A significant issue for adolescents who stutter is a disproportionally high rate of relapse, ranging from 30 to 72%, where relapse is defined as a subjectively unacceptable increase in stuttering behaviors and associated reactions following a period of post-treatment improvement. The pattern of change and relapse that frequently characterizes the therapy experience of teenagers who stutter is strikingly similar to the one seen for adolescents receiving treatment for other behavioral problems such as stress management, eating disorders and substance abuse. For these populations, researchers in behavioral health and health psychology have shown that a key factor in the prevention of relapse is the matching of therapy techniques to the adolescent’s readiness to use them. That is, behavioral interventions, including stuttering therapy, are action-oriented in that the standard strategies they employ assume that the individual is prepared to actively engage in taking effective action to change their behavior. Noncompliance and relapse occur when these same techniques are used for individuals who are contemplating change but not ready to act. A theoretical framework for understanding readiness for change in taking effective action is the Transtheoretical Model (TTM), an integrative model of intentional behavior change that describes readiness as a temporal progression of stages predicted by shifts in cognition, most notably decisional balance and beliefs about self-efficacy. There is robust evidence from health and behavioral psychology that strategies used in TTM-based interventions for a wide range of clinical populations result in cognitive changes that move the individual toward active engagement in or maintenance of behavior change. I propose that successful and long-term stuttering management in adolescents is linked to the goodness-of-fit between intervention processes and the teen’s readiness for change, and that our ability to measure and influence this relationship over time is key to successful treatment. This study represents the first step in applying the empirically validated framework provided by the TTM to a new content area: stuttering and stuttering intervention for adolescents. The long-term goal of this work is the development of computer-tailored interventions (CTI) or “expert systems” that can be delivered over a variety of platforms (i.e., internet) and used independently by adolescents who stutter or in concert with clinician-led treatment to improve participation and adherence, and prevent relapse.