# Higher Population Density and Lower Meaning In Life

### Nick Buttrick

### University of Virginia

The Psychology of Place and Home







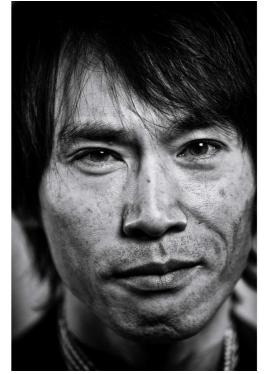
#### Samantha Heintzelman



#### Veronica Weser



#### Ed Diener



#### Shige Oishi

## Meaning What is it?

"Meaning is the web of connections, understandings, and interpretations that help us comprehend our experience and formulate plans directing our energies to the achievement of our desired future. Meaning provides us with the sense that our lives matter, that they make sense, and that they are more than the sum of our seconds, days, and years."

> Significance: What I do matters Purpose: I have a future Coherence: Things make sense

> > Steger, 2012; Heintzelman & King, 2014

### Significance



### Coherence



Baumeister, 1991; Heintzelman, Trent, & King, 2013; Milgram, 1970

### Study 1 Gallup World Poll

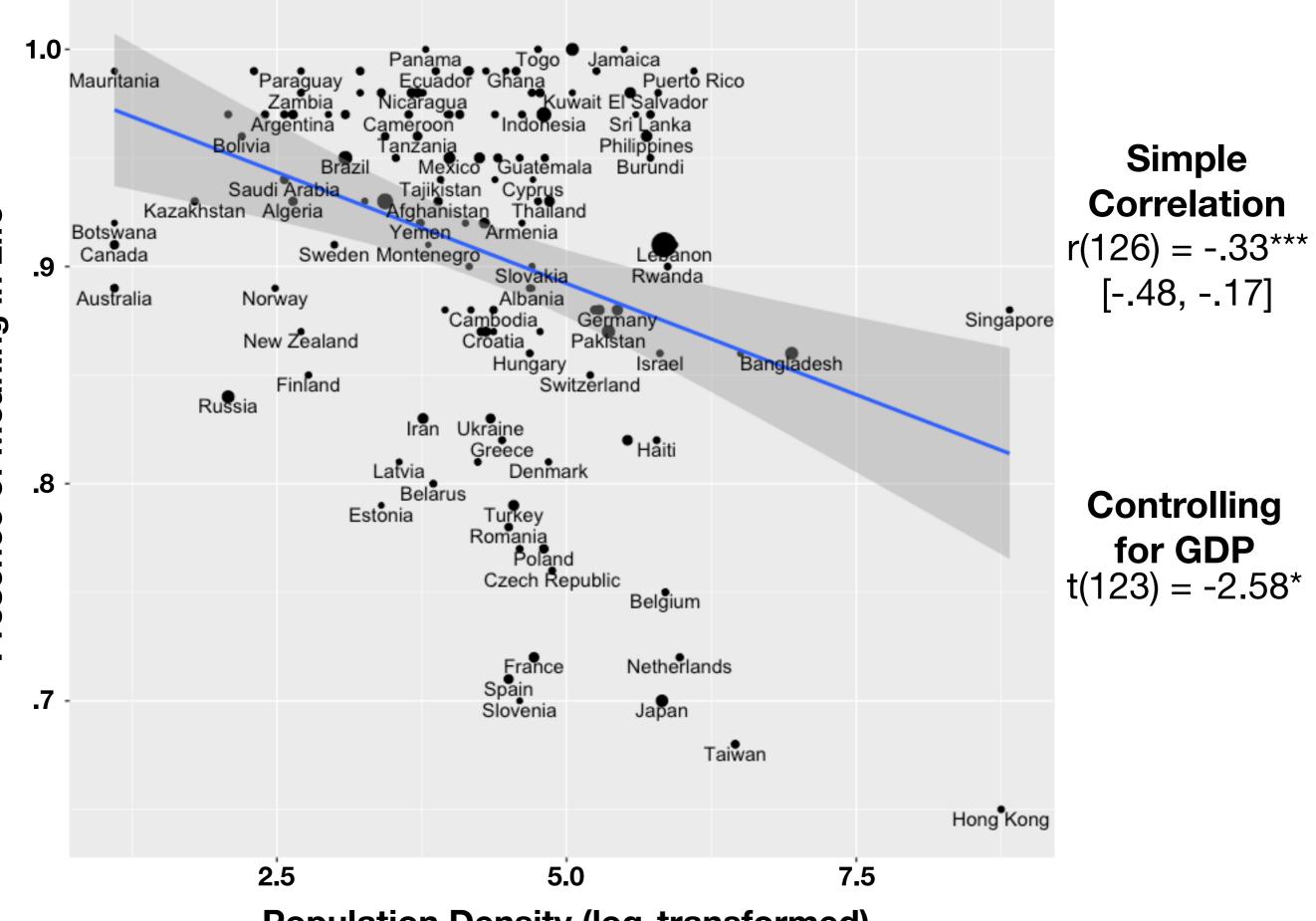
Collects nationally representative samples from over 160 countries in over 140 languages

