

Transtheoretical Model/Stages of Change

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The Transtheoretical Model/Stages of Change (TTM) helps to explain *how* people change rather than *why* they change. TTM assumes that behavior change is a process that unfolds over time through a sequence of stages, and that these stages are stable and open to change, just as health behavior risks are stable and open to change. There are four key constructs of TTM, 1) five stages of change, 2) 10 processes of change, 3) decisional balance, and 4) self-efficacy.

Central to TTM are the stages of change: 1) precontemplation, 2) contemplation, 3) preparation, 4) action, and 5) maintenance. According to TTM, behavior change is a process that happens over time and often occurs in a non-linear fashion. Movement through these stages is complicated and requires cognitive and behavioral activities, decision making, and self-efficacy.

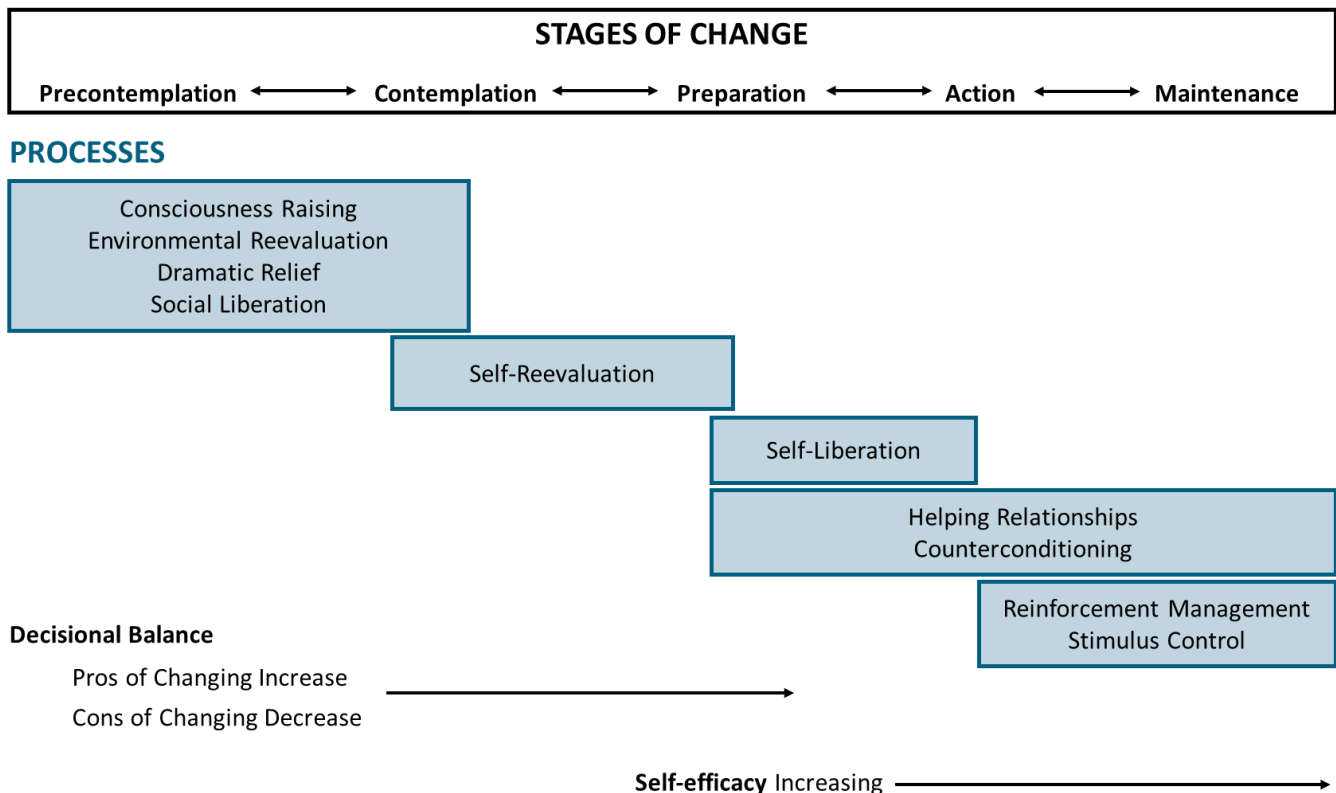
The processes of change include 10 cognitive and behavior activities that work to facilitate behavior change (detailed below). Certain processes are linked to specific stages of change. As such, the relationships between the stages of change and the processes of change have several implications for targeting intervention and treatment approaches because these relationships can provide insight as to *when* and *how* to direct behavior change.

Developer

James Prochaska & Carlo DiClemente, 1982

Graphical Representation of Theory and Constructs

(Adapted from Prochaska, Redding, & Evers, 2015)



Stages of Change

- **Precontemplation** – The individual may be unaware or lack knowledge of the consequences of their behavior. No intention to act within the next 6 months.
- **Contemplation** – The individual is aware of the problem and recognizes the benefits of behavior change. While they have examined the pros and cons of change, they tend to place more emphasis on the cons. Intends to act within the next 6 months.
- **Preparation** – The individual has a plan of action. Intends to act within the next 30 days and has taken some behavioral steps.
- **Action** – The individual has made modifications to their behavior. Changed behavior for less than 6 months.
- **Maintenance** – The individual has made the behavior change and has the confidence to continue their behavior. Changed behavior for more than 6 months.

