

## Stages of Change Theory

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## Definition/Introduction

The factors that influence “change behavior” have been significantly researched, yet one model is the standard-bearer for change. The transtheoretical model (TTM), and its easy-to-follow steps toward change, make understanding human behavior one of the easiest filters to follow. TTM stages include<sup>[1][2][3][4][5]</sup>:

1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance

TTM has become one of the most commonly applied theoretical and clinical frameworks in mental health and is effective across a broad spectrum of problems, including smoking, alcohol abuse, addiction, weight control and exercise acquisition, sunscreen use, condom use, school bullying, to preventative measures such as medical screens like mammography and cancer screening.<sup>[1]</sup> This article explains the important concepts of TTM and how to use it.<sup>[1][2][3][6]</sup>

Pre-contemplation, the first stage, reveals unmotivated people who see no need to find a solution to a problem because they usually do not believe that one exists. Individuals in this stage are unaware of or have limited awareness of the problem or lack insight into the consequences of their negative/addictive behavior. This patient response is atypical since the majority of people acknowledge their adverse behaviors. It is important to understand that a person in this stage is in complete denial and even tends to defend their actions. People in this stage often present as resistant, unmotivated, and unready, and unwilling to change. Furthermore, this individual often obsesses about the negative side of change rather than recognizing the benefits that they would gain. In other words, the cons outweigh the pros. Should a pre-contemplator present to therapy, it is likely to be due to the constant pressure of others in their life, who are likely pushing them to seek help. At times, they may even exhibit elements of change as long as the pressure from others remains present and constant. If that pressure to change is no longer present, Precontemplators will quickly return to their old habits. How does one progress to the next stage of change when there is no consideration of recognizing a problem in the first place? Consciousness-raising therapy, in addition to changes in life circumstances, may help. When people enter a new stage of their life, they tend to critically evaluate their behaviors and consider if those behaviors are serving them and those around them in a positive way. Until they gain such insight, an individual remains in this pre-contemplation stage and will continue to engage in adverse behaviors. People in this stage have no intention of making a change in the next six months and often make comments like, “I don’t see a problem with what I’m doing, so there’s no reason to change anything.”

The second stage is contemplation. This stage is marked by awareness and acknowledgment of the problematic behavior with serious consideration to change. However, the person is uncertain if the problem behavior is worthy of correcting. Therefore, this internal approach-avoidance conflict results in no commitment to taking the necessary steps toward change. In contemplation, the problem sits “center stage,” but the actor never moves. The ambivalence and indecisiveness that occur in this stage cause people to remain stuck in “contemplation” for at least six months. In general, people in this stage are more open to receiving information regarding their behaviors and finding solutions to correct them. They may make comments such as, “I know I have a problem, and I think I should do something about it.” This behavior is also known as chronic contemplation or behavioral procrastination.

The next stage along the continuum is the preparation stage. At this point in the change process, the person can easily acknowledge that a behavior is problematic and can make a commitment to correcting it. Now, there is an acknowledgment that the pros of change behavior outweigh the cons. People begin gathering information from various sources; self-help books, counseling, change-oriented programs as they start to develop a plan of action. Gathering information is a vital step in preparation. If bypassed, individuals tend to plan insufficiently, without thoughtfully considering the impact the change will play in their lives. As such, they may stumble when challenges arise, and relapse often becomes inevitable. Often appropriate planning is completed; people intend to act in the next thirty days and have usually taken behavioral steps towards that direction over the past year. It is common for people in this stage to make comments such as, “Smoking is such a bad habit. I’ve been reading about different ways to quit, and even though I haven’t totally quit yet, I am smoking less than I did before.”

