

INDIAN KNOWLEDGE SYSTEM AND SELF-REGULATED LEARNING: AN INTEGRATIVE FRAMEWORK FOR MODERN EDUCATION AND PSYCHOLOGY

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Abstract: Self-Regulated Learning (SRL) has become one of the most important concepts in the educational psychology of today. The learners are identified as capable of planning, monitoring, controlling and evaluating their own learning. Though the Western frameworks proposed by Zimmerman, Pintrich, Bandura, and Boekaerts are powerful and valid theoretical models, they tend to be largely cognitive and behaviourist in nature, with little attention paid to the spiritual, ethical, and holistic nature of learning. The Indian Knowledge System (IKS), which includes the Bhagavad Gita, Patanjali's Yoga Sutras, the Guru-Shishya tradition and Vedantic psychology, contains a wealth of ideas around self-regulation that can meaningfully supplement contemporary SRL theory and practice. Through conceptual and integrative analysis, the chapter ascertains main similarities in components of SRL and constructs of IKS, especially along the lines of Sankalpa (goal setting), Swadhyaya (self-directed study), Samatva (equanimity), and Karma Yoga (purposeful action). Academic procrastination is viewed as a failure of self-regulation and approached through an IKS lens. A new integrative framework, IKS-Based Self-Regulated Learning (IKS-SRL), is proposed for contemporary educational and counselling contexts. The chapter aims to expand the epistemic resources of educational psychology by rooting psychological theories in the classical traditions of India.

Introduction

Contemporary Challenges in Modern Education

Contemporary education systems are facing enormous challenges globally. The surge in academic stress, disengagement, procrastination and mental health problems is symptomatic of a much deeper crisis in our understanding of learning and its support (Odaci and Cikrikci, 2014). Students often struggle because they cannot control their own cognition, emotions, behaviour, and motivation; self-regulated learning focuses on these. The National Education Policy 2020 (NEP 2020) recognises the shortcomings of rote learning, defined as the memorising of information without comprehension. The NEP 2020 also advocates for the promotion of education that fosters critical thinking, ethical values, and lifelong learning. These ideas are present in the classical knowledge traditions of India (Ministry of Education, Government of India, 2020).

Emergence of Self-Regulated Learning in Educational Psychology

The concept of self-regulated learning emerged as a formal construct in the 1980s and 1990s, within the framework of social cognitive theory (Bandura, 1986) and Zimmerman's initial conceptualisation (1989). Self-regulated learning involves taking charge of one's learning experience; thereby, it is a process that is active and not passive. Despite the strong empirical support for contemporary theories, assumptions underpinning the development of contemporary self-regulated learning (SRL) theories are largely Western. These largely Western assumptions privilege individual agency and rational cognition over the relational, ethical, and spiritual dimensions of learning (Pintrich, 2000; Zimmerman and Schunk, 2011).

Relevance of Indian Knowledge System in the Twenty-First Century

India's intellectual heritage includes a highly developed understanding of mind, thought, will, learning and self-discipline. The systems of philosophy, psychology, and pedagogy of the Vedas, Upanishads, Bhagavad Gita, and Yoga provide immense potential for IKS. These treatises address consciousness, cognition, self-regulation, and the

purpose of learning. The Patanjali Yoga Sutras were introduced with the definition of yoga as “Yogah Chitta Vritti Nirodhah”, which refers to the limitation of mind movements (Yoga Sutras 1.2). This text offers an extended description of mental restraint and self-control. This definition precedes cognitive science by thousands of years (Bryant, 2009). The inclusion of IKS in NEP 2020 is significant and has positive institutional recognition, but it also requires well-thought-out conceptual conversations ones that recognise meaningful convergence and propose a framework that is culturally relevant and scientifically valid.

Rationale and Objectives of the Chapter

This chapter argues that IKS offers purposeful self-regulation principles goal-setting, reflective practice, disciplined action, emotional balance, and inner inquiry that are similar and can substantially enrich modern SRL models. An integrative approach is suggested between IKS and Western psychology rather than being mutually exclusive. The purpose of the chapter is to: (a) review important self-regulated learning frameworks; (b) highlight the educational and psycho-epistemological foundations of IKS; (c) note the convergence between IKS and self-regulated learning; (d) analyse the issue of academic procrastination through the lens of IKS; (e) propose the integrative IKS self-regulated learning framework; and (f) present the implications of the framework for modern education, counselling, and educational psychology.

