Extending the Theory of Planned Behavior to Evaluate Multiple Infection Prevention Practices

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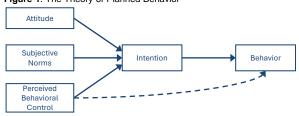
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Background

- Infection Prevention and Control (IPC) practices play a crucial role in helping to prevent the spread of pathogens.¹
- Hand hygiene is one of the most important IPC practices, with interventions commonly targeting adherence rates.²
- These interventions are increasingly rooted in behavior change theories, such as the Theory of Planned Behavior (TPB).^{3,4}
- The TPB has been used to target health behaviors, such as hand hygiene, by examining the relationships between the constructs portrayed in Figure 1. 3,5
- While the TPB has been used to target hand hygiene behaviors, its use for evaluating adherence to other IPC practices is unknown.

Figure 1. The Theory of Planned Behavior



Objectives

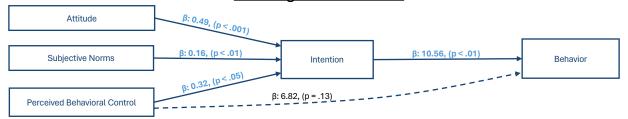
- Understand how the TPB can be used to promote IPC practices.
- Summarize the relationships between adherence to IPC practices and the TPB constructs.
- Differentiate the different intention predictors associated with the IPC practices evaluated.

Study Design

- Registered Nurses (n=58) from an academic hospital in Atlanta, GA were recruited to complete three questionnaires assessing TPB constructs
- Each questionnaire assessed the IPC practices of (1) Hand Hygiene, (2) Personal Protective Equipment, and (3)
 Cleaning and Disinfection
- Linear regressions were used for each IPC practice to predict intention from attitude, subjective norms, and perceived behavioral control, and adherence from intention and perceived behavioral control ⁶

Results **Hand Hygiene Personal Protective Equipment** Attitude Subjective β : 0.04, (p = .47) β: 8.74, (p < .05) β : 0.20, (p < .01) β : 4.33, (p = .30) Subjective Behavior Norms Perceived Perceived β : 2.50, (p = .4) β : 6.46, (p = .1! Behavioral Behaviora Control Control

Cleaning and Disinfection



Conclusions

- Attitudes predicted intention for cleaning and disinfection
- Subjective norms predicted intention for personal protective equipment & cleaning and disinfection
- Perceived behavioral control predicted intention across all three IPC practices
- Intention predicted behavior for hand hygiene & cleaning and disinfection
- The TPB can be used to understand IPC adherence beyond hand hygiene
- Future research initiatives should consider the use of TPB as a theoretical basis for future interventions aimed at preventing the spread of pathogens

References

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