

Health Belief Model

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Health Belief Model

- Health Beliefs: • These are person's Ideas, convictions, attitudes about health and illness

○ The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behavior by focusing on the attitudes and beliefs of individuals.

○ **Background** □

○ In the 1950s, US public health researchers began developing psychological models designed to enhance the effectiveness of health education programmes (Hochbaum 1958; Rosenstock; 1966). Public health service was for the most part oriented toward prevention of disease not a treatment of disease.

○ Theorists: ◦ Group of social psychologists: Godfrey Hochbaum (1958)

○ Irwin Rosenstock. ◦ Trying to explain why people were not participating in disease detection programs. (Tuberculosis Screening)

○ Traditionally health professionals have focused largely upon giving their clients information in an attempt to change their behavior.

○ □ Educational theory has identified that there are three domains of learning:

○ □ Cognitive

○ □ Affective

○ □ Behavioral

- The cognitive domain refers to the acquisition of factual knowledge and intellectual understanding of ideas. Beliefs
- □ The affective domain is concerned with attitudes, and values.
- □ Behavioral refers to skills or actions performed.

- It was one of the first attempts to view health in a social context.
- □ The model was a milestone in health education because it placed a high value on the **attitudes of the learner** and recognized the importance of the **learner's readiness** to enact meaningful behavior change.

○ The underlying concept of the health belief model is that **health behavior** is determined by personal beliefs or perception about a disease and strategies available to decrease its occurrence. (e.g covid-19)

○ major influences from learning theory:

○ □ Stimulus Response Theory

○ □ Cognitive Theory

○ Value expectancy theory

- Stimulus response theory: (Thorndike)
- □ Learning results from events which reduce the psychological drives that cause behavior (reinforcers)
- □ In other words, we learn to enact new behaviors, change existing behaviors, and reduce or eliminate behaviors because of the consequences of our actions.
- □ Reinforcers, punishments, rewards

- Cognitive theory: (Piaget, 1936)

- □ Emphasize the role of subjective hypotheses and expectations held by the individual Beliefs, attitudes, desires, expectations, etc.

- □ Influencing beliefs and expectations about the situation can drive behavior change, rather than trying to influence the behavior directly.

