

## Self-Regulated Behaviour at Work

**S. Kadhiravan and V. Suresh**  
Annamalai University, Annamalainagar

Considerable investments in theoretical and basic research over several decades have yielded insightful and detailed models of academic learning that simultaneously articulate facets of knowledge, cognition, motivation and emotion. Recently, researchers have begun to empirically study the role of students' personal attributes and psychological processes underlying their learning and academic performance. One such aspect is known as self-regulated learning or Self-Regulation in Learning (SRL). Self-regulation has the origin both from social and cultural issues. After Bandura's social learning theory, this concept has gained momentum.

**Keywords:** Behaviour, Learning

### ***Self-Regulation in Learning***

Self-regulation is the ability to behave according to one's own intention in a flexible way (Kuhl, 1992). With respect to learning, self-regulation bridges the gap between academic performance and two of its determinants viz. cognitive abilities and achievement motivation (Winne, 1995). Social cognitive researchers have viewed self-regulation as an achievement of socialization processes (Bandura & Walters, 1963; Bandura, 2001).

Self-regulated learning (SRL) is a cognitively inherent aspect of learning. The complexity of information and information processing may jointly constitute SRL. SRL is a deliberative, judgemental and adaptive process. It principally comprises of knowledge, beliefs and learned skills. It is also viewed as a process through which students activate and sustain cognition, behaviour and affect that are systematically oriented towards the attainment of their goals.

Self-regulation refers to students' self-generated thoughts, feelings and actions

which are systematically oriented toward attainment of their goals. Zimmerman (1986) defined self-regulated learners as, those who are metacognitively, motivationally and behaviourally active participants in their own learning process. In terms of metacognitive processes, self-regulated learners plan, organize, self-instruct and self-evaluate at various stages during the acquisition processes. From the motivational view, self-regulated learners perceive themselves as self-efficacious autonomous and intrinsically motivated. In terms of behaviour, self-regulated learners select structure and even create social and physical environments that optimise the acquisition process. Hence, effective learners become aware of functional relations between their patterns of thought and action and social and environmental outcomes.

### ***Self-Regulated Learning Strategies***

Learning strategies and skills include any thoughts, emotions, or behaviour that facilitates studying, understanding, knowledge or skill acquisition or the

reorganization of one's knowledge base. This is very much important for any student. Developing these strategies and skills to the students will be helpful to become more strategic learners who can take significant responsibility for their own learning. Zimmerman and Martinez-Pons (1986) defined SRL strategy as those actions directed at acquiring information or skill that involve agency, purpose (goals) and instrumentality self-perceptions by a learner.

Bandura (1986) ascribed much importance to a learner's use of self-regulation strategies. In his view, strategy applications provide a learner with valuable knowledge of self-efficacy. This knowledge in turn is assumed to determine subsequent strategy selections and enactments. Students' use of SRL strategies enables them to increase their personal control over their own behaviour and immediate environment. The most sophisticated SRL strategy relies on behavioural and environmental processes to control covert personal processes in reciprocal fashion (Zimmerman & Bandura, 1994).

Self-regulated learners are assumed to understand the impact of the environment on them during acquisition process and to know how to improve that environment through the use of various strategies. Self-regulated students use academic learning strategies in a cyclic manner and this depends upon monitoring environmental factors, personal factors as well as behavioural factors (Zimmerman & Bandura, 1994).

The purpose of self-regulatory strategy is to improve students' self-regulation of their personal functioning, academic behavioural performance and learning environment. Hence, by assisting students to learn how to use various strategies for optimising self-processes and control their social/physical environment and behaviour, educators can help them to improve their degree of self-

regulation.