## Our Data

~140,000 people in 127 countries (2007) Oishi & Diener, 2014

### **Our Measure**

"Do you feel your life has an important purpose or meaning?"



**Population Density (log-transformed)** 

Presence of Meaning in Life

### Study 2 Gallup Daily Tracking Poll

#### Surveys 1,000 Americans a day, 350 days out of the year. **Our Data**

~137,000 people in 354 US cities (2014)

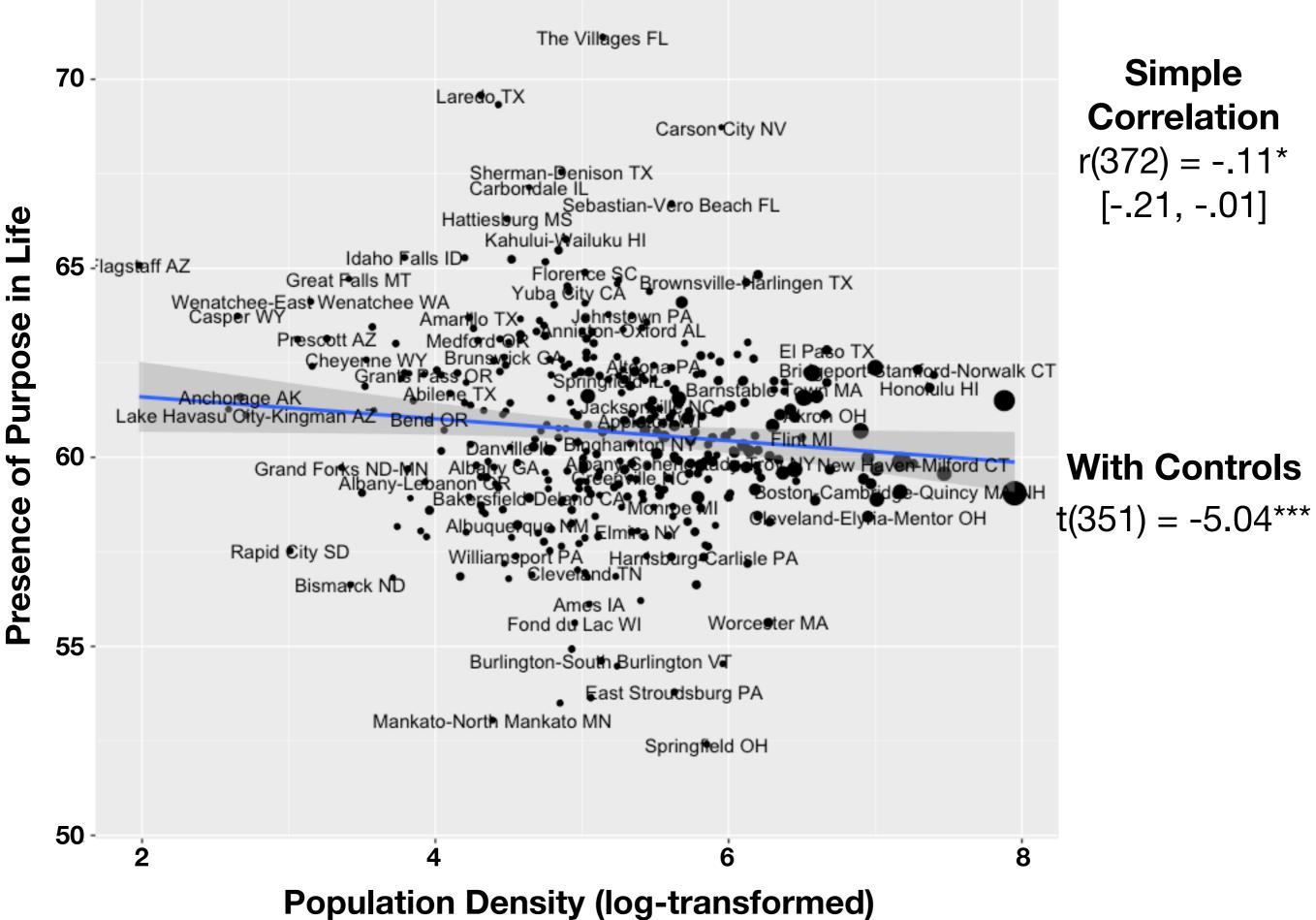
### **Our Measure**

Gallup-Healthways Well-Being Index 2.0 Purpose Subscale

e.g. "I like what I do everyday"; "In the last 12 months, I have reached most of my goals"

### **Our Controls**

City median household income; individual education, income, gender, ethnicity, and marital status