○ **Value Expectancy Theories: (Lewin, 1935)**

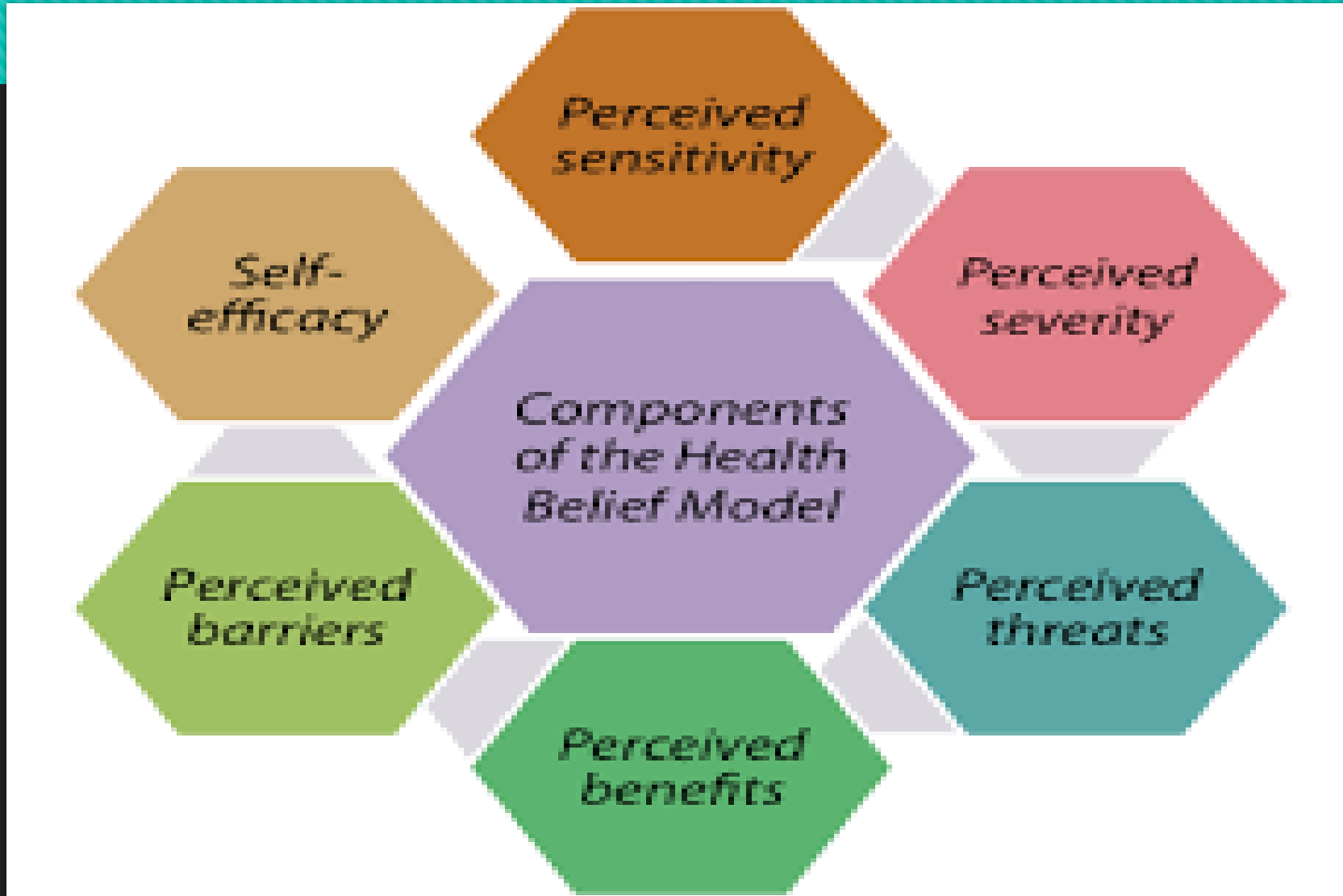
○ A goal setting theory based on level of aspiration, in which the individual sets the target of future performance based on past performance.

○ **Expectancy**: person believes that increased effort leads to improved performance

○ **Instrumentality**: person believes that improved performance leads to a certain outcome or reward
 Outcomes: person values that reward or outcome
HBM is a value-expectancy theory

○ **Based on these assumptions: People desire to avoid illness or get well. People believe that a specific health action that is available to him or her will prevent illness**

COMPONENTS OF HEALTH BELIEF MODEL:



