

# Peer Pressure in the Potty?: The Relationship Between the Presence of Others and an Individual's Decision to Wash their Hands



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## Introduction

- ❖ The purpose of this study was to determine whether females at a Midwestern public university were just as likely to wash their hands when they were alone or whether the presence of others pressures them to practice healthy hygiene.
- ❖ Washing one's hands after using the restroom is a social norm in our culture and with some possible exceptions this norm is not monitored nor is there specific punishments for violating this norm (Munger and Harris, 1989).
- ❖ Individuals should wash their hands after using the restroom (Morantz, 2003).
- ❖ Phone interviews have been conducted about an individual's habit of washing their hands. According to the interviews, most people claimed to wash their hands after using the restroom but a follow up observation showed this to be untrue (Bakalar, 2005).
- ❖ One observational study consisted of an observer hiding in the stall with an out of order sign on it (Pedersen, Keithly, Brady, 1986).
- ❖ A similar study conducted showed that hand washing behavior increased with an observer present (Monk-Turner et al., 2002).
- ❖ A study showed the greater likelihood of women washing their hands with the presence of another (Monk-Turner et al., 2005).
- ❖ The above mentioned study showed that women are less likely to wash their hands when no one is present (Monk-Turner et al., 2005).

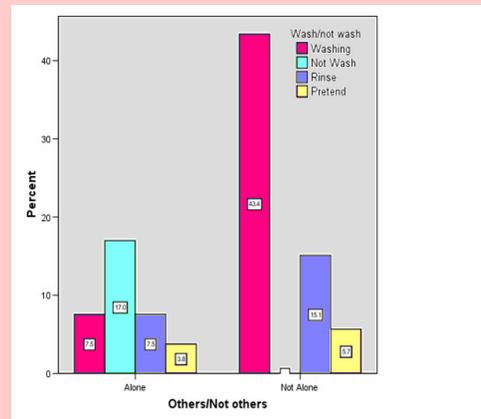
## Hypotheses

- ❖ Individuals who perceive themselves to be alone will be less likely to wash their hands.
- ❖ Individuals in the dormitory buildings will be less likely to wash their hands because of the more "casual" and "home-like" atmosphere that is associated with the dormitories.

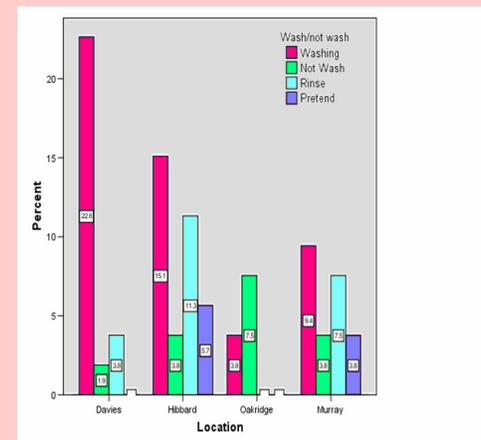
## Method

- ❖ Observations took place in female public restrooms on both upper and lower campus at UW- Eau Claire.
- ❖ Observations were taken in Hibbard Hall, Davies Center, Oakridge Hall, and Murray Hall.
- ❖ In order to maintain a natural setting, the researchers hid themselves in a stall. An "Out of Order" sign was placed on the stall door to ensure that the participants would not discover the presence of the researchers.
- ❖ The researchers positioned themselves on top of a toilet seat so that their feet would not be seen from under the stall.
- ❖ Observations were taken independently from inside the stall for a period of 20 minutes for each trial.
- ❖ For each person that exited a stall, the researchers independently noted on the coding sheet whether that participant was alone in the restroom and what level of hygiene they practiced.
- ❖ Four levels of hygiene were coded for: rinsing with only water, not turning on the water at all, turning on the water without making contact with the water (pretending to wash), and washing with soap and water.

## Hygiene and Presence of Others



## Location and Hygiene



## Results

- ❖ Percent agreement for each observer's records of whether the participant was alone was calculated using Kappa and showed that the observers had high agreement for coding whether the participant was alone ( $\kappa = 1.00$   $p = .000$ ).
- ❖ Kappa was calculated for each observer's records of hygiene and showed that the observers had high agreement ( $\kappa = .914$   $p = .000$ ).
- ❖ There was a statistically significant association between the presence of others and the decision of the participants to wash their hands,  $\chi^2(3, N = 53) = 21.37$ ,  $p = .000$ .
- ❖ Cramer's  $V = .635$  indicated a large effect size for the presence of others and the level of hygiene practiced.
- ❖ There was a statistically significant association between the location of observations and the decision of the participants to wash their hands,  $\chi^2(3, N = 53) = 19.953$ ,  $p = .018$ .
- ❖ Cramer's  $V = .354$  indicated a medium effect size for the location of the observations and the level of hygiene practiced.

## Analysis

- ❖ This study showed that the presence of others in the restroom is associated with a female's decision to wash her hands.
- ❖ In general, females were more likely to wash their hands in restrooms located in a general building than in a dormitory building.
- ❖ Because hand washing is a social norm, a person is more likely to wash their hands if they know they are being watched.
- ❖ A small sample size may be a limitation to this study.
- ❖ The results of this study cannot be generalized to the entire population because of a lack of diversity in participants.
- ❖ This study implies that there is a serious need for education of the importance of proper hand hygiene.
- ❖ There are certain guidelines that should be followed when washing one's hands (Morantz, 2003). These guidelines need to be publicized to ensure the population practices proper hygiene.
- ❖ Proper hygiene can help reduce the spread of infectious diseases, which is the main reason the public needs to be informed of the proper way to wash hands.

## Special Thanks

- ❖ Psychology 271 UTAs for assistance with statistical analyses.
- ❖ Differential Tuition for supporting the printing of this poster.