

Self-efficacy theory proposes that a central underlying mechanism of behavior change is an individual’s perception of their personal capability to perform a behavior that will lead to a desired outcome. The theory explains how self-efficacy develops, how it is altered, and how it influences behavior. Bandura added self-efficacy to his earlier social learning theory, and it is a central tenet of his later social cognitive theory.

Key to this theory are the concepts of *outcome expectations* and *self-efficacy expectations* as determinants of behavior (*not represented in figure*). Outcome expectations are personal beliefs about whether a certain behavior will lead to desired outcomes.

Self-efficacy expectation is the conviction that one can successfully execute a behavior required to produce an outcome and determines whether a person will attempt to engage in behavior and the amount of effort they will invest in the face of aversive experiences. Together, outcome and self-efficacy expectations influence the initiation and maintenance of behavior.

Self-efficacy expectations vary across three dimensions (*not represented in figure*) that have implications on performance of behaviors: *magnitude* (task difficulty), *generality* (whether efficacy expectations are situation-specific or generalize to other behaviors or situations); and *strength* (whether an individual applies effort over a longer period or with more obstacles).

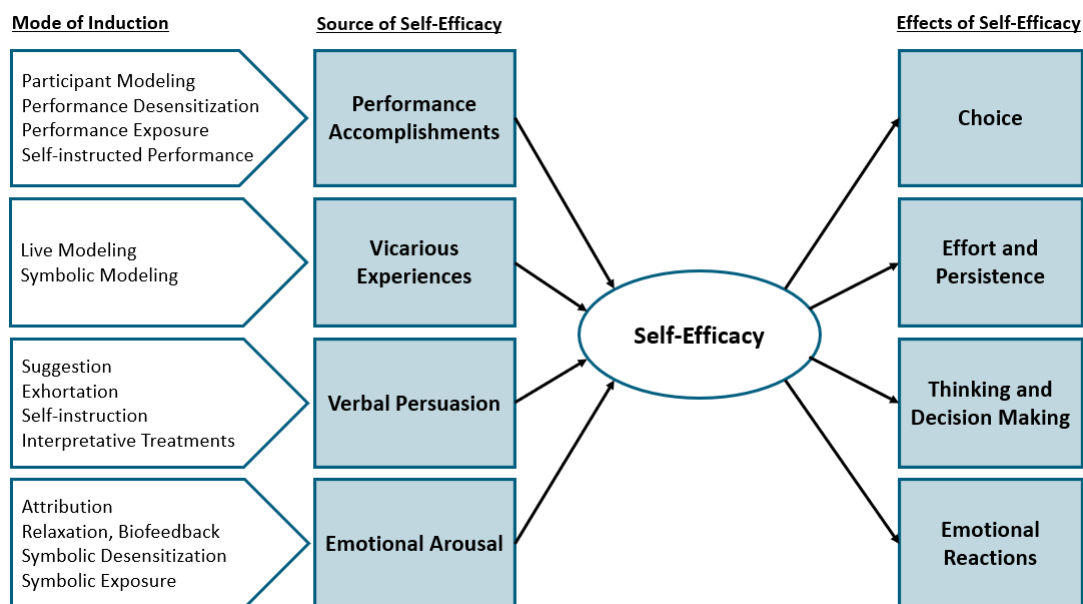
This theory details four primary sources of self-efficacy and their effects (depicted in figure). These sources represent targets for interventions to create or alter self-efficacy expectations and enable individuals to perform a behavior or attain a goal.

Developer

Albert Bandura, 1977

Graphical Representation of Theory and Constructs

(Adapted from Lippke, 2020)



Mode of Induction – Procedures or strategies used to reduce unwanted behaviors while building strong expectations of mastery for a wanted behavior.

Source of Self-Efficacy

- **Performance Accomplishments** – An individual’s prior experiences performing a behavior. Prior success strengthens self-efficacy expectations while unsuccessful attempts weaken them.
- **Vicarious Experiences** – The extent to which an individual has observed others successfully performing a behavior or engaging in threatening activities without adverse consequences.
- **Verbal Persuasion** – Suggestion or persuasion from others that an individual is capable of successfully coping with circumstances with which they have failed to cope in the past.
- **Emotional Arousal** – Emotional or physiological arousal elicited by stressful events which provides an individual with information with which to judge their vulnerability or their ability to cope.

