

Toward a Consumer Health Information Behavior Model of Health Injustice

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Consumer Health Information Behavior

- Umbrella term encompassing people's health-related information needs and the activities in which they engage (or not) in order to seek, assess, manage, use, etc. health-related information.



Health Justice

- Every individual is morally entitled to “a sufficient and equitable capability to be healthy” (Venkatapuram, 2011, p. 20).
- Still far from achieving this ideal with significant disparities in life expectancy based on:
 - Income
 - Educational attainment
 - Race
- These disparities are only continuing to increase over time



**Demographic
Factors
(income, race,
educational
attainment, etc.)**



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graph LR; A[Demographic Factors (income, race, educational attainment, etc.)] --> B[???]; B --> C[Health Trajectory / Quality of Life / Health Outcomes];
```



???



**Health
Trajectory /
Quality of
Life /
Health
Outcomes**

???: CHIB likely plays
a mediating role
between individuals'
demographic factors
and health outcomes.

The Study: Research Questions

- RQ1: How **prevalent** is information avoidance among U.S. adults?
- RQ2: What types of demographic, information-seeking, cognitive/perceptual, and social **factors** are **associated** with information avoidance?

The Study: Methods

- Secondary data analysis
 - U.S. National Cancer Institute's (NCI) 2014 Health Information National Trends Survey (HINTS)
 - HINTS 4 Cycle 4 SPSS data set (<https://hints.cancer.gov/>)
 - Final n = 3,677 (34.6%)
 - Data Collection period: 8-11/2014
 - Data Analysis: Cross-tabs; Chi-square tests of independence

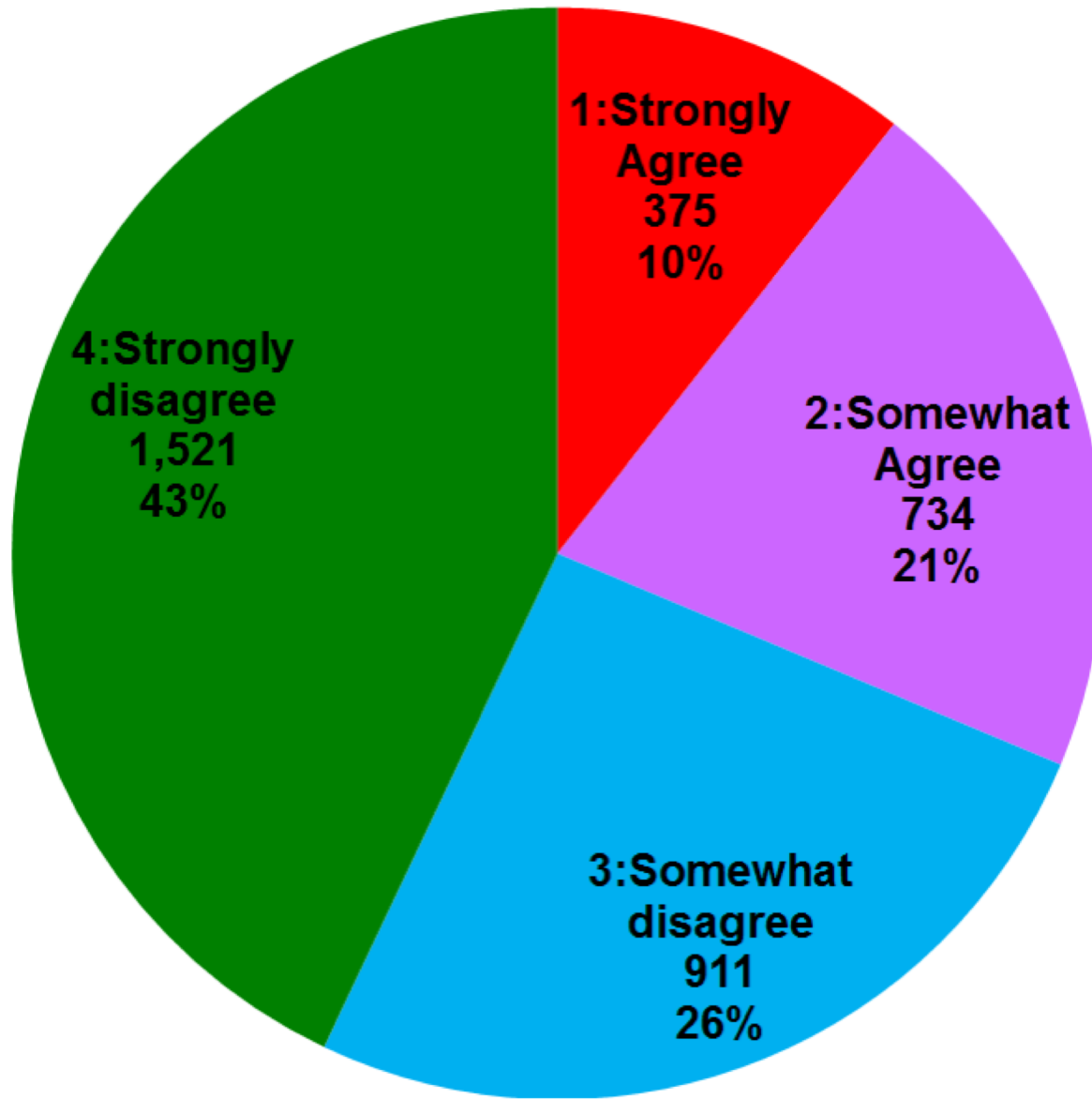


National Cancer Institute