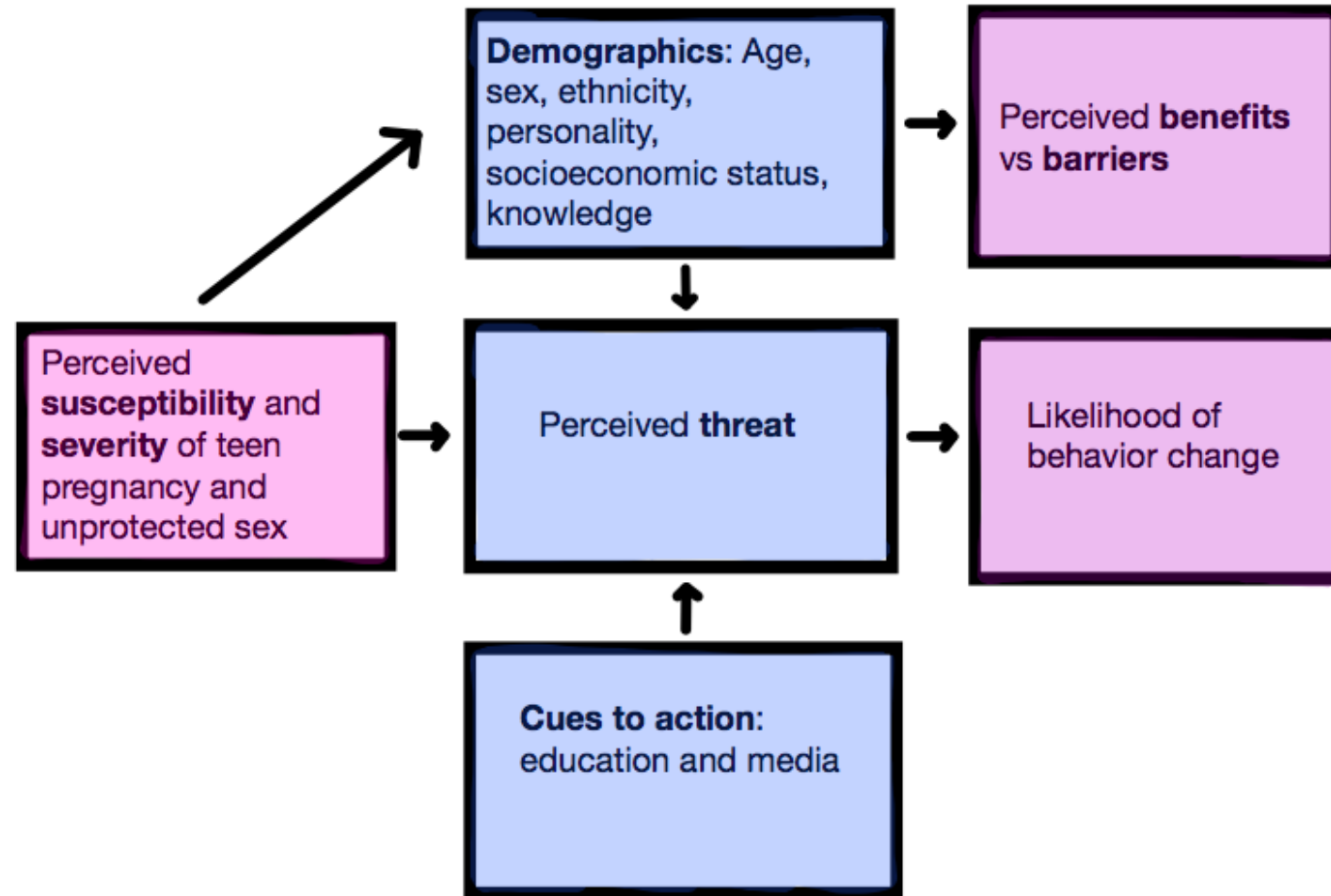
Concept	Definition	Application
Perceived Susceptibility	One's opinion of chances of getting a condition	Define population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.
Perceived Severity	One's opinion of how serious a condition is and what its consequences are	Specify consequences of the risk and the condition
Perceived Benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Define action to take; how, where, when; clarify the positive effects to be expected.
Perceived Barriers	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through reassurance, incentives, assistance.
Cues to Action	Strategies to activate "readiness"	Provide how-to information, promote awareness, reminders.
Self-Efficacy	Confidence in one's ability to take action	Provide training, guidance in performing action.

