

Exploring Health Information Seeking and Avoidance using HINTS 4

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MEDICINE

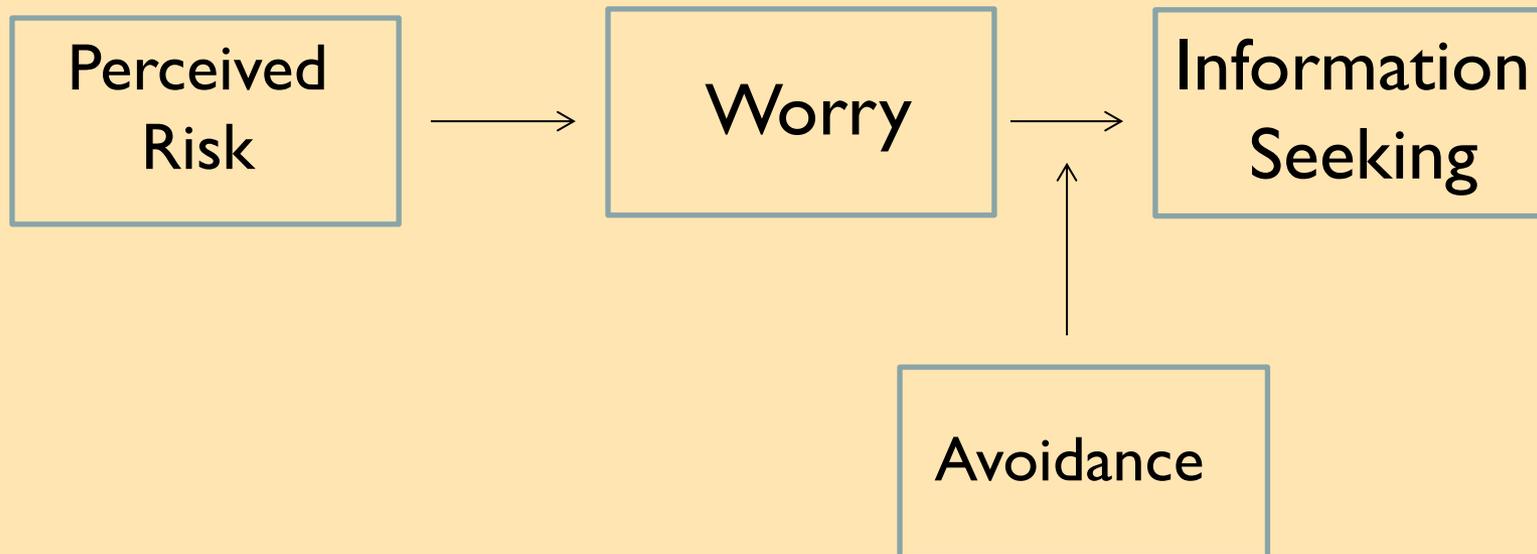
Background

- Our primary research interest is understanding motivational mechanisms that facilitate health information seeking and promote patient engagement
- HINTS data provided a number of measures of constructs of interest including Perceived Cancer Risk, Fatalism, Self-efficacy, Patient-provider communication, and locus of control



Theoretical Frame

- Adapted form of the risk information seeking and processing model (RISP)



Griffin, et al., 1999

Data

- HINTS 4, Cycle 2 subset
- Included persons who use the internet (BI=yes) as a way of controlling for access to information
- Included persons who had not had cancer (MI=no) to control for varied interpretation of perceived risk



Demographics

- Age: $M = 48.6$, $SD = 14.8$ years
- Female: 60.5%
- Non-Hispanic/White = 66.3%
 - Non-Hispanic/one or more minority = 22.3%
 - Hispanic/all races = 10.1%



Analysis

Simple zero order correlations among study variables derived from SPSS Complex Samples—linear regression.

3 separate regression analyses relating a theoretically selected set of predictors to three aspects of information search:

- Aspects: Monitoring, Satisfaction, Trust of Sources
- Predictors: search self-efficacy, family history of cancer, perceived risk, environmental worry, fatalism, information avoidance.



Single Item Indicators

Search Self Efficacy:

A7. Overall how confident are you that you could get advice or information about cancer if you needed it? (1-5)

Avoidance:

N4. I'd rather not know my chance of getting cancer. (1-4)

Note: for all indicators and scales, higher scores reflect higher levels of the named construct.



Single item Indicators

Family History of Cancer:

N7. Have any of your family members ever had cancer?

(1-3)

Recoded 1=No, 2=Not sure, 3=Yes



Scale Indicators--Search

Attention to Sources (Monitoring)

A10. How much attention do you pay to information about cancer from each of the following sources?

Newspapers—print, online; health/medical magazines; internet; radio; local tv news, national/cable tv news.

7-item summative scale (index) ranging from 7 to 28, alpha=.87.



Scale Indicators--Search

Search Satisfaction

A6. Based on the results of your most recent search for information about cancer, how much do you agree/disagree with each of the following statements?

