

# Understanding the adoption process of national security technology: An integration of diffusion of innovations and volitional behavior theories

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Thanks to: Irina Iles, MA; Brooke Fisher Liu, PhD; Gary Ackerman, PhD; Daniel S. Smith, MA

This research was funded by the Defense Advanced Research Projects Agency (DARPA) via the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The views, opinions, and/or findings contained in this article are those of the author(s) and should not be interpreted as representing the official views or policies of the Department of Defense or the U.S. Government.



#### The 'So what?'

- National security technologies (NSTs: like portable RN detectors) are here to stay.
- However, people don't quite like them and voluntary adoption is low.
- What are the factors that contribute to attitude and adoption intention formation?
- How can we increase voluntary adoption?



#### NST: Portable radiation detectors (PRDs)



Sample PRD next to deck of playing cards

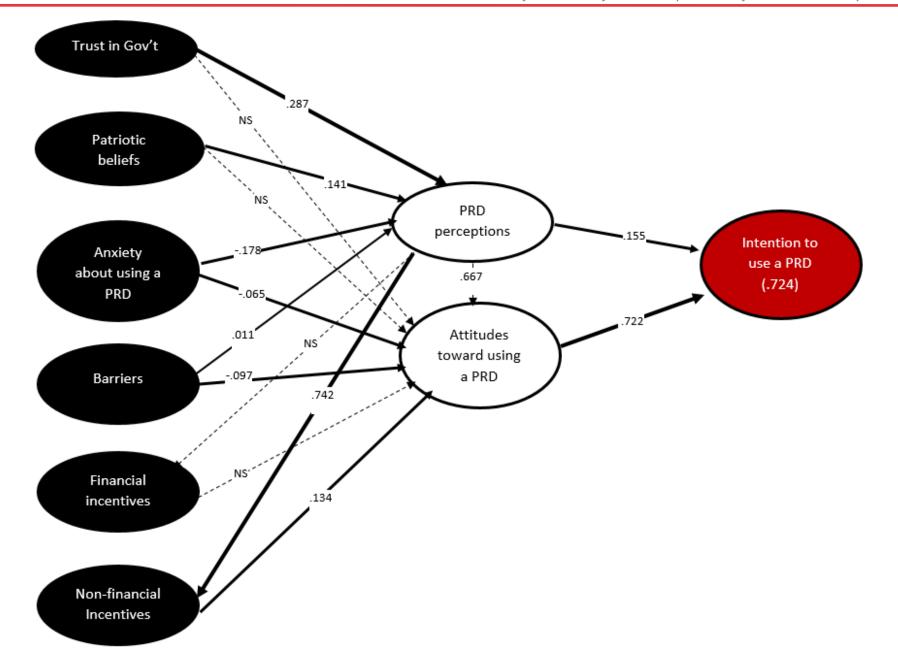
- Radiation detection devices carried on the person
- Ideal for comprehensive coverage of large areas at an affordable price
- Require substantial numbers of people (e.g. 10,000's) to adopt detection devices in major urban areas



## Theoretical Framework for Studying NSTs in Public

- Explanatory framework:
  - Diffusion of Innovations (Rogers, 2003)
- Predictive modeling:
  - Theory of Reasoned Action (Ajzen & Fishbein, 1980)
    - Behavioral intention determination as a three-level process
    - External factors -> attitudes -> behavioral intention (~ actual behavior)







#### Conclusions

- No money, No problem.
- There was a positive (even though small) effect of barriers on perceptions of PRD characteristics: social stature.
- Anxiety had a stronger effect on perceptions of PRD characteristics and attitudes than barriers: "fear of the unknown".
- People ARE willing to get involved.
- WE can set the mental map.



#### But does this work with Police?

- police are a unique population
- Motivations differ from general population
- Mandates are ineffective at establishing buy-in



## Findings





### Key Results Police Specific

- Use of local expert and personnel
- Integration into existing routines
- Comprehension of purpose
- Device saturation is legitimate concern



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