at the National Institutes of Health

Participants

- $N = 3,677$
- Gender:
 - 60% F ($n = 2,184$)
 - 40% M ($n = 1,424$)
- Age: 18-98 [M (SD) = 51.9 (21.17)]
- Race/Ethnicity:
 - 60% Non-Hispanic White
 - 17% Hispanic
 - 16% Non-Hispanic Black/African-American
 - 7% Other

Findings: Prevalence of Info. Avoidance



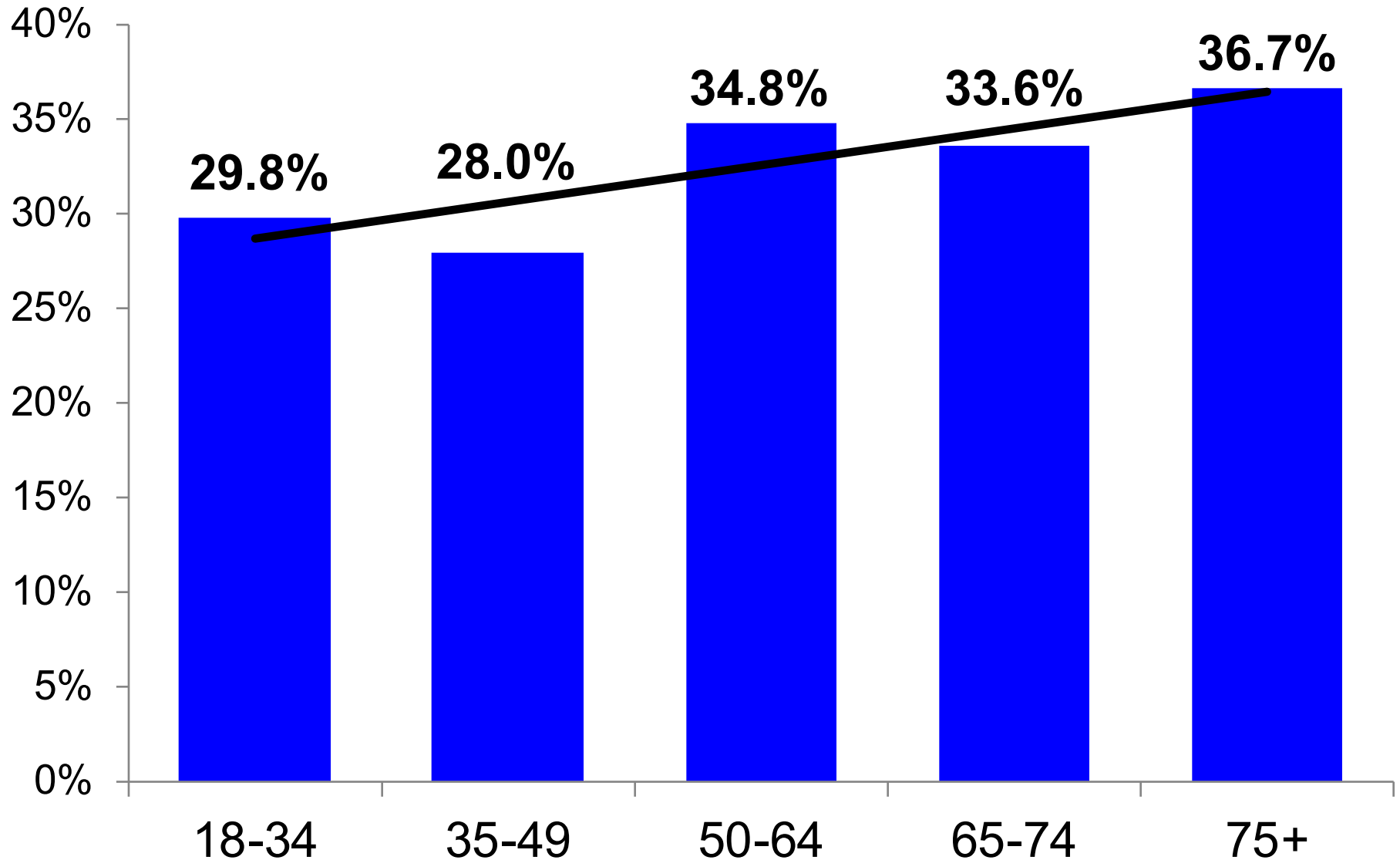
**How much do you agree or disagree with this statement:
“I'd rather not know my chance of getting cancer”?**

**“Information Avoiders”:
1,109/3,541
(31.3%)**

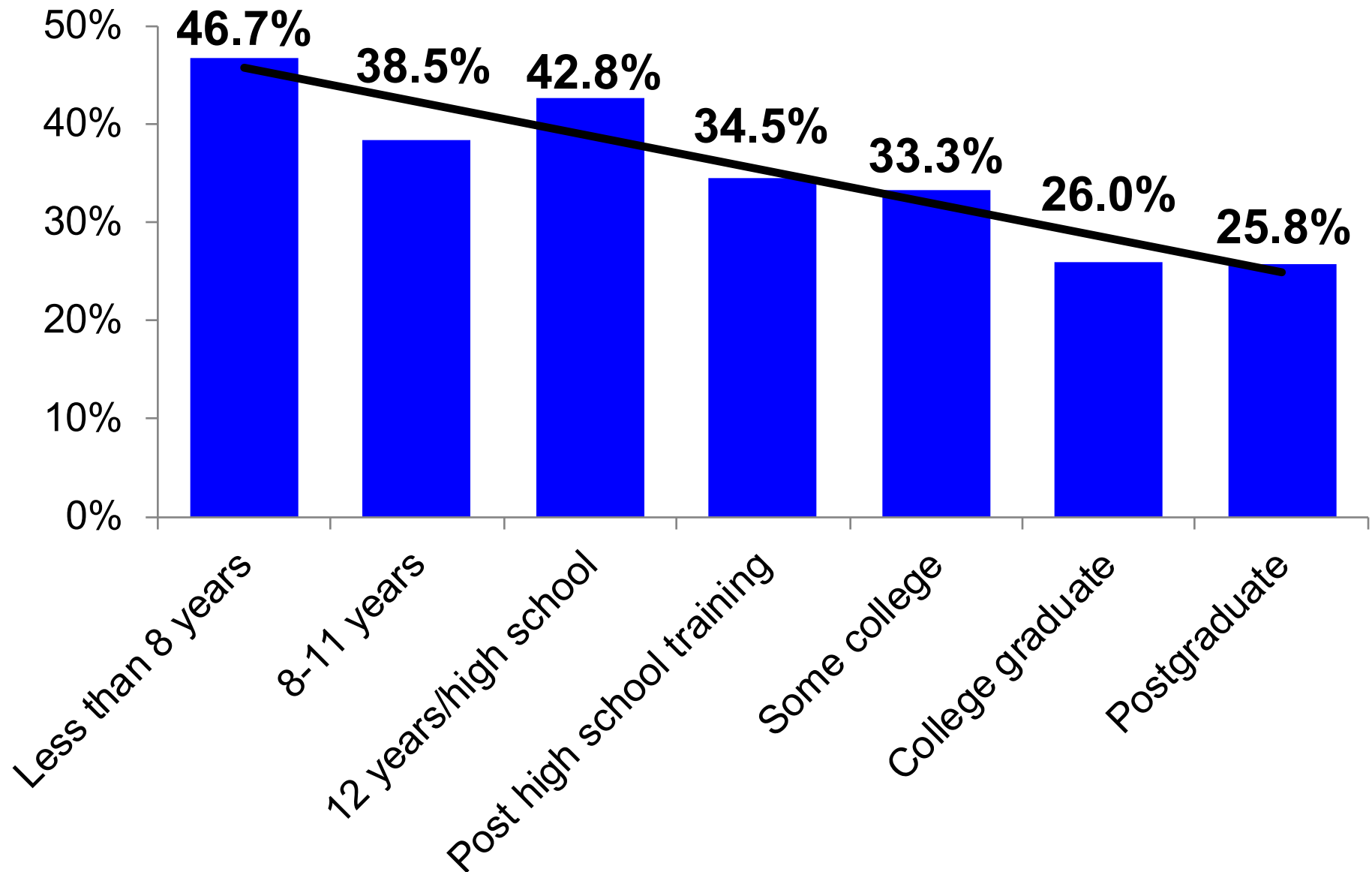
Findings: Demographic Differences

- Older age
- Lower educational attainment
- Lower household income
- Unemployed, disabled, retired
(vs. employed, homemakers, or students)
- No health care coverage

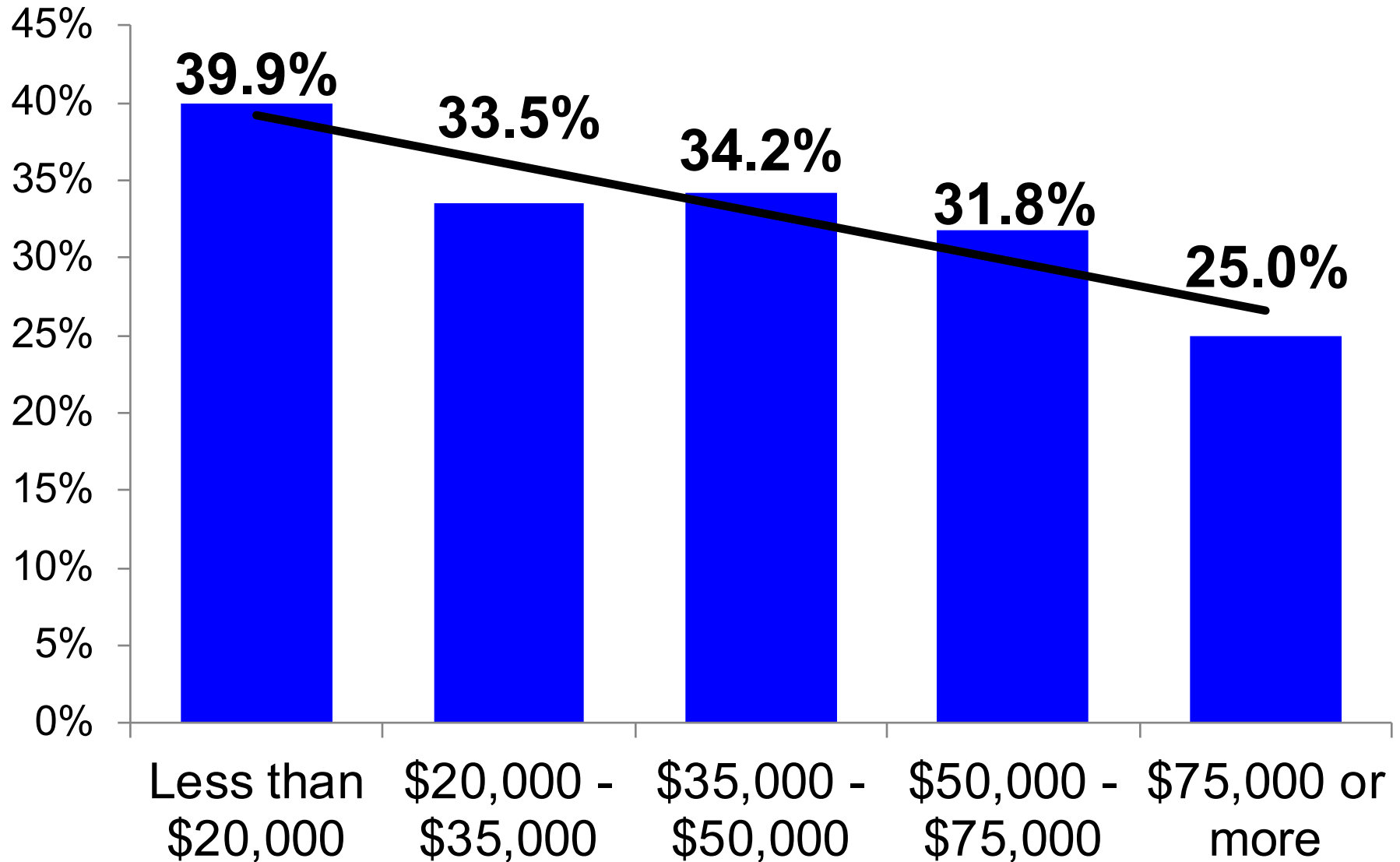
Findings: Demographic Differences - Age



Findings: Demographic Differences - Education