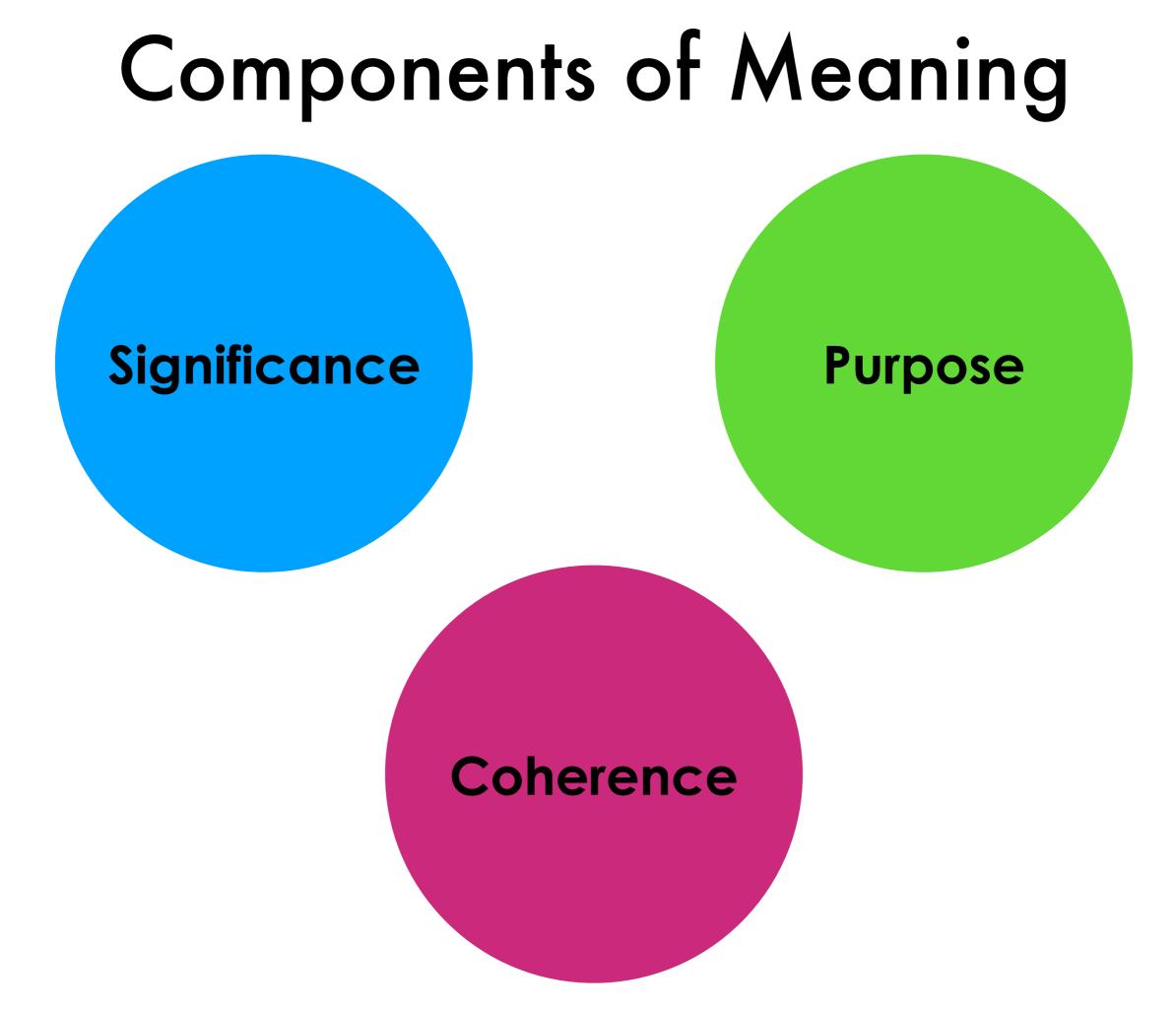


Presence of Purpose

### Interim Summary

Across 127 countries, with data from ~275,000 people, using two different instruments, at multiple levels of analysis, we find a robust association between population density and a sense of meaning in one's life

But, why?









#### Uniqueness

- •I am a unique individual
- •The things I do cannot be done by anyone else
- •The world would function fine without me

#### Power

- •I currently feel in control
- •I currently feel powerful
- •I currently feel dependent

#### Integration

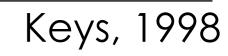
- •I don't feel I belong to anything I'd call a community