### ***Self-Regulated Behaviour at Work***

Research on academic self-regulated learning began as an outgrowth of psychological investigations on self-control among adults and its development in children (Zimmerman, 2001). Much early work on self-regulation was therapeutic in nature: researchers taught participants to alter dysfunctional behaviours such as aggression, addictions and behavioural problems. Researchers now apply self-regulatory principles to academic settings and other forms of learning like social and motor skills (Boekaerts, Pintrich & Zeidner, 2000; Zimmerman & Schunk, 2001). Self-regulation is considered an active constructive process whereby one sets goals for his/her learning/ work/life and then attempt to monitor, regulate and control their cognition, motivation and behaviour guided and constrained by their goals and the contextual features of the environment (Pintrich, 2000). Hence, researchers in the field of 'self-regulation' should broaden its scope by applying it to other areas (Schunk, 2005). In this context, the present investigation attempted to extend the use of self-regulation from academic to work situation. Thus SRB may be defined as "an active, constructive process whereby persons set goals for their work and then attempt to monitor, regulate and control their cognitions, emotions, motivation and action, guided and constrained by their goals and contextual features of the work environment".

### ***Conceptual Framework of Self-Regulated Behaviour***

Self-regulatory activities mediate the reactions between individuals and their environments and influence individuals' achievement (Pintrich, 2000; Pintrich & Zusho, 2002). Pintrich (2000) has provided a conceptual framework for understanding self-regulation [Table 1] and is considered

in the present study to explain self-regulation of behaviour at work. There are four phases in the model and four possible areas of self-regulation. The model presumes that phases may occur at any time during task engagement and are not linear. The phases are also interactive in that individuals may simultaneously engage in more than one.

**Table 1. Conceptual Framework for Studying Self-regulation**

Phases of self-regulation regulation:	Areas for regulation:
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|---|--|
| <ul style="list-style-type: none"> <li>a. Forethought, planning and activation</li> <li>b. Monitoring Motivation</li> <li>c. Control Behaviour</li> <li>d. Reaction and Regulation</li> </ul> | <ul style="list-style-type: none"> <li>Cognition</li> <li>Context</li> </ul> |
|---|--|

**a) Forethought, Planning and Activation**

Cognitions that can be self-regulated during this phase include goals, prior content knowledge and metacognitive knowledge. Goals involve setting and modifying task specific goals that serve as criteria to gauge progress. Self-regulators often activate content knowledge in a planful way through prompting and self-questioning. Activation of metacognitive knowledge, which also can occur automatically or through deliberate conscious control, includes declarative, procedural and conditional knowledge.

Motivational processes subject to self-regulation during this phase include goal orientations, self-efficacy, task value and interest. Behaviours that can be self-regulated are time and effort planning and planning for self-observation of behaviour. Planning for self-observation involves determining what method one should use to assess progress and regulate behaviour. Contextual regulation factors include one's perceptions of task and context. These perceptions are cognitions but their focus is on the context. These might include perceptions about environmental features,

which may help or hinder learning, types of task to be completed and so on.

**b) Monitoring**

The second phase is monitoring or attention and awareness of one's actions and their outcomes. Cognitive monitoring includes dynamic metacognitive judgements of learning and metacognitive awareness (Feeling of knowing).

Motivational monitoring refers to being aware of one's self-efficacy, values, attributions (perceived causes of outcomes), interests and anxieties. Monitoring of behaviours includes time and effort management and adjusting oneself based on assessment of their effects. Contextual monitoring involves monitoring task conditions to determine whether they are changing.

**c) Control**

During this phase individuals attempt to control their cognitions, motivation, behaviours and contextual factors based on their monitoring to enhance performance. Cognitive control and regulation include cognitive and metacognitive activities that individuals use to adapt and change cognitions. Through cognitive monitoring people assess the progress of their goal. They would continue to use strategies if found effective or alter/replace if found ineffective.

Motivational control and regulation include self-efficacy through positive self-talk. Individuals may also make positive outcomes, contingent on academic performance and they may attempt to control their anxiety. Behaviour control includes persisting in one's effort and seeking help when needed, from a source they believe will be helpful. Contextual control includes strategies to make the context more conducive (like structuring the environment), by eliminating or reducing distractions or by renegotiating task requirements.

#### **d) Reaction and Reflection**

It includes judgements, attributions and self-evaluations of performance. Self-regulators assess their performance that forms the basis for other efforts to regulate motivation, behaviour and context. Motivational reactions involve efforts to enhance motivation when needed. It also involves emotions as when individuals experience pride after succeeding or anger after failure.