Understanding Self-Regulated Learning: Psychological Perspectives

Concept and Definitions

Self-regulated learning refers to learners taking an active and constructive part in their own learning Zimmerman (2000) states that the degree to which students are metacognitively, motivationally, and behaviourally active participants in their own learning is defined as SRL. Pintrich (2000) describes it as a self-directed process involving goal monitoring, cognitive resource management, motivational regulation, and behavioural adaptation. What makes SRL different from any learning potential is its focus on learner agency, intention and reflection, which IKS has been practising in a systematic manner for centuries.

Historical Development and Major Theoretical Models

The historical origins of self-regulated learning come from the intersection of three areas of psychology, namely cognitive, behavioural and motivational. These fields came together between the 1970s and the 1980s. Flavell (1979) showed that learners differ in their awareness of and control over their cognitive processes. Bandura (1977, 1986) put forth the notion of self-efficacy as a crucial motivational underpinning of self-regulation. Zimmerman and Martínez-Pons (1986) later pinpointed particular strategies that high-achieving students deploy, like self-regulating, goal-setting, and self-evaluating. This empirical research around SRL laid a solid foundation for it, which has surged substantially over the following decades (Zimmerman, 2013).

Zimmerman’s Social Cognitive Model. Pintrich’s Model. Zimmerman (2000) suggested a cyclical model including three phases: forethought (goal-setting and strategy formulation), performance (strategy execution and self-monitoring), and self-reflection (evaluating results and adjusting the future). This constant feedback cycle helps learners improve their self-regulatory approach based on experience.

Pintrich’s Model. Pintrich (2000) presented a four-phase model that simultaneously incorporated cognition, motivation, behaviour, and context. He uniquely emphasised the importance of motivational regulation and social and environmental conditions that facilitate or inhibit self-regulation, rather than purely individualistic learning.

Bandura’s Self-Efficacy Perspective. Bandura (1997) believes that self-efficacy beliefs are the motivational pillar of SRL. If learners have confidence in their ability to learn, they will establish challenging goals and persist in their pursuit, even in the face of difficulties. On the other hand, low self-efficacy predicts avoidance, procrastination, and disengagement from the learning task.

Boekaerts’ Model of Adaptable Learning. Boekaerts (1999) proposes a six-component model of self-regulated learning that integrates cognitive processes and motivational processes in a dual-processing framework. The model she purports differentiates between a “growth pathway” in which students pursue mastery goals and expand competence, as well as a “well-being pathway” in which students seek emotional safety and avoid threats. Boekaerts

stressed that emotion regulation and motivational beliefs are at the core of SRL. This suggestion fits perfectly with IKS, which regards affective equanimity as a precondition of learning.

Components of SRL and Limitations of Contemporary Approaches

Essential elements of processes involving self-regulated learning (SRL) are setting goals, self-monitoring, self-control, self-evaluation, self-reflection, and motivation regulation (Boekaerts, 1999; Schunk & Zimmerman, 2008). Despite their substantial empirical value, current SRL frameworks have a limited scope. Numerous frameworks of learning have been developed over the years. Nevertheless, a considerable disadvantage of these frameworks is that they are largely grounded in the individualistic perspective of the West, which emphasises the cognitive, motivational, and behavioural aspects of learning. However, many of these frameworks have relatively overlooked issues, such as cultural, ethical, and spiritual development. Much has been learned about purposeful action. However, a theoretical examination of deeper sources has never been done before. While mindfulness-based approaches have been integrated into SRL research (Hagger et al., 2022) recently, they continue to remain on the fringes of popular theories. These limitations make a meaningful dialogue possible between contemporary theories of Self-Regulated Learning (SRL) and Indian Knowledge Systems (IKS), which offer a more complete and wholesome understanding of oneself, consciousness, values, meaningful learning, etc.

Section Summary: *Self-regulated learning (SRL) reflects students' active regulation of cognition, motivation, and behaviour. Models proposed by Zimmerman, Pintrich, Bandura, and Boekaerts are all strong frameworks. However, their individualistic and cognitively narrow orientation creates an opening for the holistic resources of IKS.*

Indian Knowledge System: Educational and Psychological Foundations

Meaning and Scope of Indian Knowledge System: The IKS is a constantly evolving body of philosophical, psychological, and pedagogical knowledge that has been built up over millennia on the Indian subcontinent (Ministry of Education, Government of India, 2020). It comprises the six orthodox philosophical schools, the Upanishads, the Bhagavad Gita, Yoga, Ayurveda, and other traditions that focus on consciousness, cognition, and ethical development. Indigenous knowledge systems are not a fossil but a living tradition that can account for the human being in its totality; that is, a human being who not only acts but also thinks, feels, wishes, and is motivated by a moral sense and a spiritual longing. In this worldview, restricting knowledge systems to the discipline boundaries that characterize modern academic knowledge is a poor attempt. (Dalal, 2011)