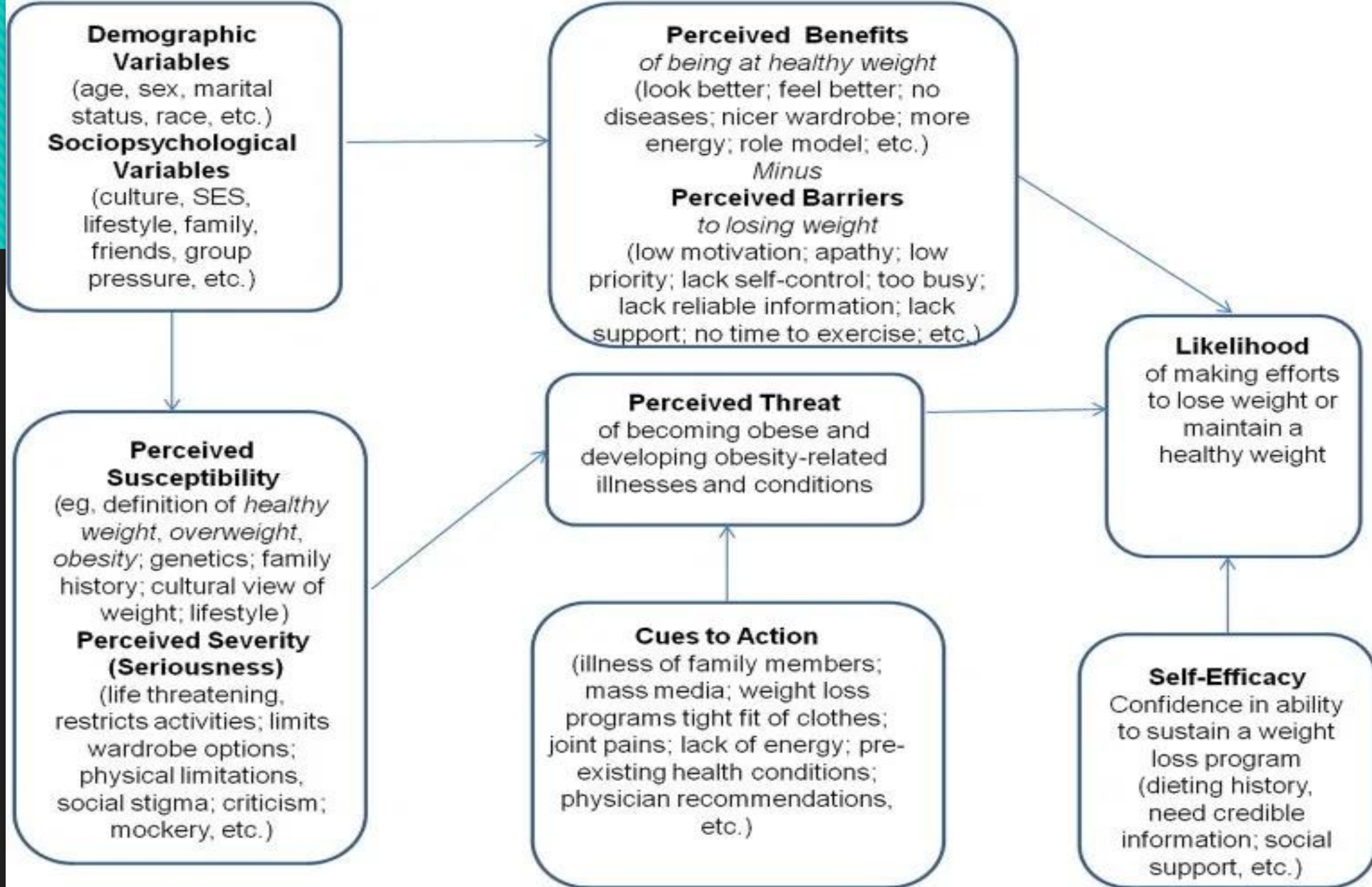
- Self efficacy was included in later versions of the model (e.g. Becker et al. 1977).
- The health belief model is a systematic and mechanistic approach.

Individual Perceptions

Modifying Factors

Likelihood of Action





- According to a meta-analysis on the effectiveness of the HBM in predicting behaviors, perceived benefits and barriers emerged as strong predictors of engaging in the health behavior, while the relationship between susceptibility, severity and the behavior was low or nonexistent (Carpenter 2010).
- While some literature suggests that beliefs about perceived susceptibility and perceived severity are predictive of engaging in health promoting behaviors such as healthy diet and exercise, smoking cessation, self-examinations and dental care (Abraham and Sheeran 2005)

○ to examine the effect of gender, health status, age and whether participants received preventive services on their perceptions of susceptibility and seriousness among participants who reported that they had health insurance.

- Females who received cancer, obesity screenings perceived higher susceptibility and perceived seriousness about developing cancer and obesity than male.
- older adults perceived higher susceptibility and perceived seriousness about developing cancer. (Raffy & Weston, 2018)

SCOPE AND APPLICATION:

- The Health Belief Model has been applied to a broad range of health behaviors and subject populations. Three broad areas can be identified (Conner & Norman, 1996):
 - **PREVENTIVE HEALTH BEHAVIORS,**
- which include health-promoting (e.g. diet, exercise) and health-risk (e.g. smoking) behaviors as well as vaccination and contraceptive practices.
- □ **SICK ROLE BEHAVIORS,** which refer to compliance with recommended medical regimens, usually following professional diagnosis of illness. □
- **CLINIC USE,** which includes physician visits for a variety of reasons.

