Self-Regulating Academic Learning and Achievement: The Emergence of a Social Cognitive Perspective

Barry J. Zimmerman

For three decades, social cognitive researchers have studied children's development of self-regulation as an achievement of socialization processes. I recount historically the emergence of a social cognitive perspective on self-regulation and identify its unique features. Two essential characteristics of students' self-regulated academic learning have been identified—their use of strategies and perceptions of self-efficacy. A social cognitive model of academic self-regulated learning is proposed that integrates triadic determinants of self-regulated learning (personal, behavioral, and environmental) on the basis of a strategic control loop. When students monitor their responding and attribute outcomes to their strategies, their learning becomes self-regulated, and they display increased self-efficacy, greater intrinsic motivation, and higher academic achievement.

KEY WORDS: self-regulation; achievement; social cognition.

INTRODUCTION

The forces of change have confronted American educators with an increasingly difficult challenge: Advances in technology are transforming the economic base of our society from industrial goods to information. In this age of information, a person's knowledge and skill have become the primary source of good jobs, self-confidence, and social prestige. The quickening pace
of technological change places more demands on citizens to assume greater responsibility for learning new competencies. There is a growing pedagogical need to understand how students develop the capability and motivation to regulate their own learning.

Approximately three decades ago, social cognitive researchers² began to study various components of self-regulation such as response inhibition (e.g., Walters et al., 1963; Walters and Parke, 1964), adoption of self-regulatory standards (e.g., Bandura et al., 1967; Bandura and Kupers, 1964; Mischel and Liebert, 1966), delay of gratification (Mischel, 1961; Bandura and Mischel, 1965), and rule induction and use (e.g., Bandura and Harris, 1966; Bandura and McDonald, 1963). This research has led to the development of a unique triadic view of human self-regulation, involving personal, behavioral, and environmental dimensions. This perspective has proven to be useful to researchers interested in diverse aspects of self-regulated functioning, such as motivation (e.g., Bandura and Cervone, 1983, 1986), physical health control (e.g., asthma, obesity, smoking, heart disease, and diabetes) (e.g., Bandura, 1986a; Clark and Zimmerman, 1990; O'Leary, 1985), mental health improvement (e.g., phobias, sleep disorders, stress management) (e.g., Bandura et al., 1982; Rosenthal and Downs, 1985; Rosenthal and Steffek, 1990), acquisition of physical skills (e.g., strength, sports, and tool use) (e.g., Bandura and Cervone, 1983, 1986), career choice and development (Betz and Hackett, 1986), complex decision-making and organizational functioning (Bandura, 1988a; Bandura and Wood, 1989; Wood and Bandura, 1989a, 1989b), and academic success (e.g., studying and test preparation and performance) (e.g., Schunk, 1984; Zimmerman and Martinez-Pons, 1986, 1988).

In the present article, I describe historically the emergence of a social cognitive perspective on self-regulation and identify unique features of the approach, delineate the essential characteristics of self-regulated academic learning, and, finally, propose a social cognitive model to explain self-regulated academic learning and achievement.

HISTORICAL OVERVIEW OF RESEARCH ON SELF-REGULATION PROCESSES

From the inception of the theory, social cognitive researchers have viewed self-regulation as an achievement of socialization processes (Bandura and Walters, 1963). Initial interest in this topic focused on self-control, which was defined as “the ability to control one’s own actions in the absence of immediate external constraints” (Thoresen and Mahoney, 1974, p. 2). It was

²Prior to his 1986 text, Bandura referred to his view as social learning theory.