Processes of Change – Cognitive and behavioral activities that facilitate progress through stages.

- **Consciousness Raising** – Increasing awareness about the causes, consequences, and cures for a problem behavior.
- **Environmental Reevaluation** – Cognitive and affective assessment of how the presence or absence of a behavior affects one's social environment.
- **Dramatic Relief** – Increasing negative or positive emotions to motivate taking appropriate action.
- **Social Liberation** – Increase in healthy social opportunities or alternatives.
- **Self-Reevaluation** – Cognitive and affective assessment of one's self-image, with or without an unhealthy behavior.
- **Self-Liberation** – Belief that one can change and the continued commitment to act on that belief.
- **Helping Relationships** – Caring, trust, openness, and acceptance as well as support from others for healthy behavior change.
- **Counterconditioning** – Learning healthier behaviors that can substitute for problem behaviors.
- **Stimulus Control** – Removing cues for unhealthy habits and adding prompts for healthy alternatives.
- **Reinforcement Management** – Rewarding oneself or being rewarded by others for making progress.

Decisional Balance – Evaluation of the pros and cons of changing behavior. As individuals move forward through the stages, the cons of behavior change decrease while the pros of behavior change increase, therefore helping to facilitate and maintain behavior change.

Self-efficacy – Confidence that one can engage in the behavior. As individuals move forward through the stages, the temptation to revert to previous risk behaviors decreases while self-efficacy to maintain the new healthy behavior increases, therefore helping to facilitate and maintain behavior change.

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 Transtheoretical Model/Stages of Change might include techniques to achieve specific changes in behavior by acting through any of these MoAs.

Aspects of constructs in the **Transtheoretical Model/Stages of Change** correspond to the [Mechanisms of Action taxonomy](#) as follows:

Theory Construct	Corresponding Mechanism(s) of Action
Decisional Balance	Attitudes towards the Behavior Beliefs about Consequences
Self-efficacy	Beliefs about Capabilities

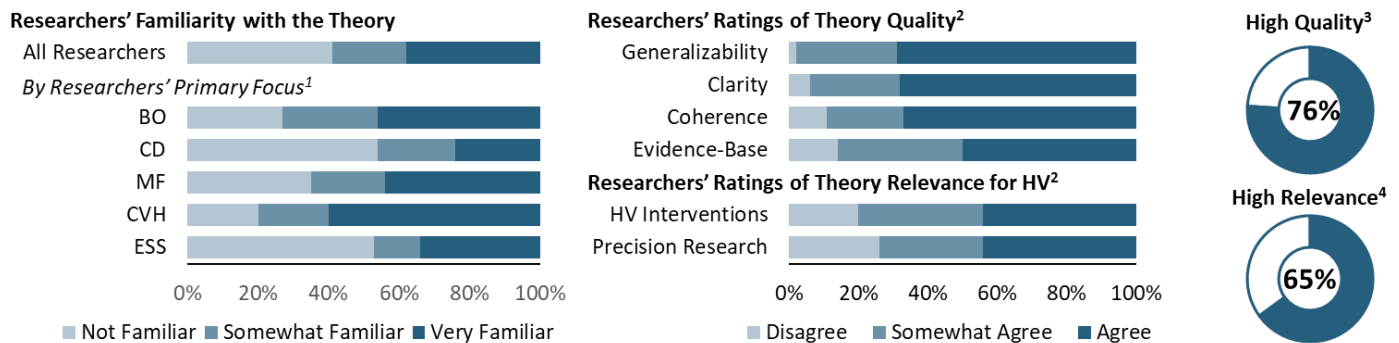
NOTE: Aspects of the graphical representation of this theory also correspond to other components of the [Precision Paradigm](#):

- Each *Stage of Change* is part of the individual context and acts as a moderator
- *Processes of Change* are intervention techniques

Examples of Use of Theory in Intervention Development/Research

- Stillman, F. A. (1995). Smoking cessation for the hospitalized cardiac patient: rationale for and report of a model program. *Journal of Cardiovascular Nursing*, 9(2), 25-36. <https://doi.org/10.1097/00005082-199501000-00004>
- Voorhees, C. C., Stillman, F. A., Swank, R., Heagerty, P. J., Levine, D.M., Becker, D.M. (1996). Heart, body, and soul: impact of church-based smoking cessation interventions on readiness to quit. *Preventive medicine*, 25(3), 277–285. <https://doi.org/10.1006/pmed.1996.0057>

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 Citations

- Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice*, 19(3), 276-288. <https://doi.org/10.1037/h0088437>
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51(3), 390–395. <https://doi.org/10.1037/0022-006X.51.3.390>
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behavior. *American Psychologist*, 47(9), 1102-1114. <https://doi.org/10.1037//0003-066x.47.9.1102>
- Prochaska, J. O., Redding, C. A., & Evers, K. E. (2015). The transtheoretical model and stages of change. In Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.), *Health behavior: Theory, research, and practice* (5th ed., pp. 127-148). Jossey-Bass.
- Velicer, W. F., Prochaska, J. O., Fava, J. L., Norman, G. J., & Redding, C. A. (1998). Smoking cessation and stress management: Applications of the transtheoretical model of behavior change. *Homeostasis IN Health and Disease*, 38(5-6), 216-233.