Behavioural reaction and reflection consist of cognitions about one's behaviours. Contextual reaction and reflection refers to evaluations of task demands and contextual factors. Effective self-regulation requires one to evaluate whether they will be able to accomplish a task, whether the environment is conducive and the changes needed for betterment.

Based on the above description and discussion with researchers in the fields of Psychology and Management the following organization is arrived at to understand and

explore the self-regulated behaviour in the work context. The identified SRB strategies are:

1. Self-esteem
2. Self-monitoring
3. Self-evaluation
4. Personal control
5. Task preparation
6. Task goal orientation
7. Coping with failure
8. Problem solving ability

#### **Strategies of Self-Regulated Behaviour**

The self-regulatory framework is extended to work setting. Since, work life is a major area in one's life. The experiences in the work situation have profound impact on the person's functioning in other areas of life. Hence self-regulation of behaviour at work should be understood with the broader perspective. Self-regulated behaviour helps us understand various mechanisms to be used in the work setting which will be helpful in motioning, controlling and regulating one's behaviour at work. Hence, Pintrich's (2000) framework is modified by incorporating the identified SRB strategies. Table: 2 provide

**Table: 2 Self-regulated Behavior at Work: A Conceptual Framework**

Phases of Self-regulation	Areas of self-regulation with possible explanation	SRB strategy explained by the area
Forethought, planning and activation	Cognition [Goals, prior content knowledge, metacognitive knowledge]	Task preparation
	Motivation [Goal orientations, self-efficacy, task value and interest]	Task goal orientation
Monitoring	Motivation [Self-efficacy, values, attribution, interest and anxieties]	Self-evaluation
	Contextual [Monitoring task conditions]	Self-monitoring
Control	Behaviour [Persisting and expending effort and seeking help when needed]	Personal control
	Contextual Strategies to make environment more conducive]	Problem solving ability
Reaction and reflection	Behaviour [Cognitions about one's behaviour]	Coping with failure

the conceptual framework for self-regulated behaviour at work.

In Table 2 only seven strategies of self-regulation are considered. But the most important strategy to be considered to regulate work behaviour is "self-esteem". Self-esteem is the evaluation of one's own worthiness, which has significant impact on every other behaviour. Hence, self-esteem is considered as the first attribute in understanding self-regulated behaviour. The operational definition of each strategy is presented below:

1. Self-esteem : Worthiness of one self as an effective worker.
2. Self-monitoring: Regulating one's actions in tune with external cues.
3. Self-evaluation: Analysing the quality of one's work activities.
4. Personal control: The expectation that the effectiveness of one's job performance is determined by one's own efforts.
5. Task preparation: Preparing oneself to deal with the task effectively and develop a plan of action.
6. Task goal orientation : Tendency of an individual to stay focussed on the goal of the given task.
7. Coping with failure: The tendency to deal with failure effectively.
8. Problem solving ability: The ability to overcome obstacles in reaching a goal.

### Recommendations

Pintrich (2003) suggested that researchers in the area of self-regulation should try to address self-regulatory processes and their relationship with personal characteristics, roles of control, regulation, intentionality and automaticity. Pintrich's (2000) model of self-regulation serves as a heuristic to help researchers to think about self-regulation and investigate the operation of component processes.

The research so far done on self-regulation have confined predominantly to academic context. But, self-regulation is a necessary attribute for any walk of life to deal with life situations effectively. Since, a major part of one's life is spent in the work context those experiences have a profound impact on the individuals psychological and social functioning. In such a context, exploring self-regulated behaviour at work can extend our knowledge in self-regulation. This will pave the way for finding solution for many work related problems and also enhancing individual and organizational effectiveness.

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**S. Kadhiravan**, PhD, Reader in Psychology, DDE, Annamalai University, Annamalainagar

**V. Suresh**, PhD, Proefessor in Psychology, DDE, Annamalai University, Annamalainagar

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