

Originally developed to explain people’s participation in programs to prevent and detect disease and their behaviors in response to diagnosed illnesses, the Health Belief Model (HBM) has been successfully adapted to topics across diverse fields of study. The HBM predicts whether and why people will take action to prevent, detect, or control health conditions. The model applies to behaviors with the potential to reduce risk of developing a disease as well as the effects of an existing disease (e.g., medication adherence).

The HBM posits that people are likely to engage in a health-related behavior if they believe that:

1. They are susceptible to a condition (at risk for a disease),
2. The condition could have potentially serious consequences,
3. The behavior could be of benefit in reducing their susceptibility to, or the severity of, the condition,
4. Their perceived barriers (or costs) are outweighed by the benefits and are not strong enough to prevent action, and
5. They believe that they can carry out the behavior successfully.

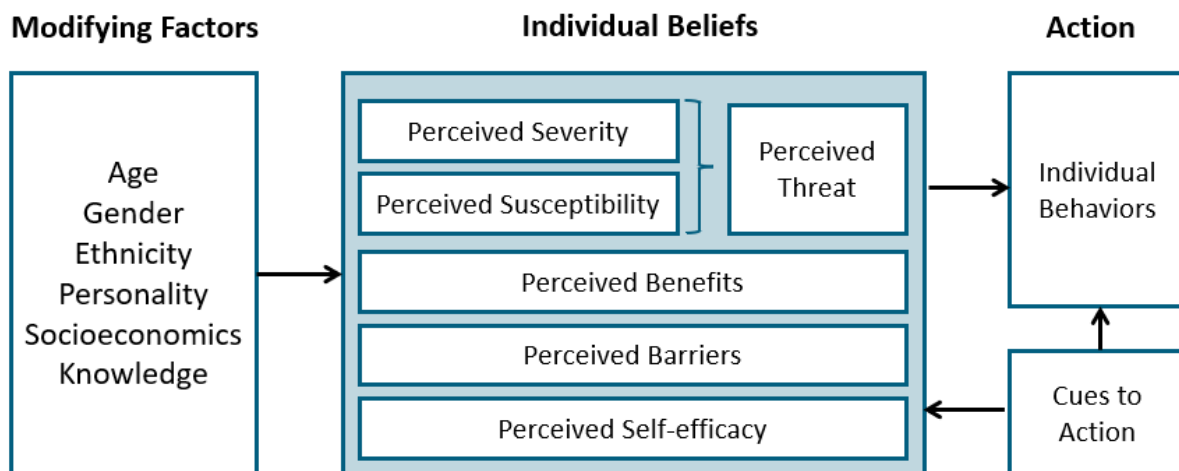
An assumption of HBM is that demographic, structural, and psychosocial factors moderate individual beliefs and indirectly influence health behaviors. However, the model does not specify how such factors operate or interact with other constructs.

Developer

Godfrey Hochbaum, Irwin Rosenstock, & Stephen Kegels, 1952

Graphical Representation of Theory and Constructs

(Adapted from Wethington, Glanz, & Schwartz, 2015)



Individual Beliefs

- **Perceived Susceptibility** – One’s beliefs about the risk of getting a health-related condition.
- **Perceived Severity** – One’s beliefs about the seriousness of a health-related condition, including medical and social consequences.
- **Perceived Threat** – The combination of one’s beliefs about their susceptibility to, and severity of, a condition.

- **Perceived Benefits** – One’s beliefs about the positive aspects of adopting a behavior (e.g., the effectiveness of the behavior in reducing risk or serious consequences).
- **Perceived Barriers** – One’s beliefs about obstacles to performing a behavior, and the negative aspects (both tangible and psychological costs) of adopting a behavior.
- **Perceived Self-efficacy** – One’s beliefs about their ability to successfully perform a behavior.

Action

- **Cues to Action** – Internal (e.g., health symptoms) or external (e.g., family pressure) factors that trigger the decision to engage in a behavior.

