

Factors associated with engaging in tobacco treatment in a psychiatric hospital: An application of the Theory of Planned Behavior

BACKGROUND

- People with mental illnesses (MI) have disproportionately higher tobacco-related disease burden as compared to those without MI (Newcomer & Hennekens, 2007; Osborn et al., 2007; Tran et al., 2009).
- Although smoking prevalence in the general U.S. population has declined in the past few decades, rates among those with MI have only slightly reduced, persisting to be two to three times national rates (Centers for Disease Control and Prevention 2013; Cook et al., 2014).
- The Theory of Planned Behavior (TPB) is a health behavior change model that suggests a person's attitudes, subjective norms, and perceived behavioral control predicts their intentions towards a behavior (Ajzen, 1985).
- Few studies have used the TPB in assessing engagement in tobacco treatment within psychiatric facilities.
- Using the TPB as a guiding framework, the purpose of this study was to examine clinician intentions to provide and patient intentions to engage in tobacco treatment from samples derived from a psychiatric hospital.
- The specific aims of this study were to assess the associations between attitudes, subjective norms, and perceived behavioral control on:
 - a) Intention of providers to deliver tobacco treatment and
 - b) Intentions of patients to engage in tobacco treatment



METHODS

Design

- For this correlational study, we employed a survey design to elicit the attitudes, subjective norms, perceived behavioral control, and intentions to provide and to engage in tobacco treatment among clinicians and patients from a psychiatric hospital in a central state of the U.S.

Sample

- Among clinicians, we targeted 270 available staff and received useable surveys from 195 (72.2%). Clinicians were licensed health care providers at the hospital.
- Among patients, we obtained responses from 115 participants with a diversity of psychiatric disorders. Eligible participants were 18 years of age or older, current tobacco users, and were willing and able to provide informed consent.

Procedure

- Surveys were administered from March 1st to December, 2017
- All participants were entered into a drawing for the opportunity to win one of five \$20 cash incentives
- Approval was received by the University of Kentucky Medical Institutional Review Board prior to administering the surveys

Key Measures

- Demographics variables: gender, ethnicity, age, marital status, education level, tobacco use, and work discipline & tenure (among clinicians) or psychiatric diagnoses (among patients)
- Attitudes (3-items), subjective norms (4-items), perceived behavioral control (4-items) and intentions to provide/intentions to engage in tobacco treatment (3-items) were developed from questions based on the TPB

Analysis

- Multivariate linear regression analyses were used to regress mean scores of intention to provide tobacco treatment (or intention to engage in treatment) on demographic variables and mean scores of, attitudes, subjective norms, and perceived behavioral control variables

RESULTS

Sample Characteristics

- Clinician participants were on average 35 years of age, mostly female, white, and a mostly college graduates.
- Patient participants were on average 43 years of age, equally distributed by gender, white, and mostly high school graduates. The primary psychiatric diagnosis was psychotic disorder (i.e., schizophrenia, schizoaffective disorder, psychosis not otherwise specified) and participants were moderately nicotine dependent