Findings: Demographic Differences: HH Income



Additional Factors Correlated with Information Avoidance

- Never go online
- No broadband access
- No tablet, smartphone
- No health apps
- Not used Internet re: cancer
- Never looked for health information from any source
- Encounter barriers if did seek cancer information:
 - Search took a lot of effort
 - Felt frustrated during the search
 - Information was hard to understand
 - Concerned about info. quality
- Less trust toward doctors, government health agencies, and the Internet
- Lower health- & information-related self-efficacy
- Report less social support
 - No regular healthcare provider
 - No friends/family they can talk to about their health
- Feel more fatalistic
 - Health behaviors don't matter
 - Limited control over weight/smoking
 - Quitting smoking won't help
 - "It seems like everything causes cancer"

Consumer Health Information Behavior Model of Health Injustice

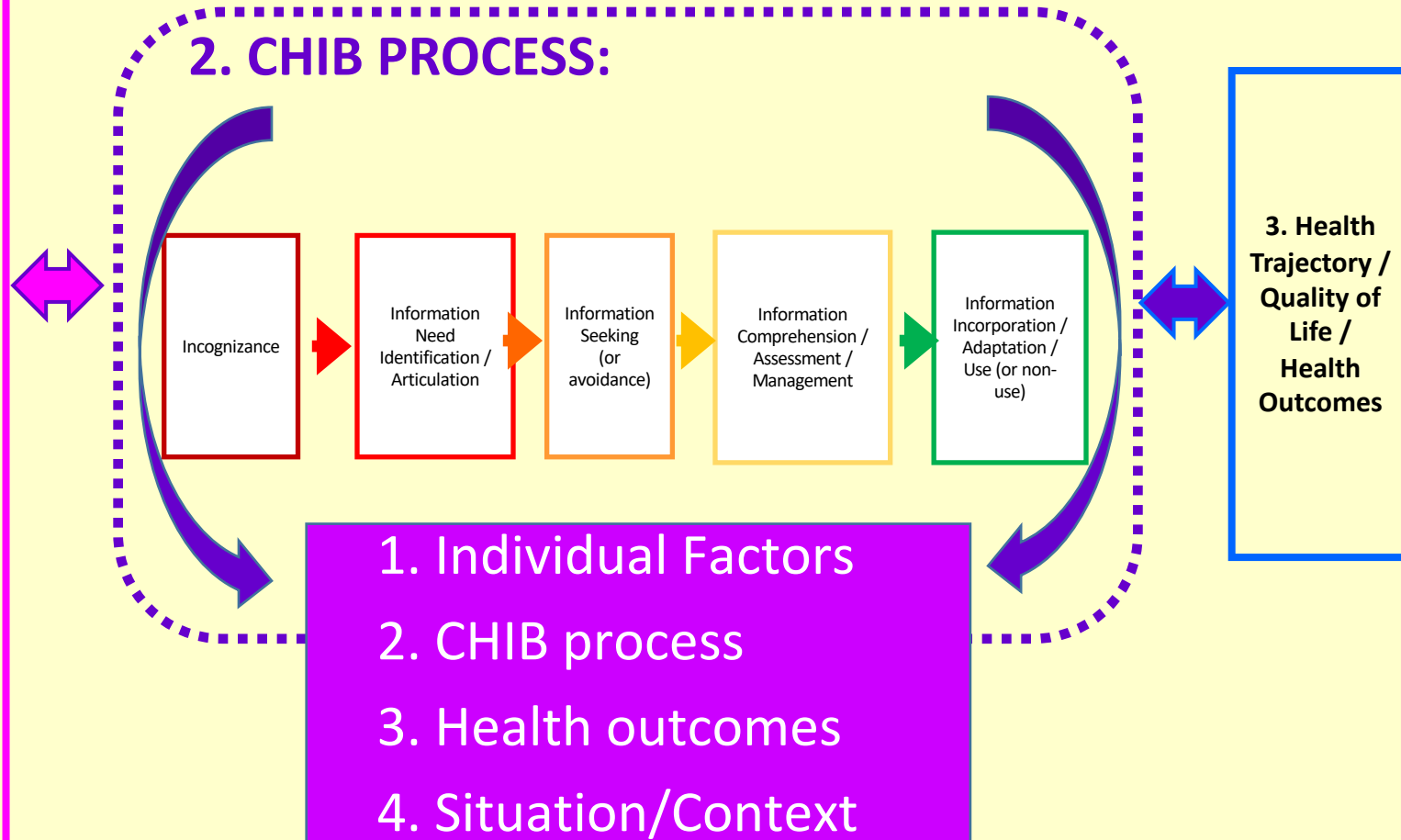
- We propose a new CHIB model of health injustice to explore potential links between CHIB and health injustice.
 - How might CHIB mediate the relationship between demographic (and other types of) factors and health injustice?
 - How might we use this information to identify potential contributory (and thus, potential solution) pathways for preventing/reducing health injustice?

CHIB Model of Health Injustice

1. Individual Factors:

- Demographics
 - Older age
 - Less education
 - Lower HHI
 - Unemployed, disabled, or retired
 - No health coverage
- Computer/Internet access and use
 - Do not use Internet
 - Do not own tablet, smartphone, basic cell phone
- Low self-efficacy
- Limited health/information/digital literacy
- Less likely to look for health information
- Have encountered barriers during any prior health-related information seeking
