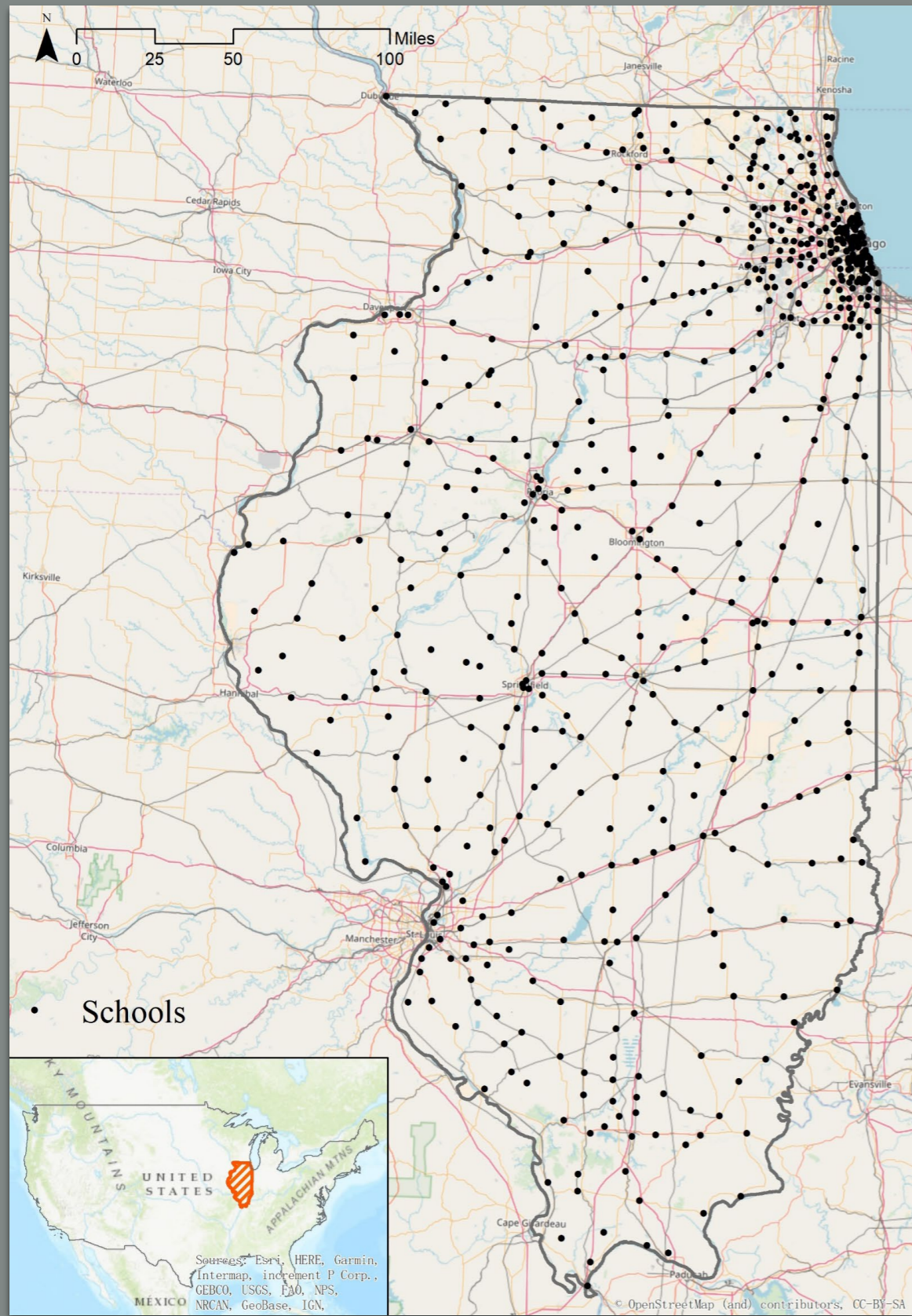
EFFECT OF WINDOW VIEW ON ATTENTION



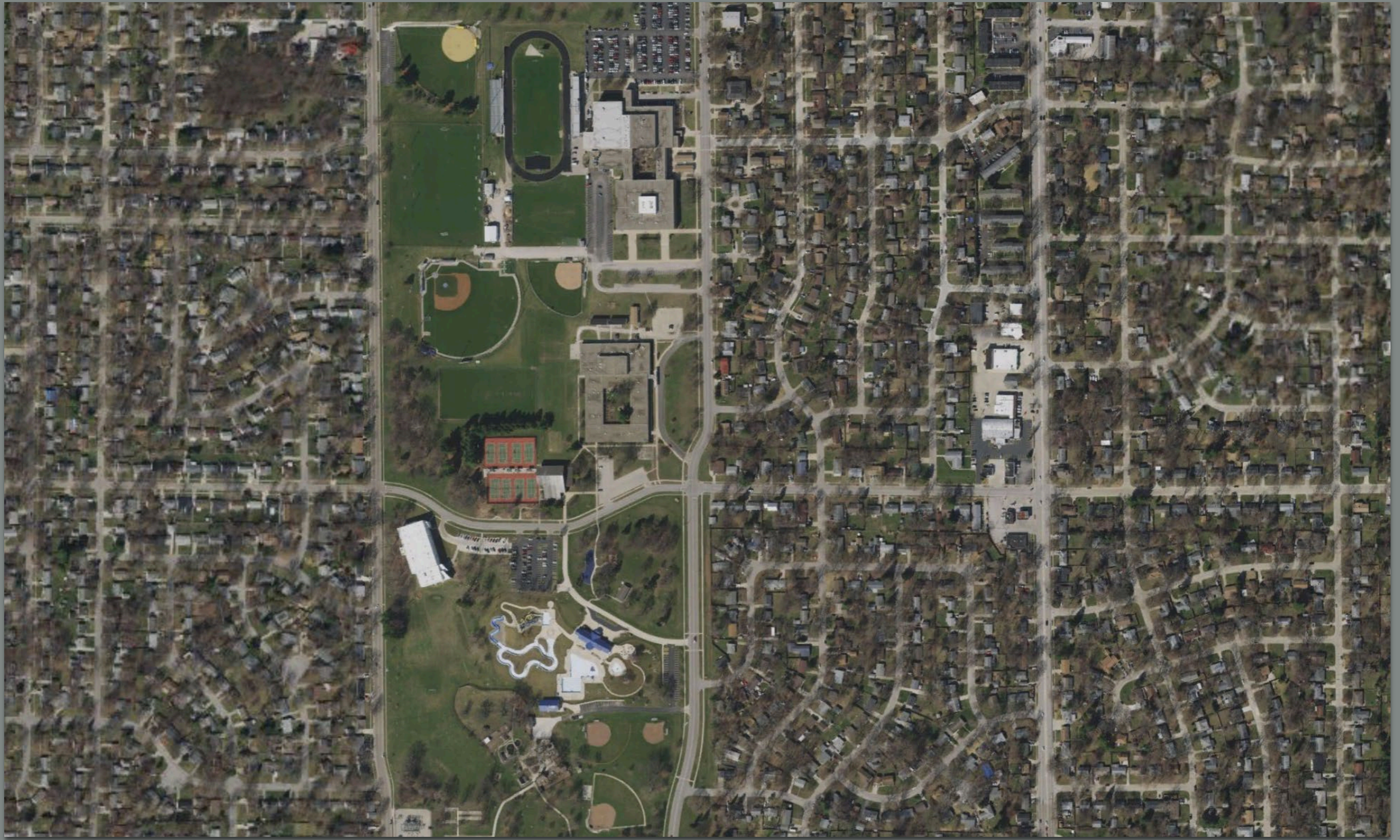