Self-Efficacy – An individual’s beliefs about their capabilities to perform a behavior that will lead to a desired outcome.

Effects of Self-Efficacy – Self-efficacy may influence an individual’s: 1) *choice* or decision whether to approach or avoid a situation and/or engage in a particular behavior, 2) investment of *effort and persistence* in dealing with obstacles and adverse experiences, 3) *thinking and decision making* in setting goals, and 4) *emotional reactions* (e.g., stress and anxiety).

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 Self-Efficacy Theory might include techniques to achieve specific changes in behavior by acting through any of these MoAs.

Aspects of constructs in the **Self-Efficacy Theory** correspond to the [Mechanisms of Action taxonomy](#) as follows:

Theory Construct	Corresponding Mechanism(s) of Action
Performance Accomplishments	Skills Beliefs about Capabilities
Vicarious Experiences	Social Learning/Imitation Beliefs about Consequences
Verbal Persuasion	Social Influences
Emotional Arousal	Emotion Perceived Susceptibility/Vulnerability
Self-efficacy	Beliefs about Capabilities

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

- Modes of Induction are [intervention techniques](#)
- Effects of Self-efficacy are [outcomes](#)

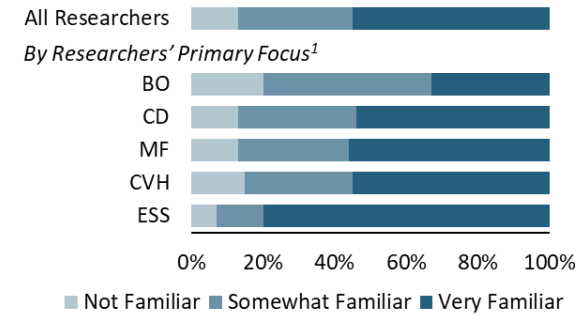
Examples of Use of Theory in Intervention Development/Research

Nguyen, J.D., Carson, M.L., Parris, K.M., and Place, P. (2003). A comparison pilot study of public health field nursing home visitation program interventions for pregnant Hispanic adolescents. *Public Health Nursing, 20*, 412-418.

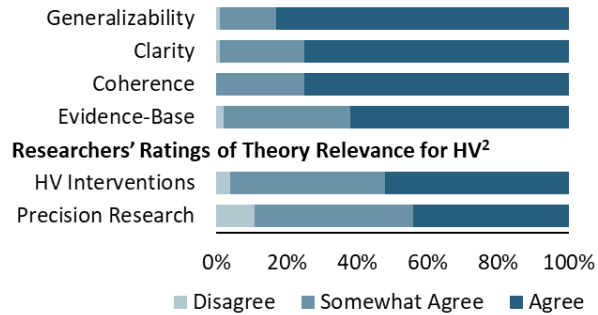
Nichols, J., Schutte, N.S., Brown, R.F., Dennis, C., and Price, L. (2009). The impact of a self-efficacy intervention on short-term breast-feeding outcomes. *Health Education & Behavior, 36*, 250-259.

Key Results from Intervention Researcher Survey

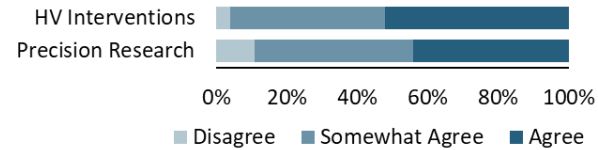
Researchers' Familiarity with the Theory



Researchers' Ratings of Theory Quality²



Researchers' Ratings of Theory Relevance for HV²



High Quality³



High Relevance⁴



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 Citations

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.

Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioural Change. *Psychological Review*, 84, 191-215. Originally published by APA and reprinted here with permission.

Lippke, S. (2020). Self-Efficacy Theory. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 4722-4727). Springer International Publishing. https://doi.org/10.1007/978-3-319-24612-3_1167

Reeve, J. (2014). Understanding motivation and emotion. NY: John Wiley & Sons, Inc.