- •I feel close to other people in my community
- My community is a source of comfort

#### Contribution

- I have something valuable to give to the world
- My daily activities do not produce anything worthwhile for my community
- •I have nothing important to contribute to society

#### Coherence

- The world is too complex for me
- •I cannot make sense of what is going on in the world
- •I find it easy to predict what will happen next in society









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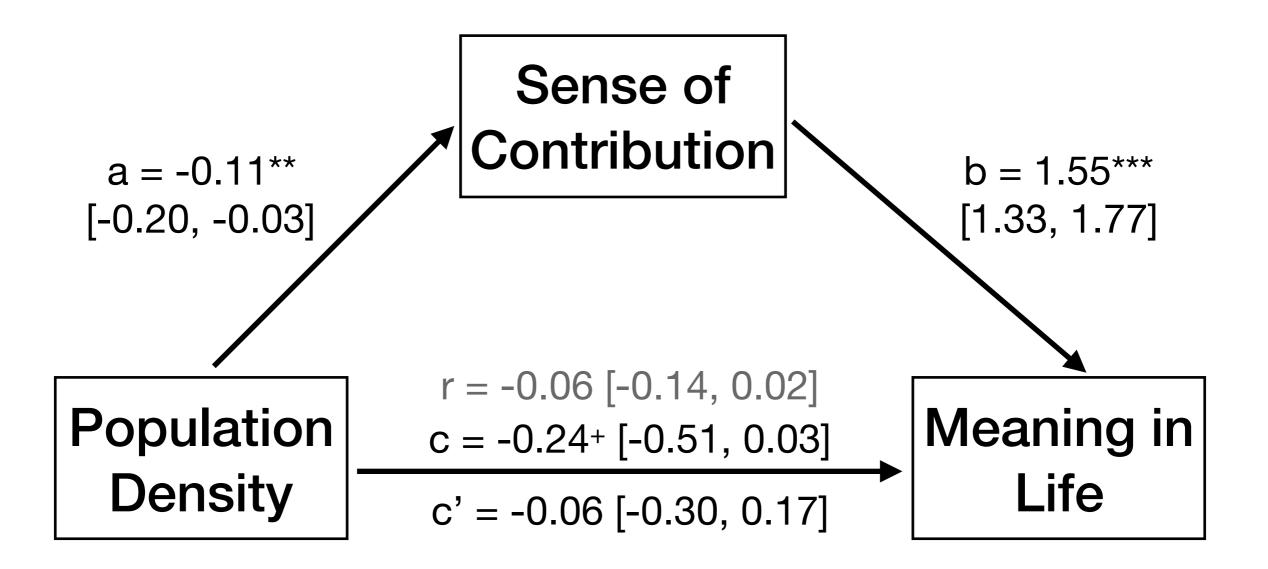
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ab [indirect path] = -0.18\*\* [-0.31, -0.05]