Application to the Precision Paradigm: Alignment of Theory Constructs with Mechanisms of Action Taxonomy

Mechanisms of Action (MoA), derived from theories of behavior, are the processes through which specific intervention techniques are expected to affect behavior. Interventions grounded in the Health Belief Model might include techniques to achieve specific changes in behavior by acting through any of these MoAs.

Aspects of constructs in the **Health Belief Model** correspond to the [Mechanisms of Action taxonomy](#) as follows:

Theory Construct	Corresponding Mechanism(s) of Action
Perceived Threat	Perceived Susceptibility/Vulnerability
Perceived Benefits	Beliefs about Consequences
Perceived Barriers	Beliefs about Consequences Attitude towards the Behavior
Perceived Self-efficacy	Beliefs about Capabilities
Cues to Action	Behavioral Cueing Social Influences

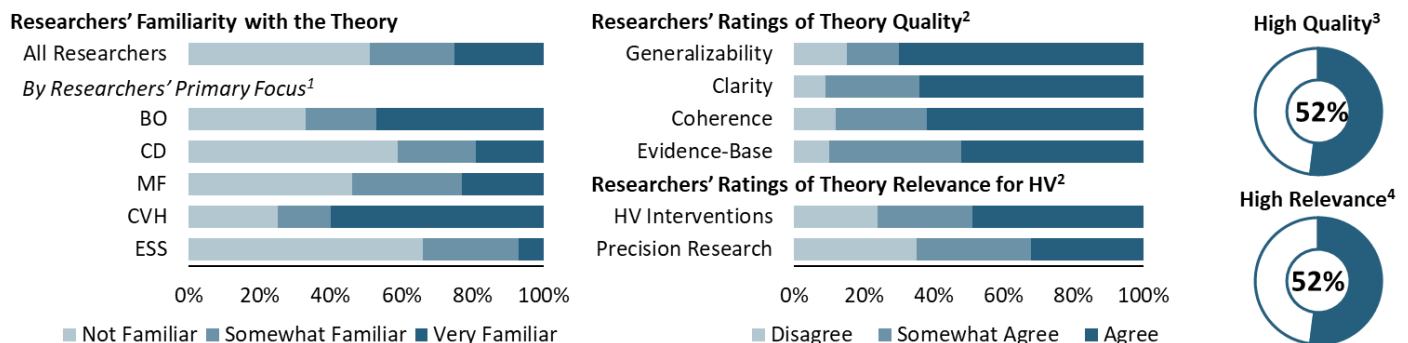
NOTE: Aspects of the graphical representation of this theory also correspond to other components of the [Precision Paradigm](#):

- Modifying factors are context and act as moderators
- Individual behaviors are an outcome

Examples of Use of Theory in Intervention Development/Research

Jacobson Vann, J. C., Finkle, J., Ammerman, A., Wegner, S., Skinner, A. C., Benjamin, J. T., & Perrin, E. M. (2011). Use of a tool to determine perceived barriers to children’s healthy eating and physical activity and relationships to health behaviors. *Journal of Pediatric Nursing*, 26(5), 404-415. <https://doi.org/10.1016/j.pedn.2010.10.011>

Key Results from Intervention Researcher Survey



¹Intervention researchers’ primary or secondary area of research; BO=Birth Outcomes; CD=Child Development; MF=Maternal Psychosocial Functioning; CVH=Cardiovascular Health; ESS=Family Economic Self-Sufficiency
²Of those who indicated they were familiar with the theory. Those answering ‘Not Sure’ to the quality and relevance items were excluded from the denominator.
³Percent of researchers answering agree/somewhat agree to all four quality items.
⁴Percent of researchers answering agree/somewhat agree to both relevance items.

Methods for the intervention researcher survey can be found [here](#).

Theory Citation

Hochbaum, G., Rosenstock, I., & Kegels, S. (1952). *Health belief model*. Public Health Service.

Wethington, E., Glanz, K., & Schwartz, M. D. (2015). Stress, coping, and health behavior. In Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.), *Health behavior: Theory, research, and practice* (5th ed., pp. 223-242). Jossey-Bass.