

# A Deep Divide:

## Differences in Rural and Urban Americans' Trust of Scientists

Ginger Orton, M.S.; Laura Fischer, Ph.D.;  
Cheng-Xian Yang, M.S.; Lauri Baker, Ph.D.



TEXAS TECH UNIVERSITY  
Davis College

Agricultural Education  
& Communications™



### Introduction

An individual's **trust in scientists** is related to their attitude toward scientific issues, such as **believing in climate change** (Myers et al., 2017), **complying with disease guidelines** (Plohl & Musil, 2021), and **getting the COVID-19 vaccine** (Allington et al., 2021; Kossowska et al., 2021; Muğaloğlu et al., 2022).

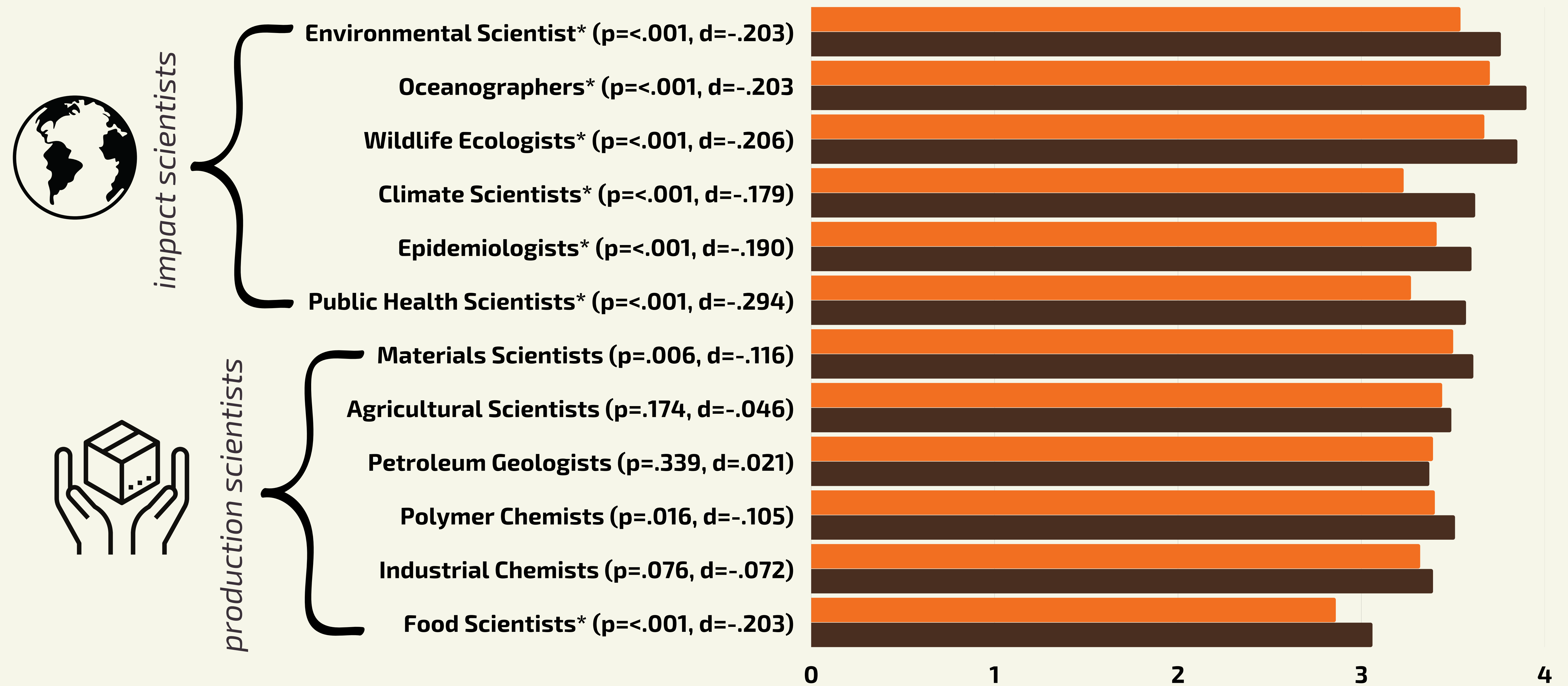
**Rural Americans have shown comparatively lower trust in science and scientists than those in urban areas** (Baker et al., 2021; Krause, 2019).

### Methods

The trust-in-scientists scale (McCright et al., 2013;  $\alpha = 0.80$ ) was used to collect data from **1,774 Americans** (rural = 751; urban = 1,023) from April 20 to June 7, 2022 via an **online survey instrument**. A series of paired samples **t-tests** were used to **compare differences** in level of **trust** between **rural** and **urban** audiences across **production** and **impact** scientists.

### Results

Paired Samples T-Test: Between Group Mean Differences in Trust in Scientists (N = 1,774)



Notes: (1 = completely distrust to 5 = completely trust) \* = significant group differences at the .001 level

### Conclusions

Our results show **rural audiences have less trust in scientists than their urban counterparts**. These findings support the research on trust in science (Baker et al., 2021; Krause, 2021) but show novel understanding of trust in specific scientists.

**Stronger, more engaging science communication should be designed for rural audiences to build trust in both production and impact scientists and increase science literacy** (McCright et al., 2013).

### References & Full Abstract