EFFECT OF WINDOW VIEW ON ATTENTION

Fail Count in Color Stroop Test

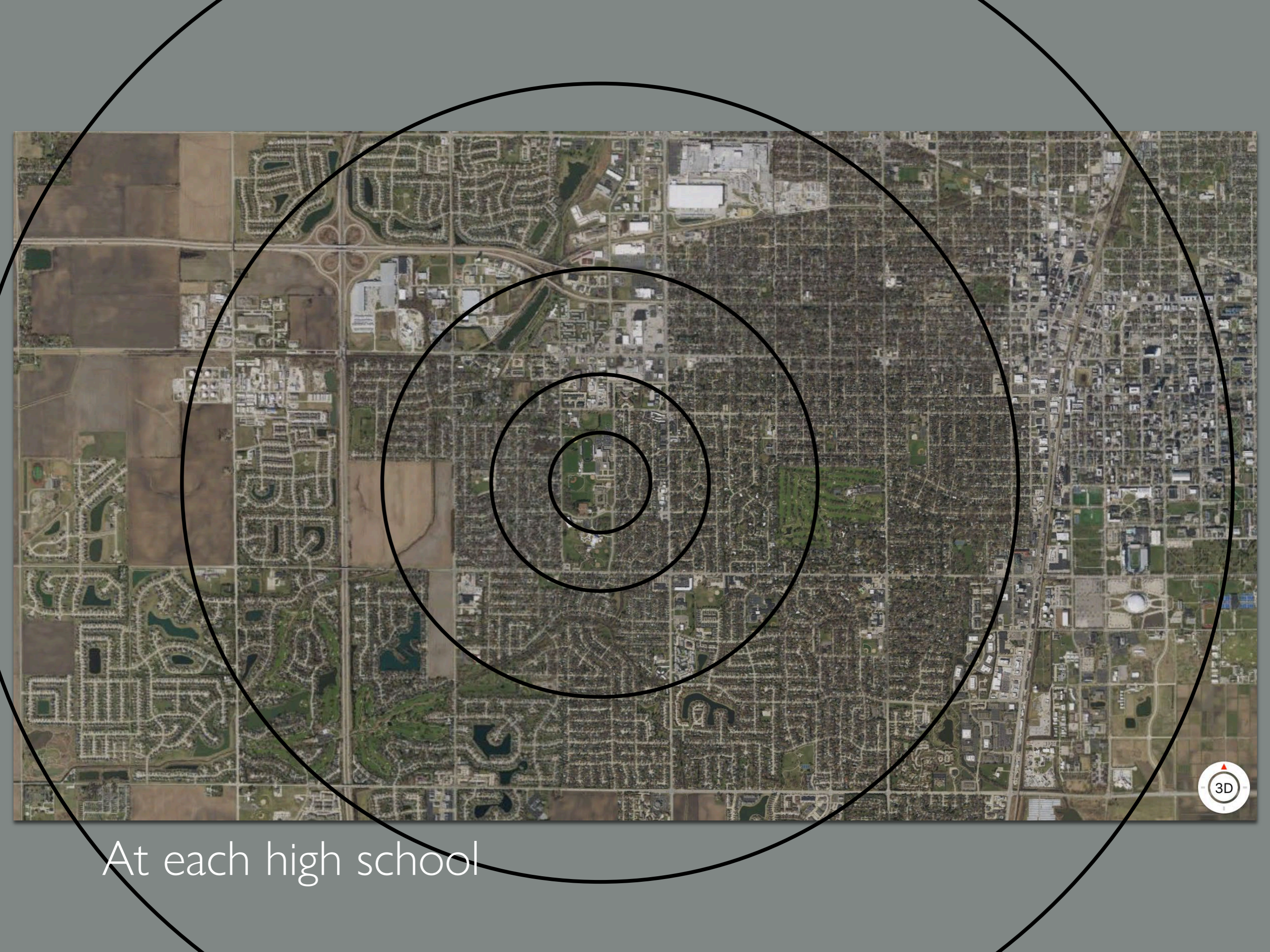