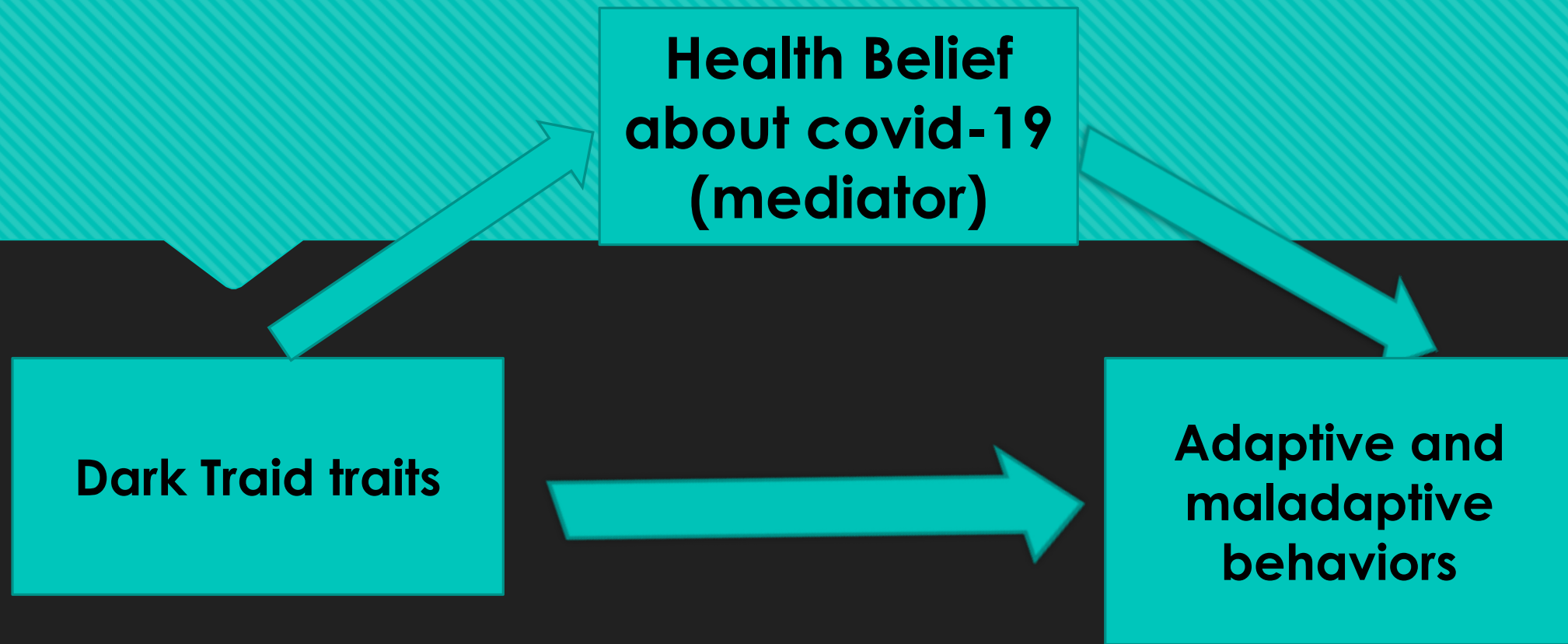
- The Patient Protection and Affordable Care Act (ACA) encourages health promotion and disease prevention by making preventive care more accessible and affordable for many Americans, especially among young adults who may be more likely to delay preventive care because of cost (i.e. barrier to access) (Koh and Sebelius 2010;
- While young adults are exposed to higher rates of harmful health outcomes (e.g. sexually transmitted infections [STIs], mental health, substances use), studies have shown that a high percentage of young adults received no preventive care, counseling or reported low screenings rates (Adams et al. 2018; Fortuna, Robbins, and Halterman 2009; Minino et al. 2007).

Weaknesses

- Not great for long term behavior change
- ◦ Lacks of operationalized homogeneity
- ◦ Difficult to be tested (low test-retest reliability)
- ◦ Self fulfilling prophecy

Scales on health belief model

- health belief model scale for exercise Shiyan, Xinglin, 2020)
- **Health Belief Model Scale and Theory of Planned Behavior Scale to assess attitudes and perceptions of injury prevention program participation (Emily, Matthew,Robert, 2019)**
- **Breaset self-examination for early detection of breast cancer**



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