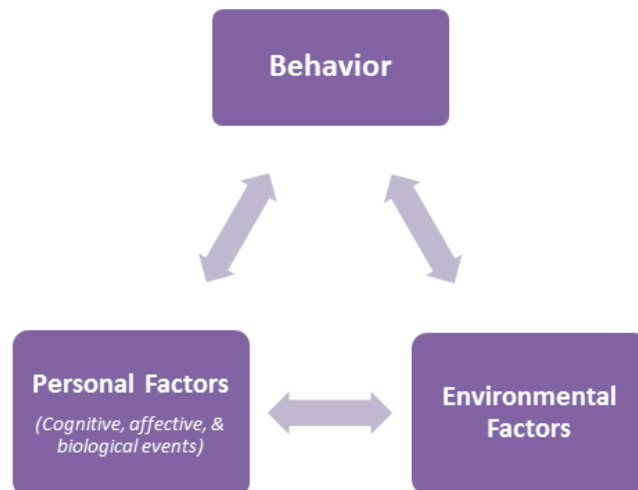


## What is Social Cognitive Theory?

Albert Bandura developed the **Social Cognitive Theory** based on the concept that learning is affected by **cognitive, behavioral, and environmental factors** (Bandura, 1991). In contrast to the traditional psychological theories that emphasized learning through direct experience, Bandura posited that virtually all learning phenomena can occur by observing other people's behavior and consequence of it (Bandura, 1986).

Bandura posited that the process of observational learning was governed by **four key aspects**: attention, retention, reproduction, and motivation. **Attention** is a process in which people selectively observe and extract information from the ongoing modeled activities (Wood & Bandura, 1989). **Retention** involves a process of "transforming and restructuring information in the form of rules and conceptions" (p. 362) and store the information into memory. **Reproduction** is the act of performing the actual behavior that was observed. The fourth aspect concerns **motivation** which propels the learner to attention, practice and retention.



(Adapted from Wood & Bandura, 1989)

## Key Concepts

The Social Cognitive Theory emphasizes that observational learning is not a simple imitative process; human beings are the agents or managers of their own behaviors (Bandura, 2001). Based on this idea, Bandura has identified several concepts critical for learning. Below are a few examples:



## Human agency

Human agency is the concept that learners make an intentional decision to invest in learning and enact behavior change (Bandura, 2001). The core feature of agency is its “power to originate actions for given purposes (Bandura, 1997, p.3)”. Social Cognitive Theory identifies three modes of human agency: personal, proxy, and collective (p. 13).

## Self-regulation

Self-regulation refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals (Boekaerts, 2005, p. 14). According to Bandura, self-regulation operates through a set of psychological subfunctions: self-monitoring subfunction, judgemental subfunction, and self-reactive influences (Bandura, 1991, pp. 250-256).

## Self-efficacy

Self-efficacy plays a central role in self-regulation process. It concerns an individual’s belief in their capabilities to successfully control actions or events in their lives. These beliefs are based on the individual feeling that they possess the requisite cognitive abilities, motivation, and resources to complete the task (Wood & Bandura, 1989). There are four main sources of information that create students’ self-efficacy: enactive mastery experiences, vicarious (observational) experiences, social persuasions and physiological and psychological states (Bandura, 1997).

## Measurements

**Self-efficacy** is a key element of Social Cognitive Theory because it affects students’ motivation and learning (Pajares, 1996, 2006; Schunk, 1995, 2003). Below we present a few examples of self-efficacy measures within various educational contexts:

The Academic Self-Efficacy Scale (Chen et al., 2014) is designed to evaluate the self-efficacy of individuals in an “Introduction to Computer Science” program. It consists of 9 items rated using a five-point Likert scale.



Student teacher self-efficacy measure is developed and validated by Van Dinther, Dochy, Segers, and Braeken (2013) to assess student teachers' self-efficacy in competence-based education. It consists of 6 subscales: Interpersonal competence, pedagogical competence, subject knowledge and methodological competence, organizational competence, competence for collaboration with colleagues, and competence for reflection and development. The complete instrument can be found from the appendix of the article.

The Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich & De Groot, 1990) has a well-regarded subscale for Self-Efficacy that can be used for students in higher education settings.



## References

1. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
2. Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248--287. 10.1016/0749-5978(91)90022-L
3. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
4. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Reviews Psychology*, 52, 1-20. 10.1146/annurev.psych.52.1.1
5. Boekaerts, Monique, Pintrich, Paul R., and Zeidner, Moshe, eds. *Handbook of Self-Regulation*. St. Louis, MO, USA: Academic Press, 2005. ProQuest ebrary. Web. 2 October 2014.
6. Chen, L.-Y., Hsiao, B., Chern, C.-C., & Chen, H.-G. (2014). Academic Self-Efficacy Scale [Database record]. Retrieved from PsycTESTS. doi: 10.1037/t32195-000
7. Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578.
8. Pajares, F. (2006). Self-efficacy during childhood and adolescence: Implications for teachers and parents. In F. Pajares, & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 339–367). Greenwich, CT: Information Age Publishing.
9. Schunk, D. H. (1995). Self-efficacy and education and instruction. In J. E. Maddux (Ed.), *Self-efficacy, adaptation and adjustment: Theory, research and application* (pp. 281–303). New York: Plenum Press.
10. Schunk, D. H. (2003). Self-efficacy for reading and writing: Influence of modeling, goal setting and self-evaluation. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 19(2), 159–172.
11. Van Dinther, M., Dochy, F., Segers, M., & Braeken, J. (2013). The construct validity and predictive validity of a self-efficacy measure for student teachers in competence-based education. *Studies in Educational Evaluation*, 39(3), 169.
12. Wood, R. & Bandura, A. (1989). Social Cognitive Theory of Organizational Management. *The Academy of Management Review*, 14(3), 361-384.