All models controlling for individual demographics

## Manipulations Vignettes

#### The New York Times

#### The Crowded Life: Too Many, Too Much?

#### By STEVE ERHLICH

A few months ago, Bob Buckley and his family made their way to a local park on a sunny spring day. When they got there, they were shocked to find the park overrun with people. With no space to themselves, Bob's family couldn't help running into people—literally. They attempted to play soccer in a cramped field or find an open swing on a crowded playground, but in the end, there were just too many people. When asked about how he felt, Bob responded, "I felt very cramped. There were so many people, and no open space. It's like everywhere else these days—full of people."

#### Squirrels Explosion: Too Many, Too Much?

#### By STEVE ERHLICH

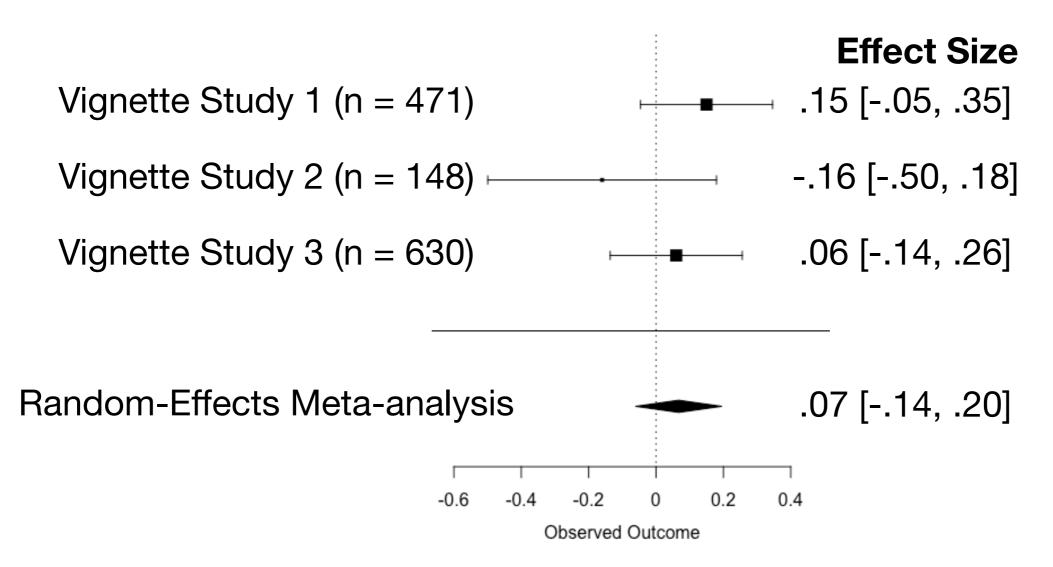
A few months ago, Bob Buckley and his family made their way to a local park on a sunny spring day. When they got there, they were shocked to find the park overrun with squirrels. Within the limited space, Bob's family couldn't help running into the creatures. They attempted to play soccer in the field or find an open swing on the playground, but it was difficult to avoid them. When asked about how he felt, Bob responded, "I felt quite overwhelmed. There were so many of the critters. It seems like this is happening in other places too."