624 High Schools



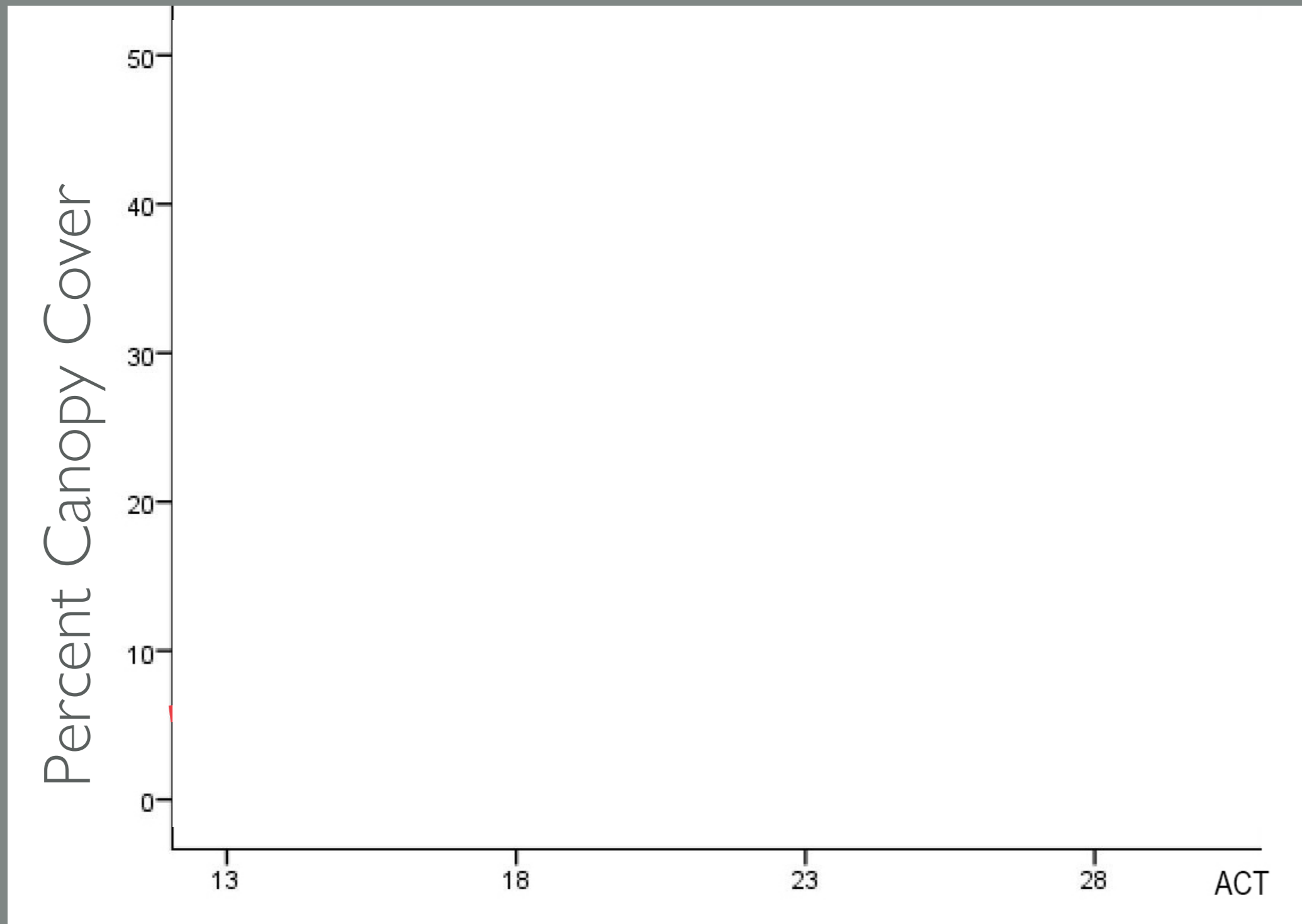
At each high school