- a. Took a lot of effort
- b. Felt frustrated
- c. Concerned about information quality
- d. Information was hard to understand

4-item summative scale ranging from 4 to 16. Items recoded so high scores indicate greater satisfaction, $\alpha=.85$

Scale Indicators--Search

Trust in Sources

A8. In general how much would you trust information about cancer from each of the following?

Doctor, family/friends, newspaper/magazines, radio, internet, television, government health agencies, charitable organizations, religious organizations and leaders

9-item summative scale (index) ranging from 9 to 36,
alpha=.60



Scale Indicators

Patient Provider Communication

C5. For all health care providers you've seen in past 12 months, how often did they:

Listen to your questions? Attend to your feelings?

Involve you in health care decisions?

Check your understanding? Explain things clearly?

Spend enough time with you?

Help you deal with feelings of uncertainty?

7-item scale, score range 7-28, alpha=.94.



Scale Indicators

Environmental Worry

11 & 2. How much do you worry that each of the following will harm your health:

Air pollution, chemicals in the water, chemicals on food, cell phone radiation, medical imaging radiation, household chemicals, chemicals in personal care products.

8-item summative scale (index) ranging from 8 to 32,
alpha=.91

Scale Indicators

Perceived Cancer Risk

N1. How likely are you to get cancer in your lifetime?

N2. Compared to others your age, how likely are you to get cancer in your lifetime?

N3. I feel like I could easily get cancer in my lifetime.

Three item summative scale ranging from 3 to 15, alpha = .82



Scale Indicators

Fatalism

N5a. It seems like everything causes cancer.

N5b. There's not much you can do to lower your chances of getting cancer.

N5c. ...it's hard to know which recommendations to follow.

Three item summative scale ranging from 3 to 12, alpha = .60



Scale Indicators

Health Behaviors Index

How often do you use calorie info from a menu to order?

About how many cups of the following do you consume each day?—fruit, vegetables?

Not counting diet drinks, how often do you drink regular soda/pop per week?

How often per week do you exercise in a typical week?

How often per week do walk, hike, or bike?

6-item index; score range 3-41.



Scale Indicators

Quality of Life

F9. Over the past 2 weeks how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things?

Feeling down, depressed, or hopeless?

Feeling nervous, anxious, or on edge?

Not being able to stop or control worry?

4 item summative scale, scale range 4-16, $\alpha=.89$



Correlations

	1	2	3	4	5	6	7	8	9	10
1. Search Satisfaction										
2. Attention to Sources	.12									
3. Trust in Sources	.20	.51								
4. Search Self-efficacy	.57	.04	.21							
5. P/P Communication	-.25	-.07	-.14	-.29						
6. Environmental Worry	-.07	.24	.10	-.12	.04					
7. Perceived Risk	-.05	-.07	-.10	-.05	.13	-.01				
8. Fatalism	-.15	-.09	-.08	-.16	.10	-.07	.22			
9. Avoidance	-.04	-.07	-.06	-.06	-.04	-.08	-.00	.20		
10. Quality of Life	.21	-.05	.02	.20	-.26	-.10	-.20	-.17	-.01	
11. Health Behaviors	.01	.03	-.05	.04	-.02	.06	-.03	-.03	-.00	.02

Regression Results

DV: Search Satisfaction, $R^2 = .074$

Variable	B	SE	Wald F	P
Search Self-efficacy	.165	.176	.88	.348
Family History Cancer	-.208	.201	1.073	.300
Perceived Risk	-.107	.070	2.343	.126
Environmental Worry	.174	.031	31.814	<.001
Fatalism	-.128	.082	2.430	.119
Avoidance	-.221	.159	1.929	.165

Regression Results

DV: Attention to Sources, $R^2 = .068$

Variable	B	SE	Wald F	P
Search Self-efficacy	.854	.145	34.844	<.001
Family History Cancer	.027	.168	.026	.872
Perceived Risk	-.164	.062	6.955	.008
Environmental Worry	.080	.020	15.274	<.001
Fatalism	-.027	.068	.151	.698
Avoidance	-.130	.147	.785	.376

Regression Results

DV: Trust in Sources, $R^2 = .328$

Variable	B	SE	Wald F	P
Search Self-efficacy	1.705	.116	216.667	<.001
Family History Cancer	-.002	.161	.000	.991
Perceived Risk	-.018	.059	.098	.755
Environmental Worry	-.023	.019	1.545	.214
Fatalism	-.112	.067	2.804	.094
Avoidance	-.016	.120	.017	.869

Conclusions

The three components of cancer information search examined in the present study, satisfaction, attention to sources, and trust in sources, are modestly correlated.

The strongest predictors of the three components of search are search self-efficacy and environmental worry.

Family History of Cancer, Fatalism, and Avoidance were not significant predictors of any of the three components of information search.

Unclear why the Health Behavior Index was not significantly associated with any of the variables included in the current study

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