

What factors contribute and detract from PHN's (Public Health Nurse's) delivering environmental risk reduction education in the home setting?

Beth Tinker, RN
Candidate for MN/MPH in Summer 2007
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Pediatric Environmental Health



What will it take to integrate nursing and environmental health?

◆ Supports

- growing body of evidence
- nurses are seemingly well positioned
- strengths of PHN's

◆ Cautions

- lack of formal education in EH
- workforce is already stressed
- gap in literature regarding nurse delivered EH interventions

ERRNIE

Environmental Risk Reduction through Nursing Intervention and Education



- ◆ ERRNIE is an on-going NIH funded dual site RCT exploring environmental risks and risk reduction in a rural, low-income, pediatric sample.
- ◆ Goal- test the impact of a PHN delivered intervention on child, family and household measures of environmental risk reduction.
- ◆ PHN intervention delivered over 4 home visits/ 2 wks apart

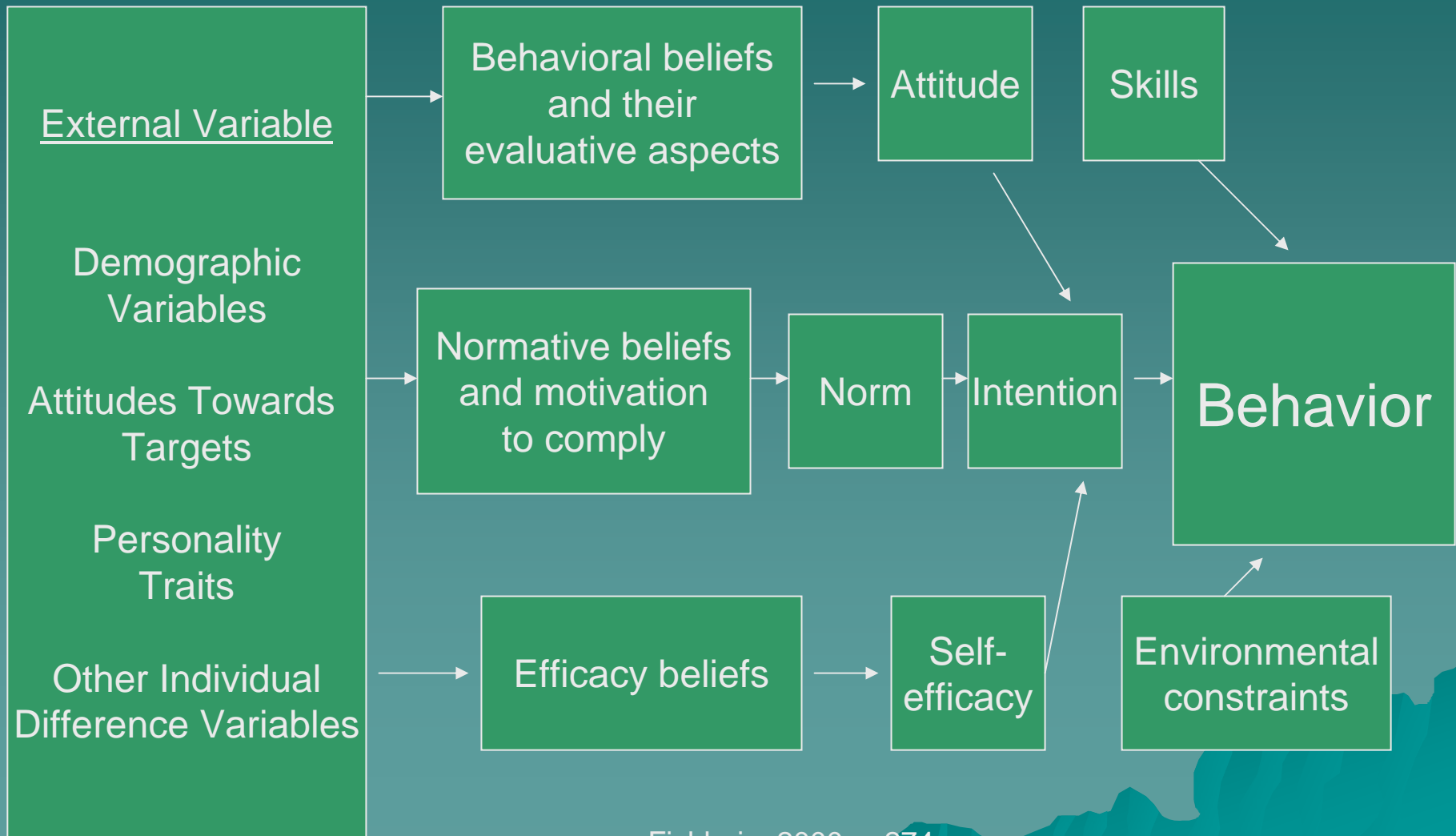


ERRNIE: A Process Evaluation

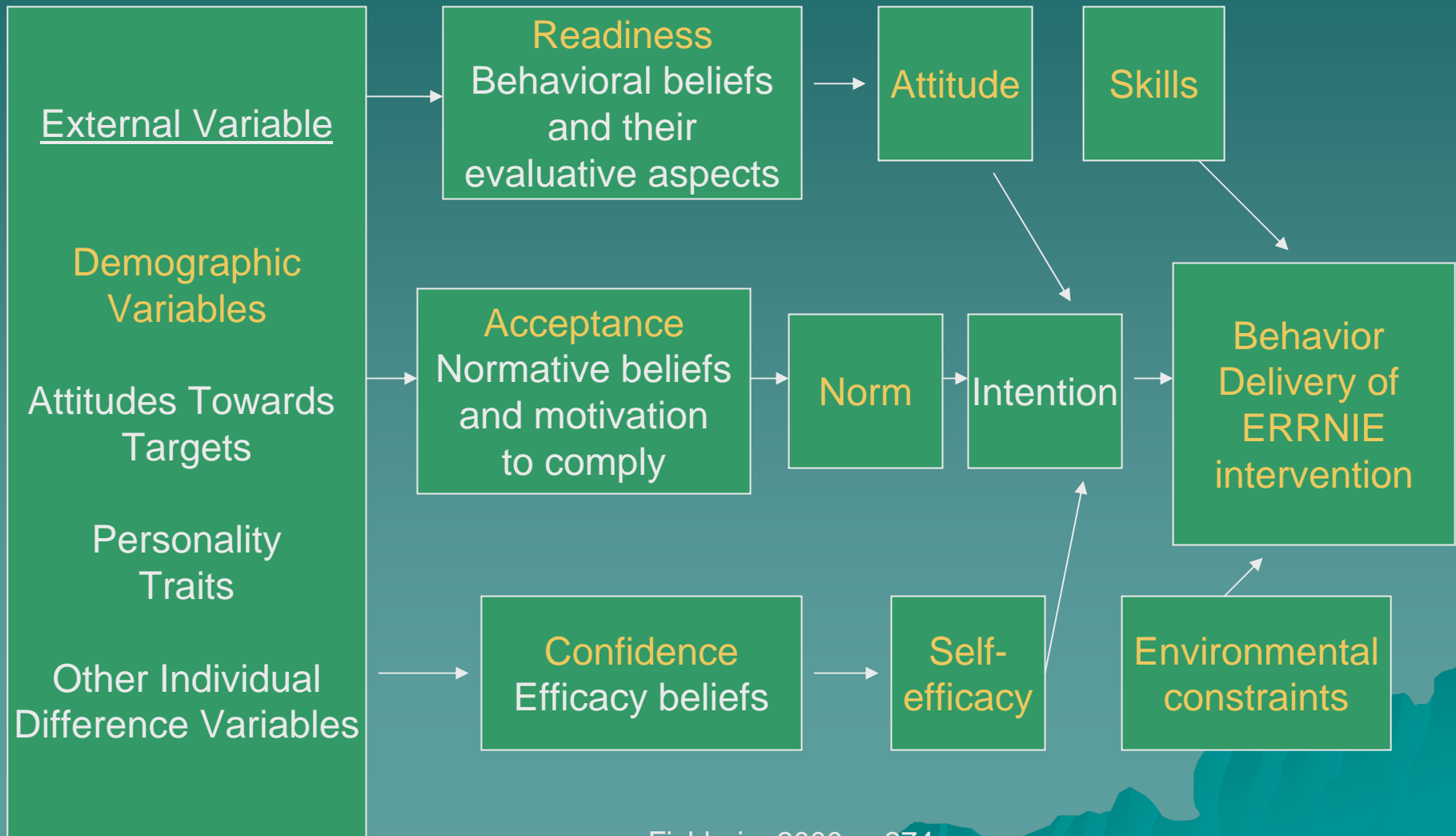
Study Aims:

- 1) Explore the readiness, acceptance, and confidence level of PHN's in delivery of ERRNIE
- 2) Describe nurses' perspectives and both their perceived barriers and opportunities to integrate environmental health into their nursing practice
- 3) Explore if this new content adds stress or influences job satisfaction for these nurses

Conceptual model for ERRNIE process evaluation



Empirical model for ERRNIE process evaluation



Study Methods

- ◆ Descriptive analysis and process evaluation
- ◆ One-to-one structured phone interviews with all nine participating PHN's
- ◆ Content analysis to identify primary themes and concepts- qualitative description
- ◆ Regression to look at possible association between some predictor variables and 2 outcome variables. (%time of visit spent on ERRNIE and variable of visit went well)

Interview guide based on 6 themes

- ◆ 1) Environmental health education and background
- ◆ 2) Knowledge and confidence in the delivery of EH messages