At each high school

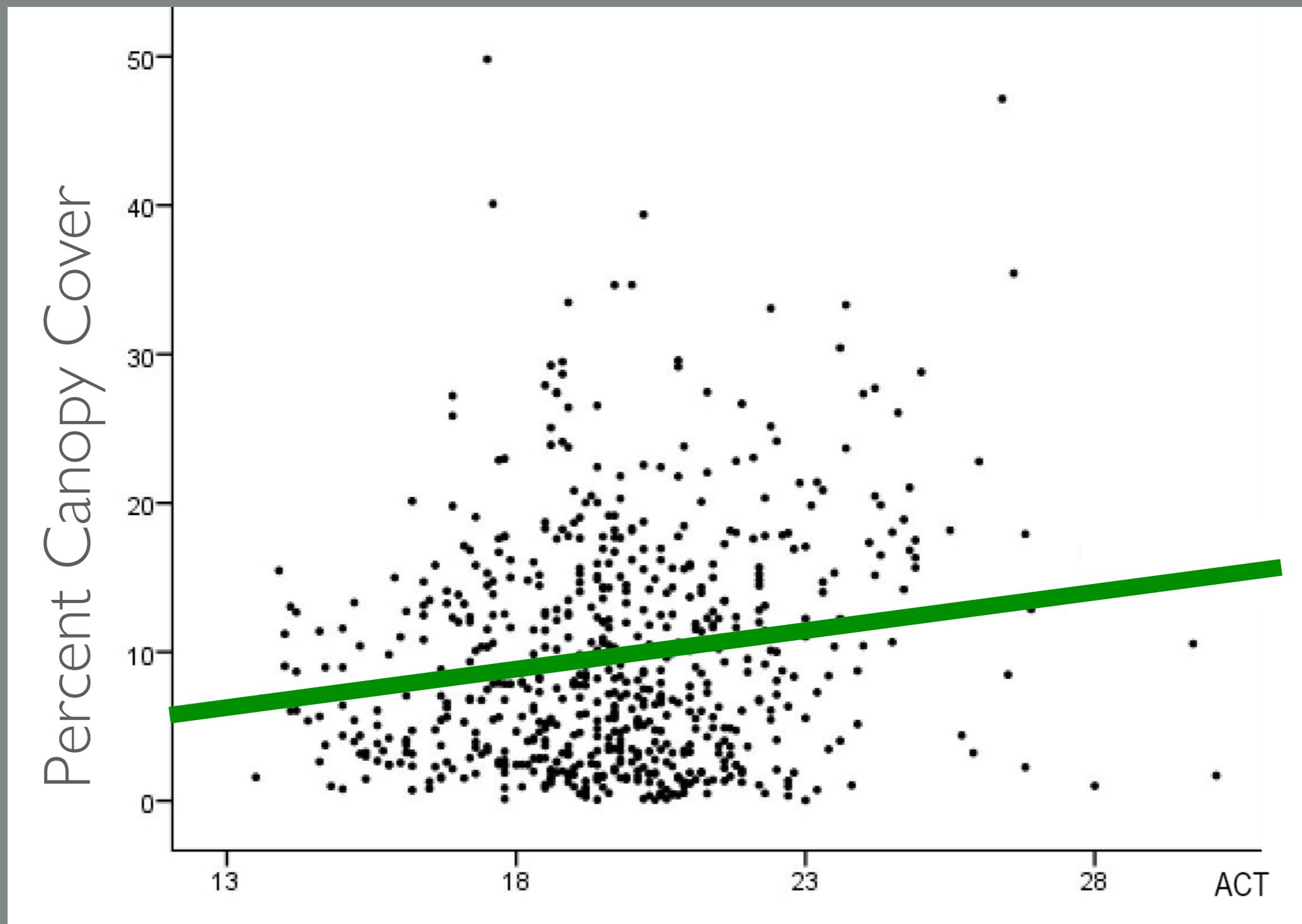


IS CANOPY ASSOCIATED WITH PERFORMANCE?