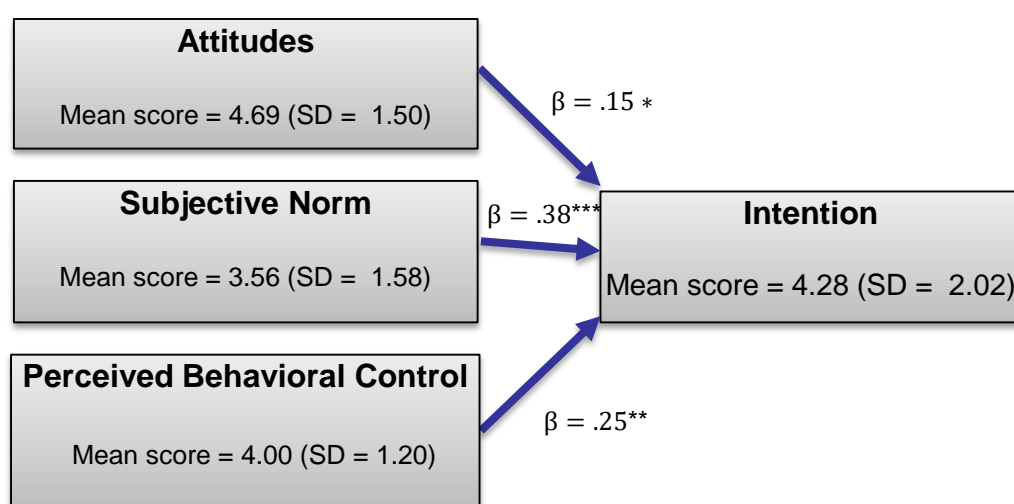


Figure 1. Applying the Theory of Planned Behavior variables in assessing the intention to provide tobacco treatment

Multivariate analysis regressing intentions on attitudes, social norms and perceived behavioral control among clinicians

- After controlling for demographic and work-related variables, **subjective norms** ($\beta = .38, p < .0001$) was the variable most associated with intentions to provide tobacco treatment, followed by **perceived behavioral control** ($\beta = .25, p = .001$), and **attitudes** ($\beta = .15, p = .014$) (see Figure 1).

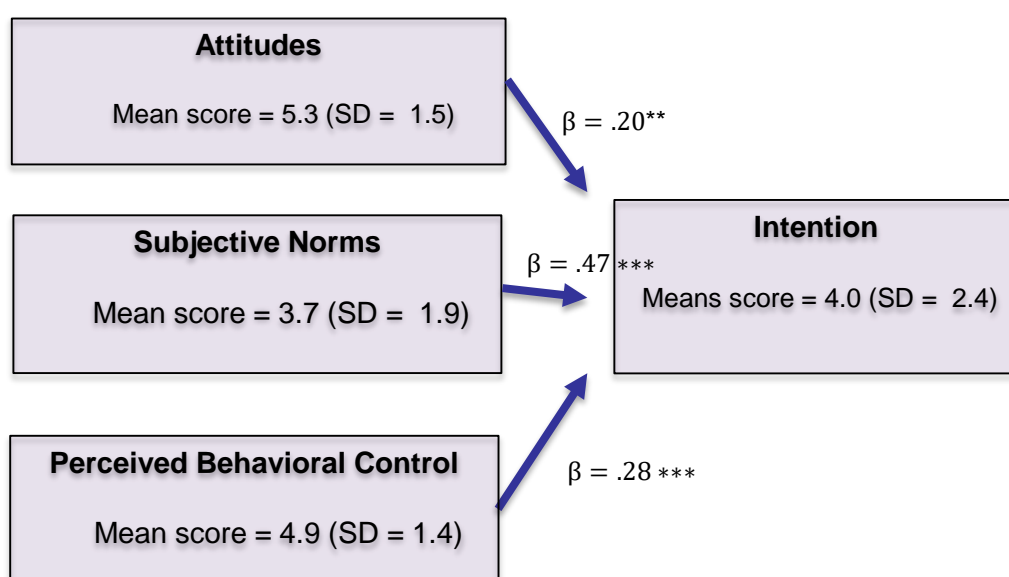


Figure 2. Applying the Theory of Planned Behavior in assessing the intentions to engage in tobacco treatment

Multivariate analysis regressing intentions on attitudes, social norms and perceived behavioral control among patients

- Of all the TPB variables, **subjective norms** predicted intentions to engage in tobacco treatment most strongly ($\beta = .47, p < .0001$), followed by **perceived behavioral control** ($\beta = .28, p < .0001$), and **attitudes** ($\beta = .20, p = .007$) (see Figure 2).

Conclusions

- Advocate for a culture that makes tobacco treatment **normative** for clinicians and patients in psychiatric settings
- Support best practices for the delivery of treatment for tobacco users with MI
- Train clinicians/staff in provision of evidence-based tobacco treatment with emphasis on referral to appropriate treatment programs (e.g., Tobacco Quit lines) upon discharge
- Educate patients on the available tobacco treatment approaches and encourage engagement

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