#### MLQ - P

- •I understand my life's meaning
- My life has a clear sense of purpose
- •I have a good sense of what makes my life meaningful
- •I have discovered a satisfying life purpose
- My life has no clear purpose
- IV: Vignettes telling people that population density is rising (vs, e.g. that squirrel population density is rising)
- **DV:** Meaning in Life Questionnaire, Presence Subscale

Sng et al, 2017; Steger et al, 2006

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## Manipulations Immersion





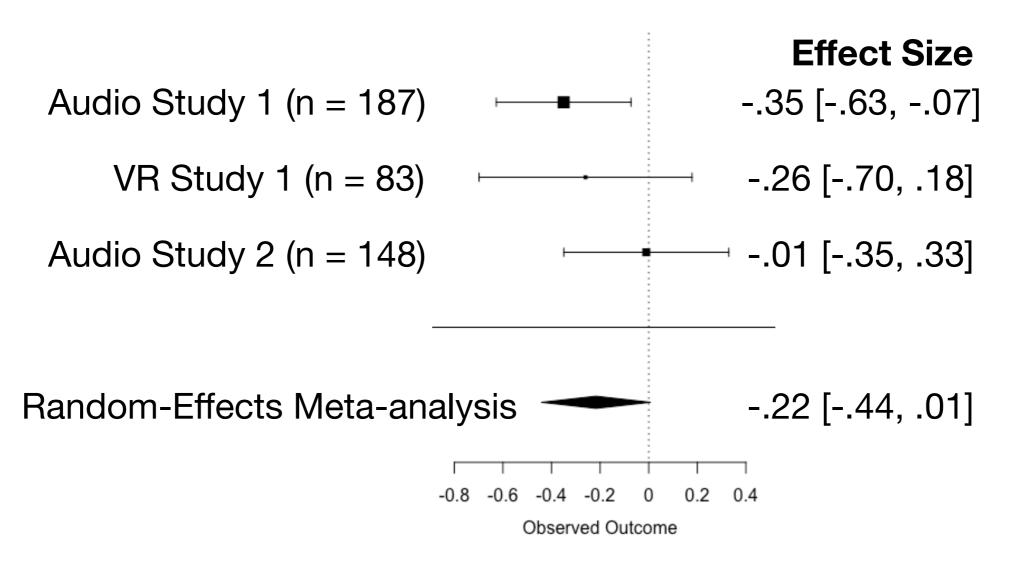






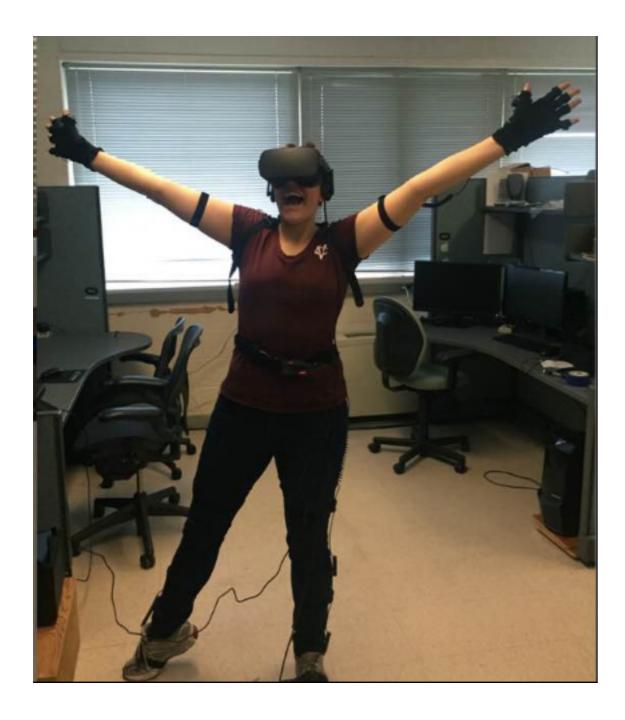
- Audio IV: Sounds from a busy or empty area
- VR IV: Walking though a virtual space with many or few avatars
- **DV:** Meaning in Life Questionnaire, Presence Subscale

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# Ongoing Study More VR











Population density is associated with meaning in life

Living around many other people may minimize the significance of one's contribution to society, thus reducing meaning

Richly manipulating population density in the lab is hard

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