- ◆ 3) Beliefs about the importance and value of EH messages

Ex. Tell me about your previous environmental health experience.

Does ERRNIE compliment what you have already been doing? Seem burdensome?

Are you proud that you are able to share environmental health education with your community?

Themes con't

- ◆ 4) Perceptions of control and self efficacy as related to job stress
- ◆ 5) Adequacy and thoughts on prior training provided for the intervention
- ◆ 6) Institutional and management support for such practice

Ex. Do you feel that participating in ERRNIE has added additional stress to your work load or time demands? What has that impact been on a scale of 1 to 10? (1 being no added stress and 10 being an incredible amount of added stress)

Preliminary findings

Themes emerging from interviews:

- ◆ **Readiness**- "It is time for nursing to get back to its roots in environmental health"
"I am passionate about this study"
"I have had to learn a lot of this new material on my own"
- ◆ **Acceptance**- "Some of my colleagues are more stressed about this project"
"I hope this content will eventually reach all families with children"

Findings con't

- ◆ **Confidence-** "I am very confident in my ability to talk about environmental health with my community"

"I feel more confident with some content areas over others, for example, the well water screen is complicated"

- ◆ **Environmental constraints-** "It takes a lot of time to follow up on all the abnormal results, this can be stressful"

"The health department management is not very engaged with the project, I have to do a lot of learning on my own time"

Limitations and assumptions

- ◆ Small sample size (but reaching large population of 80 families)
- ◆ One particular env health intervention
- ◆ 2 counties- Whatcom and Gallatin
- ◆ Assume full participation from the nurses
- ◆ Using % time of visit spent on ERRNIE and nurse impression of visit going well (yes/no) as measure of delivery
- ◆ Not addressing all constructs in the model

Thanks

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Questions or Comments?