- Less trust toward health information sources (doctors, Internet, and government agencies)
- Less social support
- Prefer non-collaborative decision-making
- Feel more fatalistic

2. CHIB PROCESS:

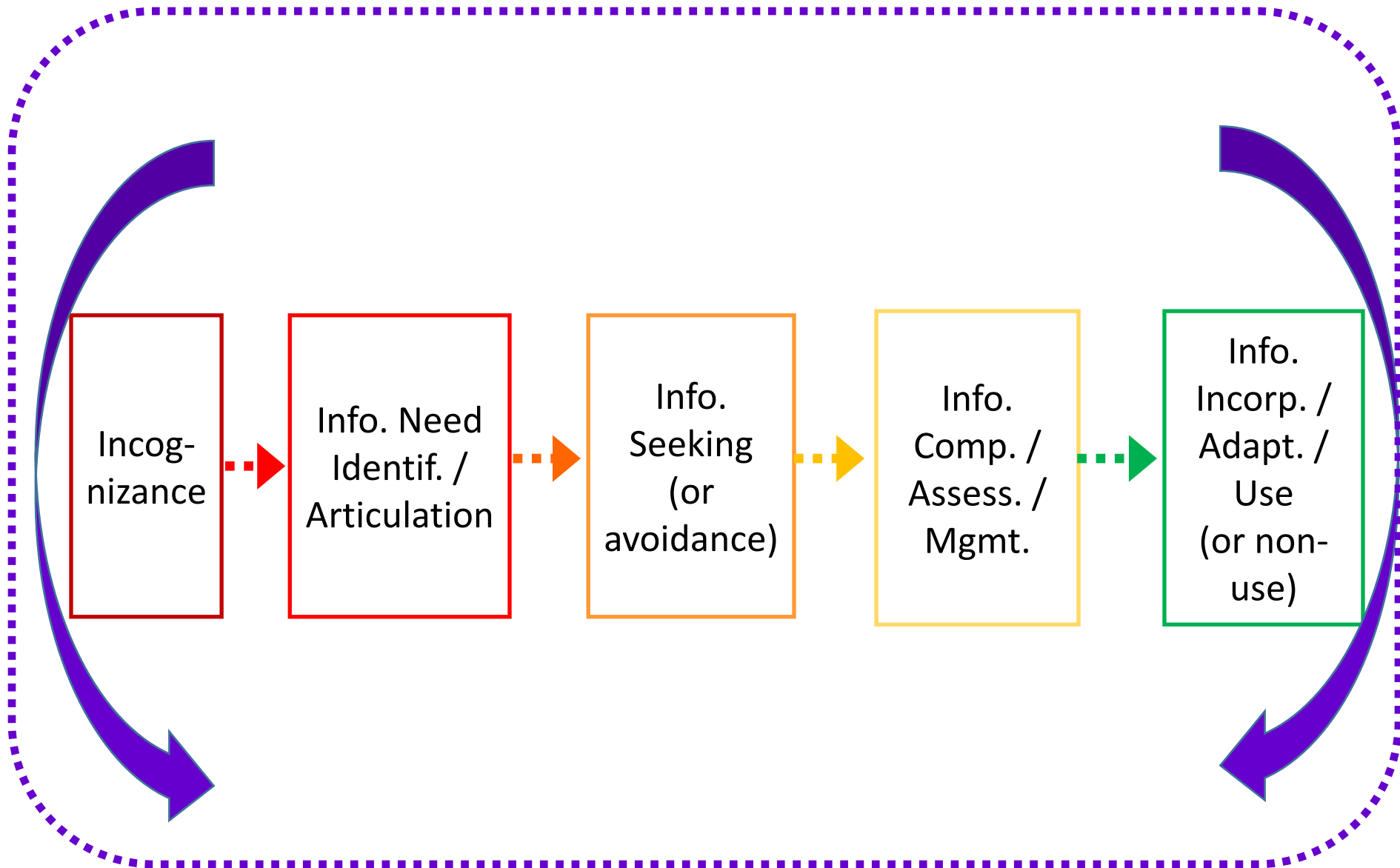


**4. SITUATION/CONTEXT: RESOURCES & OPPORTUNITIES /
LIMITATIONS & BARRIERS**

1. Individual Factors

- Demographics
 - Older age
 - Less education
 - Lower HHI
 - Unemployed, disabled, or retired
 - No health coverage
- Computer/Internet access and use
 - Do not use Internet
 - Do not own tablet, smartphone, basic cell phone
- Lower health & info. self-efficacy
- Limited health/information/digital literacy
- Less likely to look for health information
- Encountered barriers during health-related information seeking
- Less trust in some sources of health info.
 - Doctors
 - Internet
 - Govt. agencies
- Less social support
- Prefer non-collaborative decision-making
- Feel more fatalistic

2. CHIB Process



3. Health Outcomes

**3. Health Trajectory /
Quality of Life /
Health Outcomes**

4. Situation/Context

= SITUATION/CONTEXT: RESOURCES & OPPORTUNITIES / LIMITATIONS & BARRIERS =

- A person's current situation, along with their broader context.
- The resources and opportunities they have available to them.
- Limitations and barriers that they encounter within their day-to-day lives.
- Both actual and perceived are important.

Future Work

- We are conducting further work to build on this model by incorporating:
 - Selected components of other information behavior models.
 - Findings from additional empirical studies of CHIB.
 - An additional class of influencing variables – characteristics of the information/sources that people consult, but as they interact with characteristics of the individual.



