

Gender Differences in Crosswalk Use

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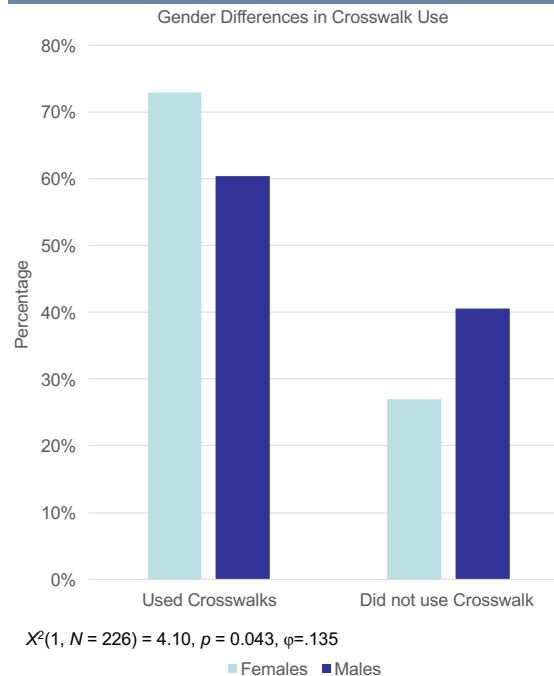
Background

- Through the exploration of studies on gender differences in topics such as traffic behaviors and rule compliance, our group constructed our hypothesis on gender differences in crosswalk use.
- Research infers that men and women hold show gender differences in compliance and risk-taking, likely due to social pressures on gender role. These roles lead women to internalize traffic rules more than men (Tom & Granie, 2011).
- Men often act less cautiously in street-crossing situations, while women tend to be more appreciative of crosswalks and crossing signals (Bernhoft & Carstensen, 2008).
- Rule-bending is widely considered a dominant behavior and is therefore considered to be more socially acceptable when displayed by men rather than women (Piatak & Mohr, 2019).
- Conformity, or behavior driven by external standards, is a factor in rule abidance and is shown to be higher in woman than men (Portillo & DeHart-Davis, 2009).
- Therefore, there seems to be a significant affiliation between gender and crosswalk behaviors.
- There has not been too much research specifically on gender difference in crosswalk use; however, there has been considerable research on gender difference in rule-compliance which directly relates to the abidance of crosswalk laws.
- This study contributes to the field by adding to the lack of traffic law abidance-related literature and furthering the research on gender differences in social standards.

Prediction

- Female students would be more likely to use the crosswalk, whereas male students would be more likely to cross not using the crosswalk.

Results



Conclusions

- The observed gender differences in literature choices mostly supported our prediction: Men were more likely to not use the crosswalk (39.6%) in comparison to females (27%). Females were more likely to follow the established traffic rules (73%) than males were (60.4%).
- Male pedestrians were more likely to act less cautiously and more independent from the rules than women as previously found by Bernhoft et al. (2008), and Tom (2011). Our findings confirmed this.
- Our findings confirm the findings of Piatak et al (2019). and Portillo et al. (2009), as female employees were more likely to be rule abiding. The females in our study were seen to be more rule abiding than the males.
- Our findings show that participants are no more likely to use the crosswalk in the morning or in the afternoon suggesting that time of day has no effect on the willingness of both genders to follow the rules of the crosswalk. This may mean that gender is the main moderating factor of crosswalk usage.
- Our group concluded that the difference in crosswalk use is due to gender differences regarding caution and safety. Males are overall less cautious and less worried about safety than females.
- The limitations of our study include a restricted area sample of only Wittenberg's campus and a restricted sample of only Wittenberg students. To further the research, a wider sample area (including more crosswalks) and a wider sample demographic (Non-Wittenberg Students) would need to be used.

Research Methods

Participants

- Wittenberg University undergraduates
- Primarily Caucasian, aged 18 to 23
- 115 females, 111 males
- "Morning" groups (observed at 11 AM) and "evening" groups (observed at 5 PM)
- Observed at: The Crosswalk at the Wittenberg Sign (location one), The Crosswalk at the Hollenbeck crossing (location two), The Crosswalk across from Krieg (location three).

Procedure

- Team member A and team member B set up at an inconspicuous location to observe.
- Team member A and Team B recorded data such as demographics and whether the crosswalk was used.
- Team member A and team member B observed for twenty minutes at each designated site within the predetermined areas, marked off on google images and approved prior to study completion.
- Team member A and Team member B did not interact with any of the subjects.

Data Analysis

- **IV- Gender**
 - Male
 - Female
- **DV- Crosswalk use**
 - *Used Crosswalk: Enters and uses at least 50% of the crosswalk*
 - *Did not use use: Does not enter or use 50% of the crosswalk before entering or exiting crosswalk*
- **Statistical Test**
 - 2x2 chi-square test (gender X crosswalk use)

Literature Cited

- Bernhoft, I. M., Carstensen, G. (2008). Preferences and behavior of pedestrians and cyclists by age and gender. *Transportation Research*, 11(2), 83-95. doi: 10.1016/j.trf.2007.08.004
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