During the action stage, change happens. Total abstinence of the adverse behavior is the expectation for a period of fewer than six months. While in this stage, people gain confidence as they believe they have the willpower to continue on the journey of change. They continue to review the importance of the behavioral change while evaluating their commitment to themselves. People in this stage are willing to receive assistance and support. Developing short-term positive reinforcement in the form of rewards sustains motivation. Considering potential hurdles to overcome and then developing plans to counteract potential triggers that may lead to relapse is prominent. During this stage, the most overt behavioral changes are acknowledged by the individual and by others. However, the visible changes found in this stage should not be mistakenly equated as the only components of change. Often, people mistakenly associate change solely with action, thereby forgoing all the prerequisite work required to act on changing a behavior. Prematurely jumping to this stage without adequately preparing will lead to difficulty.[2][3] An example of a statement made by an individual in the action stage would be, “It’s easy to say you’ll quit smoking, but I’m doing something about it. I haven’t smoked a cigarette in four months.”

Continuing the new behavior change is the focus of the maintenance stage. Here, individuals have maintained total abstinence from the adverse behavior for more than six months. As people progress through this stage, the more confident they become in their ability to sustain the positive lifestyle changes and the less tempted/fearful they feel of relapsing. They can maintain a new status quo and can remind themselves of the progress they have made. At times, they may have thoughts of returning to old habits; however, they resist the temptation and remain on track because of the positive strides they have made. People become skilled at anticipating potential triggers that may result in relapse and have constructed coping strategies to combat these situations in advance. Typically, people remain in this stage anywhere between six months to five years.[7] A longitudinal study from the 1990 Surgeon General’s Report showed that after 12 months of abstinence, 43% of people returned to their smoking habit. However, it was not until reaching the 5-year mark of abstinence that the risk for relapse dropped to 7%.[7] Individuals in this stage require support as they re-evaluate their reasons for change, acknowledge the success they’ve made thus far, consider the potential triggers for relapse, and subsequently create contingency plans to try and avoid relapse.

The ultimate goal of TTM is to create an action plan that will assist in preventing relapse and maintaining sobriety. The concept of relapse is a common factor in change behavior and, as such, should be discussed and normalized. Often, change behavior will take a spiral or recycling of stages rather than a linear progression.[1][2][7] For example, smokers can take an average of three to four action attempts before achieving long-term maintenance.[1] At the risk of

demeaning one's achievement up to that point, relapse should not be viewed as a failure. It should be considered an excellent opportunity to reevaluate one's triggers, reassess one's motivation for change, reassess old/new barriers to achieving the goal, and plan for stronger contingency plans. It is essential to recognize the possibility of relapse and acknowledge it as a potential for growth and improvement. Approximately fifteen percent of people who relapse regress to the pre-contemplation stage and often try to suppress the memory of the unsuccessful trial and thoughts of the negative behavior.[1] Eighty-five percent of individuals return to the contemplation stage or preparation stage rather than pre-contemplation.[1] Individuals require constant active maintenance in the first 3 to 6 months of abstinence since this period is considered the most tempting time for relapse.[1]

Termination, the final stage, is not often included in the stages of change (TTM) because it is difficult to achieve. It describes a period with zero temptation for relapse and the achievement of 100% self-efficacy. Although this level of success rarely accompanies addictive behaviors, examples of this can be seen in everyday life, when individuals buckle their seat belts as soon as they enter a car or when individuals take their medications at the same time every day. Certain factors are required to assist with stage progression. These factors include the processes of change, decisional balance, and self-efficacy.[1][2][7]

1. The processes of change explain how change occurs. The ten processes illustrate both the external and internal requirements needed to transition through the stages.
2. Decisional balance considers the pros and cons of change. The further one progresses through the stages, the greater the pros of change are valued over the cons.
3. Self-efficacy explains the level of confidence one has in executing and maintaining a positive change despite the temptation for relapse.

## Issues of Concern

It is important to note that a great deal of TTM research has focused on illustrating high success rates when changing one adverse behavior. However, many studies that have attempted to use stage-matched system treatment for multiple behaviors have yielded limited efficacy.[8] A comprehensive literature review of studies attempting to implement change behavior to multiple adverse behaviors showed only 1 out of 39 studies were able to achieve significant change results on each of three or more adverse behaviors.[8]

There is limited research and even less evidence towards the efficacy of this theory for changing multiple adverse behaviors at one given time, although it is possible that research methods don't capture change. One challenge in developing such successful research trials is the possibility that an individual may not acknowledge all targeted adverse behaviors at the same level of importance for change. For example, an individual may be considered by researchers to be in the action stage for smoking cessation, but in the contemplation stage for exercise, while in the pre-contemplation stage for excessive alcohol use. Furthermore, information regarding ways to approach the relapse of one behavior, yet maintenance of other behaviors is limited. TTM, also known as the *Stages of Change Theory*, does not consider ways to tackle the complexity of multiple change behavior at this time and, as such, requires further research.