Contact Information

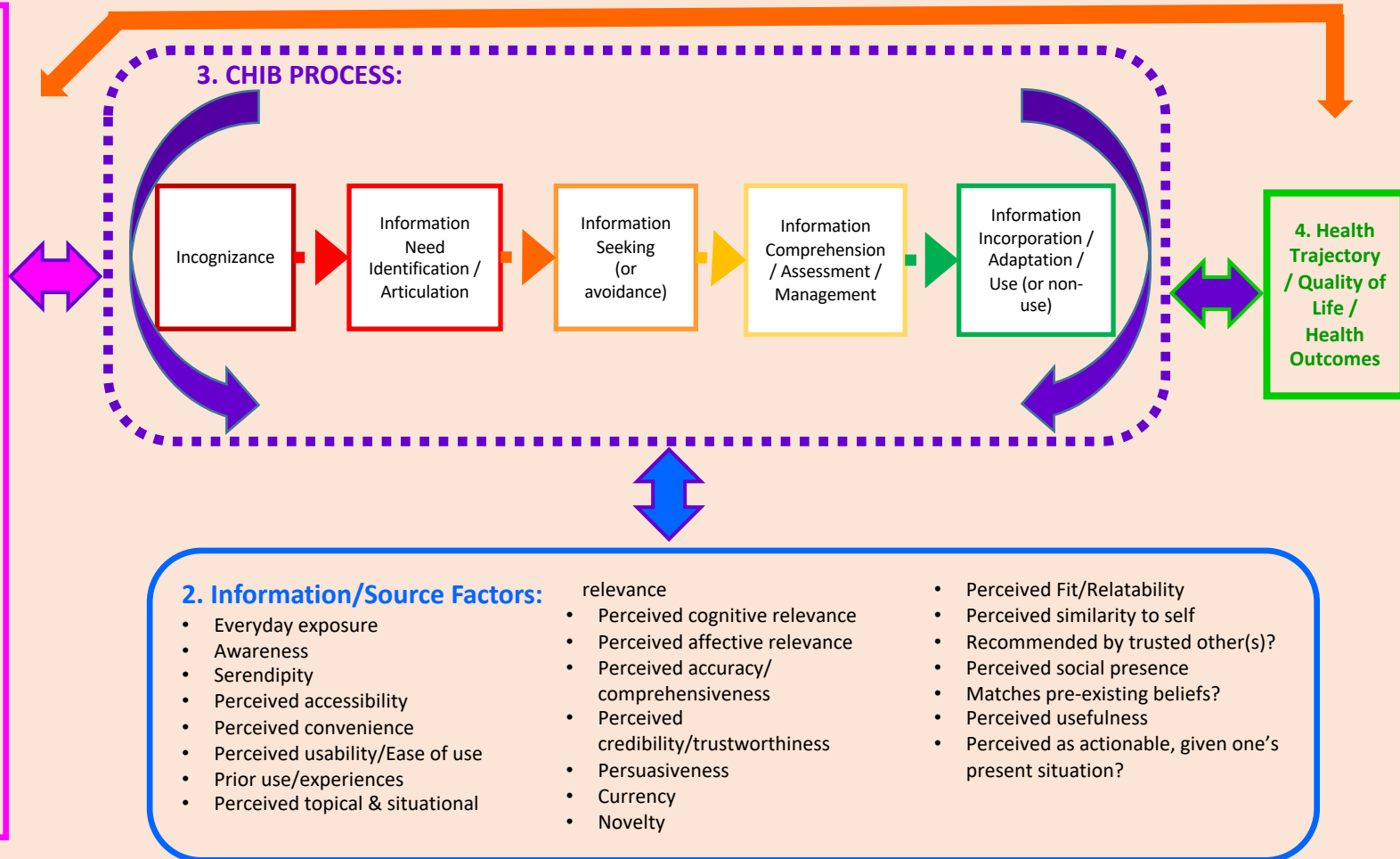
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1. Individual Factors:

- Demographics
- Socioeconomic factors
- Physical factors
- Experiential factors
- Knowledge/Skills
- Beliefs/Perceptions
- Emotions/Attitudes
- Personality/Coping style/ Information orientation
- Preferences/Values/ Goals/Priorities
- Social factors

3. CHIB PROCESS:



2. Information/Source Factors:

- Everyday exposure
- Awareness
- Serendipity
- Perceived accessibility
- Perceived convenience
- Perceived usability/Ease of use
- Prior use/experiences
- Perceived topical & situational

- relevance
- Perceived cognitive relevance
- Perceived affective relevance
- Perceived accuracy/comprehensiveness
- Perceived credibility/trustworthiness
- Persuasiveness
- Currency
- Novelty

- Perceived Fit/Relatability
- Perceived similarity to self
- Recommended by trusted other(s)?
- Perceived social presence
- Matches pre-existing beliefs?
- Perceived usefulness
- Perceived as actionable, given one's present situation?

===== 5. SITUATION/CONTEXT: RESOURCES & OPPORTUNITIES / LIMITATIONS & BARRIERS =====