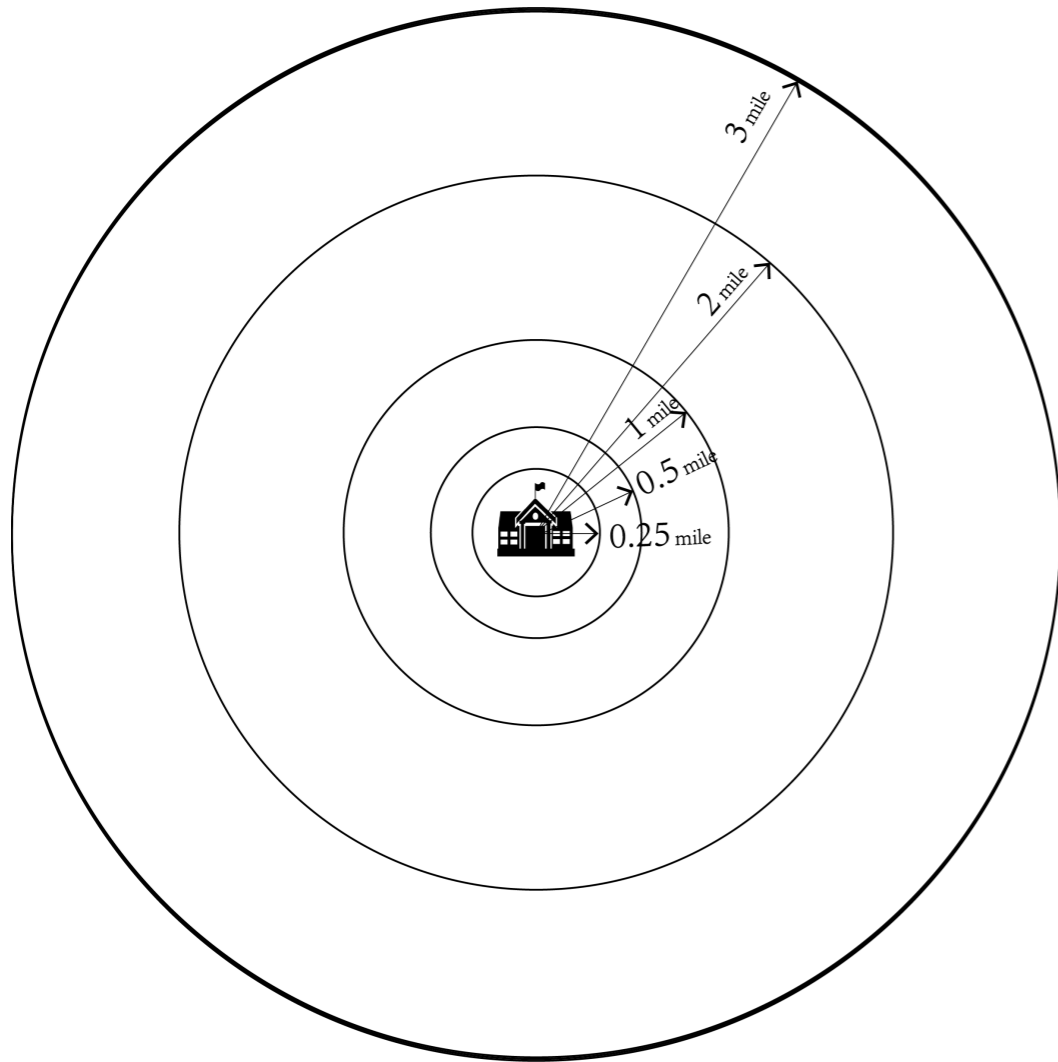
ACT Score

IS CANOPY ASSOCIATED WITH PERFORMANCE?