Educational Philosophy in Ancient India: Ancient Indian educational philosophy was very purposive and value-oriented. Education's purpose was not vocational or technical training but to bring about the highest development of a human being as a moral and spiritual entity. The command of the Taaittiriya Upanishad, 'Satyam Vada, Dharmam Chara' (Speak truth, practice righteousness), encapsulates this ethical orientation. Education was inseparable from character building and the inculcation of Viveka (discriminatory wisdom). Mookerji (1947/1989) wrote that Nalanda and Takshashila exemplified this integrative vision and were places of rigorous intellectual inquiry and ethical and contemplative practice across a range of disciplines. This model of education, envisioned centuries ago, focuses on enlightenment and values.

Guru-Shishya Tradition as a Model of Learning: The Guru-Shishya (teacher-student) tradition is a distinctive pedagogical model in which the teacher assumes total responsibility for the students' intellectual, moral, and spiritual development. The Guru modeled equanimity, ethical conduct, and other ideas that the Shishya internalized through proximity, observation, and discipline. This model anticipates modern-day relational pedagogy and mentoring approaches while placing self-receptivity and self-disciplined effort at the center of the learning process. The Guru-Shishya model's relational depth also anticipates Vygotsky's idea of the zone of proximal development and social constructivist theories of scaffolded learning.

Swadhyaya and Self-Directed Learning: "Swadhyaya" means "self-study through personal enquiry and reflection" (from "swa", "self", and "adhyaya", "study"). According to Bryant (2009), it comes as the fourth Niyama of Patanjali, and it not only means study of the text but also self-study. In other words, 'swadhyaya' refers to the study of the consciousness that exists within you. Swadhyaya's congruence with contemporary ideas of self-directed learning and metacognition is evident. What makes it totally unique, though, is its offering of a reflective and existential dimension that purely cognitive accounts cannot provide.

Psychological Concepts in Indian Thought: Indian philosophical psychology presents an advanced model of the psyche. The Samkhya-Yoga tradition identifies manas (the lower mind, of sensory processing and reactive emotion); buddhi (the discriminative intellect that makes wise judgement and discernment); chitta (the greater field of consciousness that includes memory and the storehouse of impressions or Samskaras); and ahamkara (the sense of self that produces attachment and reactivity) (Dasgupta, 1922/2004). A framework in modern terms, that of executive function, metacognition, emotional regulation, and identity, provides a culturally and psychologically rich vocabulary of self-regulation.

Holistic Development and Its Educational Significance: IKS emphasises the interconnectedness of knowledge, character, and practice. According to Vedantic tradition, education is envisaged not only for intellectual development but also for moral purification (Chitta Shuddhi) and the ability to control the internal environment over a sustained time. The focus on the integrated formation of the whole person is consistent with modern research on social-emotional learning, the importance of non-cognitive competencies in achieving academic and life success, and much more but also points towards the development of the learner's moral and spiritual growth.

Section Summary: *IKS has a comprehensive and profound psychological learning framework. The concept of SWADHYAY, the Guru-Shishya tradition, the inner faculties of Manas, Buddhi, Chitta, and Ahamkara, and a focus on holistic personal development can be considered a key starting point for a dialogue with SRL theory*

Convergence between Indian Knowledge Systems and Self-Regulated Learning

The concept of IKS and SRL is deep and meaningful in education. Table 1 provides a systematic overview of the major correspondences identified across these two traditions. The subsequent subsections will elaborate in detail on the most substantive of these convergences.

Table 1

Convergence Between Indian Knowledge System Concepts and Self-Regulated Learning Components

IKS Concept	Primary Source	SRL Component	Point of Convergence
Sankalpa (Purposeful resolve)	Bhagavad Gita; Yoga Sutras	Goal Setting	Both involve deliberate intention formation; Sankalpa extends SRL goal-setting to ethical and existential purpose beyond mere academic outcomes.
Swadhyaya (Self-study)	Patanjali Yoga Sutras 2.44	Self-Monitoring & Metacognition	Both require learner-directed reflective inquiry; Swadhyaya adds contemplative inner observation beyond cognitive self-tracking.
Samatva (Equanimity)	Bhagavad Gita, Chapter 6	Emotion Regulation	Both emphasise affective stability for sustained learning; Samatva provides a philosophical and practical framework absent in mainstream SRL.
Karma Yoga (Selfless action)	Bhagavad Gita 2.41 (Radhakrishnan, 1948)	Intrinsic Motivation	Both privilege process over outcome; Karma Yoga grounds intrinsic motivation in ethical obligation rather than individual preference alone.

