

4-28-2023

## Personal Actions: The Correlation Between Water and Energy Conservation

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Billerbeck, J. N., Galloway, J., Wagoner, Y., Castenada, B., Barchard, K. A. (2023). Personal Actions: The Correlation Between Water and Energy Conservation.

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# Personal Actions: The Correlation Between Water and Energy Conservation

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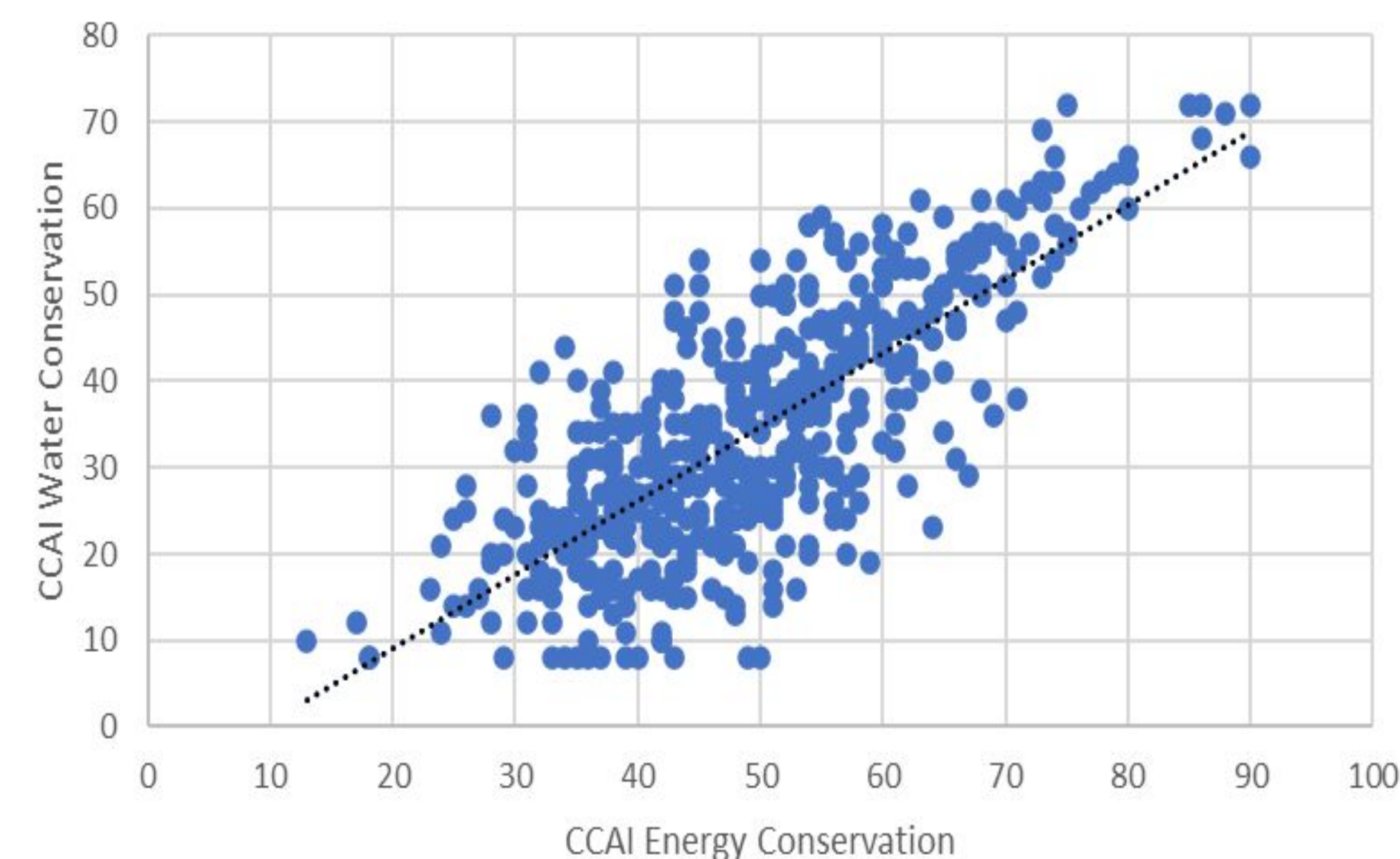
## INTRODUCTION

- Water and energy conservation are growing concerns around the world.
- Energy conservation policies create both energy and water savings (Gu et al., 2016). Conversely, water conservation impacts energy usage (Sokolow et al., 2016). Heating water in the home accounts for 20% of the home's energy use (Chini et al., 2016).
- Our study examines the relationship between water conservation and energy conservation.

## RESULTS

- There was a strong positive correlation between water and energy conservation ( $t(498) = .77$ ,  $p < .001$ ; 95% CI = [.73, .80]). See Figure 1.

**Figure 1**  
*The Relationship Between Energy Conservation and Water Conservation*



**Water conservation is strongly and positively correlated with energy conservation**

## METHOD

- Participants were 500 MTurk workers in the U.S.
- We filtered out 15 climate change deniers, leaving 485 participants (203 female, 279 male, 3 non-binary), aged 19 to 76 ( $M = 39.68$ ,  $SD = 11.69$ ), of which 402 identified as Caucasian/White, 41 as African American/Black, and 25 as Asian.
- Participants completed the 10-minute online Qualtrics study in return for \$3.00.
- Climate Change Action Inventory (Barchard et al. 2021).

### Water Conservation

1. Take shorter showers.
2. Turn off the water while brushing your teeth.
3. Turn off the water while washing your hands.
4. Turn off the water while soaping in the shower.
5. Turn off the water while washing vegetables (or wash them in a bowl).
6. Encourage others to conserve water.
7. Problem solve how to conserve water.
8. Give money or time to organizations working on conserving water.

### Energy Conservation

2. When leaving a room, turn lights off.
3. When entering a room, leave lights off.
4. Turn off electronics (phones, computers, etc.) when they are not in use.
5. Unplug appliances (microwaves, coffee makers, etc.) when they are not in use.
6. Air dry laundry.
7. Wash laundry in cold water.
8. Take cold showers.
9. Encourage others to conserve energy.
10. Problem solve how to conserve energy.
11. Give time or money to organizations working on energy conservation.

## DISCUSSION

- Information on water and energy conservation should be presented to the public in an interactive way that invites people to get involved.
- Social influence plays an important role in getting people to conserve water and energy. Individuals are more likely to reduce energy and water usage if made to feel motivated (Peterson et al., 2015).

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