ACT Score

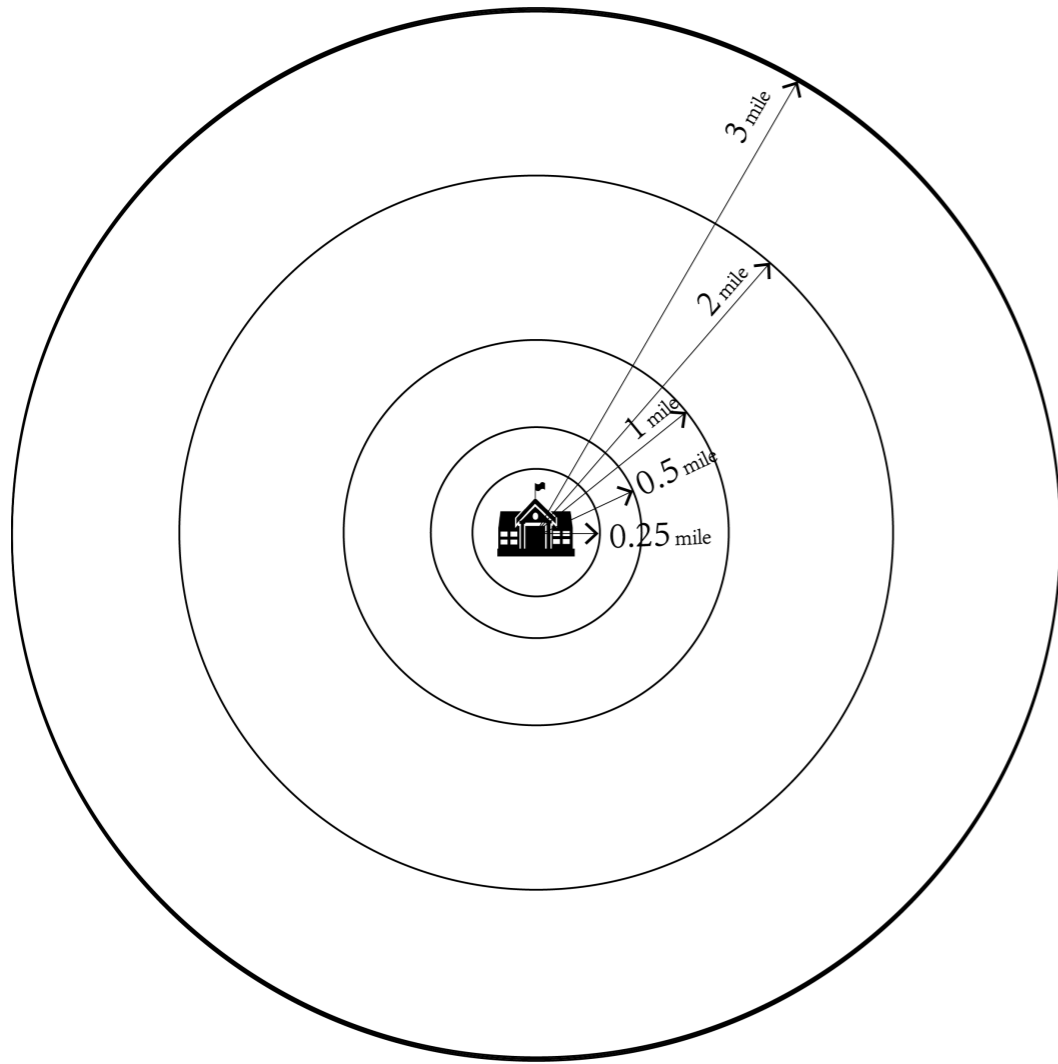
Green neighborhoods predict outcomes?



Distance from school

	ACT	College Readiness	Freshman on Track	Four-Year Graduation
0.25-mile buffer	_____	_____	_____	_____
0.5-mile buffer	_____	_____	_____	_____
1-mile buffer	_____	_____	_____	_____
2-mile buffer	_____	_____	_____	_____
3-mile buffer	_____	_____	_____	_____

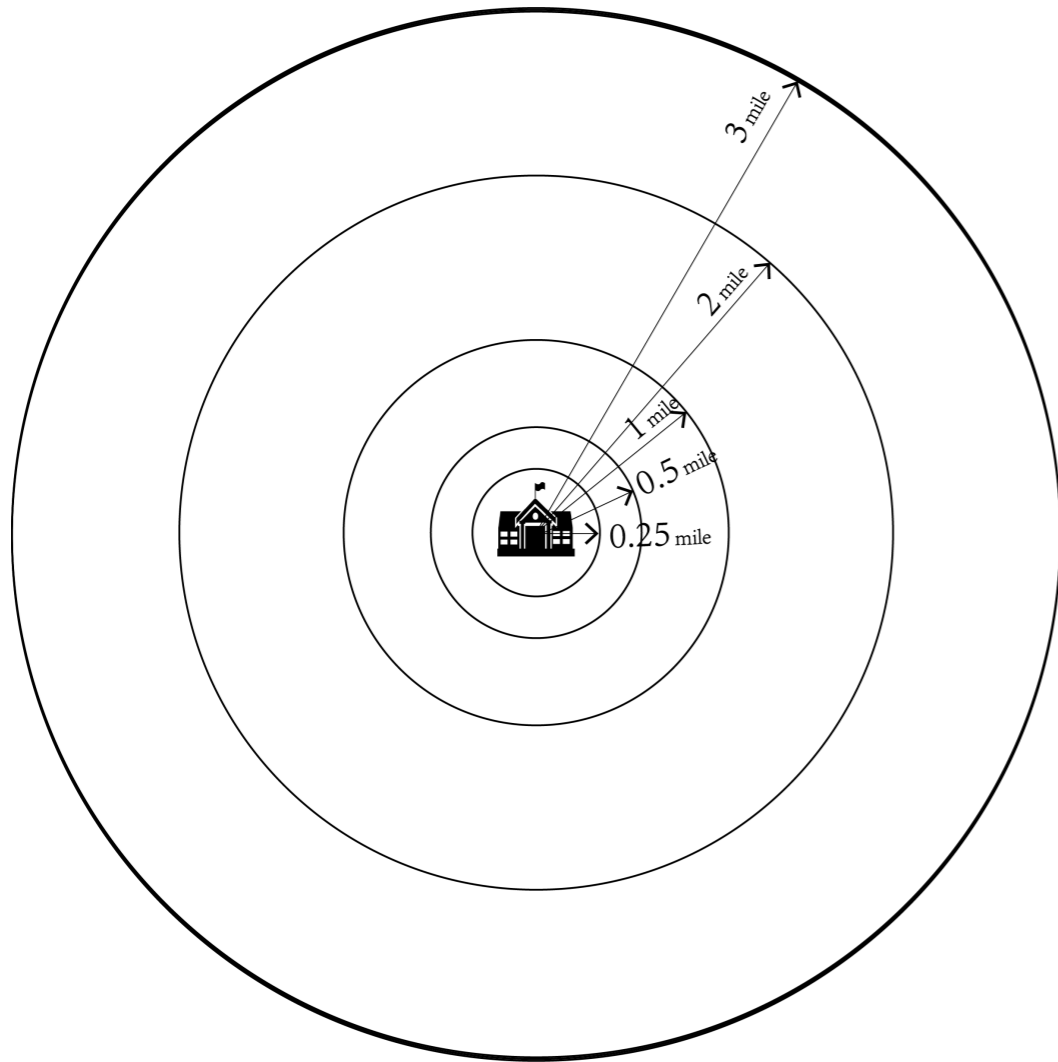
Green neighborhoods predict outcomes?