## Clinical Significance

Developing a reliable framework for self-change, or professionally-assisted-change is beneficial for those seeking change and for those in the health care system who are assisting with change. When using this model of change, "changers" are not coerced, but rather supported and accepted at the stage they present. Treatment becomes personalized based on the individual and the stage in which they reside. With this method, "change behavior" is thought of as a fluid and dynamic evolution, with possible recycling of stages, rather than focusing on the end goal of change. The importance of discussing the common and potential risk of relapse allows for the focus to be shifted from

a failure mindset to the success that was achieved up until the point of relapse. Allowing the discussion of relapse in a nonpunitive manner leads to an honest examination of lessons learned regarding the individual, their triggers, and better ways to address those triggers. Overall, TTM assists in improving compliance and motivates people regarding the prospect of change.

Although much of the documented research has centered around smoking cessation and other addictive behaviors such as alcohol abuse, and other illicit drug use; applications of the stages of change theory (TTM) has been seen in a wide variety of problematic behaviors. The numerous applications of this model have ranged from stress management, medication compliance, exercise participation, weight control, and condom use, to preventative measures such as medical screening tests.[1]

Using TTM to assist with preventative medicine is another category of significance. One way to comply with healthy lifestyle behaviors is to encourage compliance with medical assessments. One study showed that patient-no show rates were not only a financial burden on the U.S. healthcare system but also indirectly affected patient access to medical care.[9][10][11] Per TTM, one would assume that these future patients are either in the pre-contemplation or contemplation stages. Not maintaining regular medical care may lead to complex clinical presentation when care is eventually requested. With this in mind, the concept of offering financial incentives from payers to patients who seek routine medical care was thought of as a way to promote healthy lifestyle behavior and advance a patient into the planning or action stage.

## **Nursing, Allied Health, and Interprofessional Team Interventions**

TTM provides guidelines for "changers" and assists various health care professionals when helping individuals who are considering a change. Team members must be mindful that the majority of "changers" are not in the action stage. As such, it is reasonable to expect low registration rates and/or high dropout rates when creating and implementing an action-based treatment plan for the collective of "changers." [1] In a study by Krebs et al., results showed that stages of change strongly predicted therapy outcomes. In an action/maintenance-oriented smoking cessation program for cardiac patients, only 22% of pre-contemplators and 43% of contemplators quit smoking after six months. Conversely, 76% of individuals in the action stage were not smoking after six months.[5] Furthermore, a study by Velicer et al. illustrates that 40% of individuals are in the pre-contemplation stage, while 40% are in contemplation, and 20% in preparation. This suggests that for every behavioral change, 40% of individuals will not be ready for change.[2][7][12][7]

Therefore, treating every "changer" as if they are in the action stage does not adequately serve those contemplating change and ultimately leads to premature relapse. Once the client's stage of change is determined, health care professionals can better assist with change behavior. The type, duration, and intensity of therapy should be geared towards which stage the individual finds themselves in at the time.[3][13]

Studies show that moving from one stage to the next within one month will double one's chances of acting on changing behavior in the next six months of treatment.[1] For pre-contemplators who remain in this stage by the end of the first month, only 3% of them progressed to action by six months. However, for pre-contemplators who transitioned to contemplation at one month, 7% of them advanced to action by six months.[1] Similarly, for contemplators remaining in this stage by one month, only 20% acted by six months. Conversely, and perhaps even more profoundly, for the contemplators who transitioned to the preparation stage by one month, 41% of them took action by six months of treatment.[1]

