Who’s Watching the Watcher? Individuals’ Perceptions of Privacy Surrounding the Use of Unmanned Aerial Vehicles (UAVs)

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Overview

- Expanded access to UAV technology
  - Hobbyists
  - Law enforcement agencies
  - Businesses
  - Researchers

- Current Focus
  - Individual privacy concerns in the context of race and gender
  - Variations in privacy concerns depending on the UAV operator
Regulations For UAV use

- Responsibility mostly left to state and local governments
- FAA only regulates airspace, and general UAV operating rules (Raley, 2017).
- **Arizona Revised Statute 13§1449P states:**
  - UAV cannot interfere with police, firefighters, or manned aircraft.
  - UAV cannot fly within 500 feet horizontally or 250 feet vertically of any critical space.
  - No mention of privacy is listed in the state statute.
Privacy has been defined as “the selective control of access to (the) self” (Altman, 1975).

UAVs create two potential threats to privacy:
- Unrestricted movement
- Ability to document various aspects of a person’s life (Hsu and Chen, 2015).
Demographics & Methodology

- Secondary analysis of survey data (Nelson et al., 2019)
- 2,108 survey respondents assessing perceptions of UAVS and UAV regulations

Demographics
- Mostly white (77%)
- College educated (44%)
- Male (57%)
- Chi-Square analysis
Findings: Race and UAV Operators

"Drones can invade spaces I consider to be private"

"First responders (e.g., the police, fire department) are the entities who should be allowed to enter private spaces with drones."

"I am concerned about my privacy being violated by recreational (i.e., use by hobbyists or private citizens) drone users."

Chi-Square = 22.94 (p < 0.05)
Findings: Gender and UAV Operators

"DRONES CAN INVADE SPACES I CONSIDER TO BE PRIVATE"

"FIRST RESPONDERS (E.G. THE POLICE, FIRE DEPARTMENT) ARE THE ENTITIES WHO SHOULD BE ALLOWED TO ENTER PRIVATE SPACES WITH DRONES" *
Chi-Square = 18.1997 p < 0.05

"I AM CONCERNED ABOUT MY PRIVACY BEING VIOLATED BY RECREATIONAL (I.E. USE BY HOBBYISTS OR PRIVATE CITIZENS) DRONE USERS" *
Chi-Square = 35.9328 p < 0.05
Conclusions

- Citizens have privacy concerns surrounding UAVs and their operators
- More legislative attention needs to be given to UAVs in the context of privacy
- **Limitations and future research:**
  - Exploration of why these concerns exist
  - Exploration of how these concerns vary within underrepresented communities
  - Exploration of how situational factors may influence the level of privacy concerns
Questions?