Distance from school

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1-mile buffer	★	_____	_____	_____
2-mile buffer	★	_____	_____	_____
3-mile buffer	★	_____	_____	_____

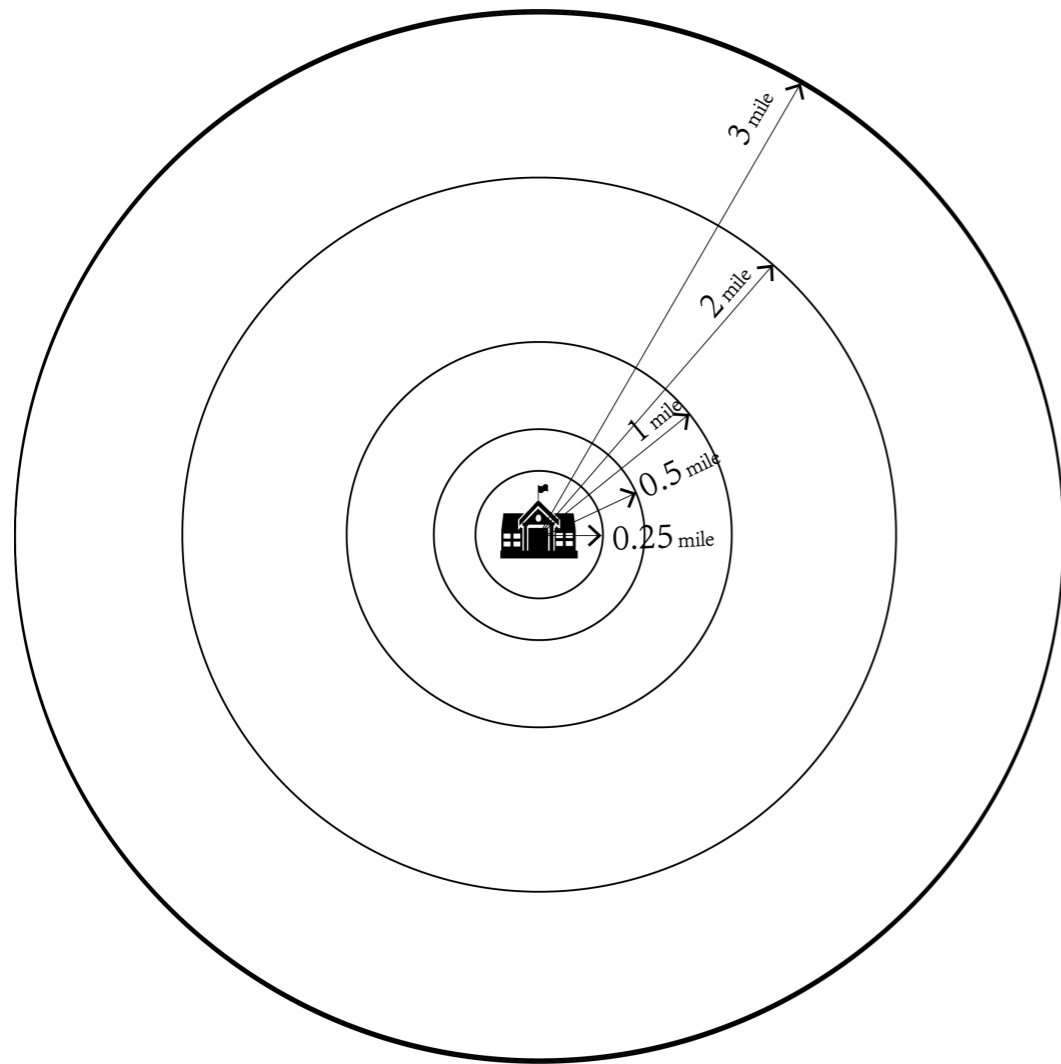
Green neighborhoods predict outcomes?