In summary, processes of change, when paired with their appropriate stages of change (TTM) counterparts, provide the best support for change.[1][2] More cognitive and affective processes are required initially, while the later stages require more behavioral processes. Therapists take on different roles based on the stage their client is present at the time. During the pre-contemplation stage, the therapist must take on the role of a nurturing parent, showing empathy, using active listening, and going with the client's resistance rather than against it.[2][5] During the contemplation

stage, the therapist must take on the persona of a Socratic teacher, as they aim to challenge the client's beliefs to gain new insights about their behaviors.[2][5] During the preparation stage, the therapist takes on the character of an experienced coach as they work with the client to develop a game plan that is executable when the client is ready.[2][5] Lastly, in the stages of action and maintenance, the therapist takes on the role of a consultant, as they provide guidance, advice, and support when needed.[2][5]

## Review Questions

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## References

1. Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. *Am Psychol.* 1992 Sep;47(9):1102-14. [PubMed: 1329589]
2. Norcross JC, Krebs PM, Prochaska JO. Stages of change. *J Clin Psychol.* 2011 Feb;67(2):143-54. [PubMed: 21157930]
3. Norcross JC, Wampold BE. What works for whom: Tailoring psychotherapy to the person. *J Clin Psychol.* 2011 Feb;67(2):127-32. [PubMed: 21108312]
4. Zimmerman GL, Olsen CG, Bosworth MF. A 'stages of change' approach to helping patients change behavior. *Am Fam Physician.* 2000 Mar 01;61(5):1409-16. [PubMed: 10735346]
5. Krebs P, Norcross JC, Nicholson JM, Prochaska JO. Stages of change and psychotherapy outcomes: A review and meta-analysis. *J Clin Psychol.* 2018 Nov;74(11):1964-1979. [PubMed: 30335193]
6. Prochaska JO, Velicer WF, Redding C, Rossi JS, Goldstein M, DePue J, Greene GW, Rossi SR, Sun X, Fava JL, Laforge R, Rakowski W, Plummer BA. Stage-based expert systems to guide a population of primary care patients to quit smoking, eat healthier, prevent skin cancer, and receive regular mammograms. *Prev Med.* 2005 Aug;41(2):406-16. [PubMed: 15896835]
7. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *Am J Health Promot.* 1997 Sep-Oct;12(1):38-48. [PubMed: 10170434]
8. Prochaska JO, Velicer WF, Rossi JS, Redding CA, Greene GW, Rossi SR, Sun X, Fava JL, Laforge R, Plummer BA. Multiple risk expert systems interventions: impact of simultaneous stage-matched expert system interventions for smoking, high-fat diet, and sun exposure in a population of parents. *Health Psychol.* 2004 Sep;23(5):503-16. [PubMed: 15367070]
9. Peterson K, McCleery E, Anderson J, Waldrip K, Helfand M. Evidence Brief: Comparative Effectiveness of Appointment Recall Reminder Procedures for Follow-up Appointments [Internet]. Department of Veterans Affairs (US); Washington (DC): Jul, 2015. [PubMed: 27606388]
10. Wu J. Rewarding healthy behaviors--pay patients for performance. *Ann Fam Med.* 2012 May-Jun;10(3):261-3. [PMC free article: PMC3354976] [PubMed: 22585891]
11. Dunnagan T, Haynes G, Smith V. The relationship between the stages of change for exercise and health insurance costs. *Am J Health Behav.* 2001 Sep-Oct;25(5):447-59. [PubMed: 11518339]
12. Velicer WF, Fava JL, Prochaska JO, Abrams DB, Emmons KM, Pierce JP. Distribution of smokers by stage in three representative samples. *Prev Med.* 1995 Jul;24(4):401-11. [PubMed: 7479632]
13. DiClemente CC, Prochaska JO, Fairhurst SK, Velicer WF, Velasquez MM, Rossi JS. The process of smoking cessation: an analysis of precontemplation, contemplation, and preparation stages of change. *J Consult Clin Psychol.* 1991 Apr;59(2):295-304. [PubMed: 2030191]

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