Distance from school

	ACT	College Readiness	Freshman on Track	Four-Year Graduation
0.25-mile buffer	★			
0.5-mile buffer	★			
1-mile buffer	★	★		
2-mile buffer	★			
3-mile buffer	★			

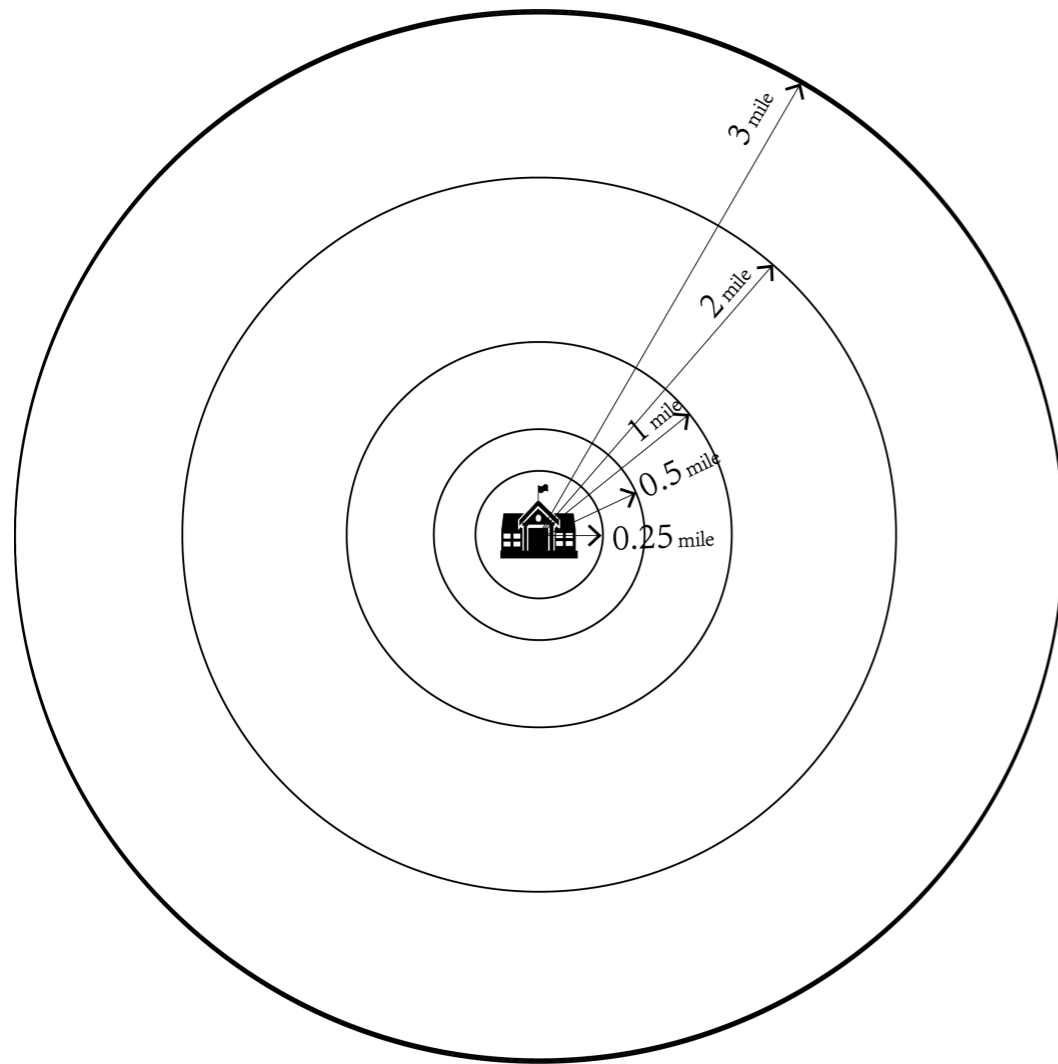
Green neighborhoods predict outcomes?



Distance from school

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0.25-mile buffer	★		★	
0.5-mile buffer	★		★	
1-mile buffer	★	★	★	
2-mile buffer	★			
3-mile buffer	★		★	

Green neighborhoods predict outcomes?



Distance from school

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0.5-mile buffer	★		★	
1-mile buffer	★	★	★	
2-mile buffer	★			
3-mile buffer	★		★	



Predictions

More urban green leads to:

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