IKS Concept	Primary Source	SRL Component	Point of Convergence
Ashtanga Yoga (Eight-limbed path)	Patanjali Yoga Sutras	Self-Control	Both address regulation of attention, impulse, and behaviour; Yoga extends SRL self-control to somatic, ethical, and contemplative dimensions.
Viveka / Pratyahara (Discrimination; Sense withdrawal)	Samkhya-Yoga; Yoga Sutras	Self-Monitoring & Self-Control	Both develop the capacity to distinguish productive from unproductive mental activity; IKS provides structured experiential practices for this skill.
Sakshi Bhava (Witness consciousness)	Yoga Sutras 1.2; Vedanta	Metacognition	Both cultivate an observing awareness of cognitive and emotional processes; Sakshi Bhava offers an experientially deeper metacognitive orientation than cognitive monitoring alone.
Tapas (Disciplined effort)	Patanjali Yoga Sutras 2.43	Motivation Regulation & Persistence	Both address sustained volitional effort; Tapas connects persistence to character formation and moral development, not merely task completion.
Guru-Shishya (Teacher-student bond)	Vedic tradition; Upanishads	Social & Contextual SRL	Both recognise expert guidance in learning; Guru-Shishya extends mentoring to transformative relational and moral dimensions of development.
Atma-Bodha (Self-knowledge)	Vedanta; Upanishads	Self-Reflection	Both involve evaluative inquiry into one's learning; Atma-Bodha deepens SRL self-reflection to existential and identity-level understanding.

Note. IKS = Indian Knowledge System; SRL = Self-Regulated Learning. Sources: Bryant (2009); Radhakrishnan (1948); Rao & Paranjpe (2016); Zimmerman (2000); Pintrich (2000); Boekaerts (1999).

Swadhyaya and Autonomous Learning: The IKS concept of Swadhyaya is structurally similar to the SRL principle of autonomous, self-directed learning. Both emphasize the learner's active engagement, independent inquiry, and reflective capacities that enable them to continue learning beyond formal instruction. Nevertheless, Swadhyaya extends self-learning by rooting it in intuitive or contemplative inner observation. This self-study involves not only the content but also an examination of our motivations, assumptions, and habitual thoughts. A contemporary cognitive approach provides theorists with metacognitive depth, but they have yet to understand this depth in experiential terms.

Sankalpa and Goal Setting: The word "Sankalpa," which means a solemn and purposeful resolve, is similar to the SRL component of goal setting but has a more profound meaning. While the goals of self-regulated learning (SRL) are defined in specific, measurable academic terms, Sankalpa connects the learner to an inner intention that is anchored deeper in purpose, ethical commitment, and dharmic obligation. When a learner forms a sankalpa, they align their will with their values and aspirations. Studies in positive psychology and self-determination theory suggest that motivating ourselves through goals that are purposeful and autonomy-supportive is beneficial for motivation and well-being (Deci & Ryan, 2000; Ryan & Deci, 2020). This IKS principle enjoys strong empirical convergence.

Yoga and Development of Self-Control: Patanjali's Ashtanga Yoga System Provides a Detailed and Sequenced Way to Develop Self-Control. The Yamas (ethical restraints) and Niyamas (personal observances) set out the moral axioms; Asana and Pranayama set stronger somatic and physiological self-regulation; Pratyahara, Dharana, and Dhyana progressively cultivate attention, focus, and sustained awareness. The foundational Sutra "Yogah Chitta Vritti Nirodhah" (Yoga Sutras 1.2) describes the ultimate aim of mental self-regulation as the complete mastery of mental fluctuations. This formulation is arguably the most comprehensive account of self-control among any classical tradition (Bryant, 2009). An integrated system addressing physical, emotional, cognitive, and moral dimensions of

self-regulation is what this practice constitutes together. These dimensions are treated separately, if at all, in contemporary SRL frameworks (Rao & Paranjpe, 2016).

Bhagavad Gita and Regulation of Mind: The Bhagavad Gita has teachings on mind regulation that are psychologically sophisticated and deepen modern SRL theory. The self-controlled person, according to Krishna, is someone who has mastered the senses, managed the mind, and has equanimity (Samatva) towards success and failure in Chapter 6 of the Gita. Samatva is especially important for the SRL because it describes a positive affect that enables an individual to engage in challenges without becoming distorted or frustrated. This quality is an attribute that is similar to Boekaerts' (1999) "growth pathway," where the learning proceeds from a position of affective stability rather than emotional reactivity or self-protective avoidance.

Karma Yoga and Intrinsic Motivation: Karma yoga, the discipline of selfless action, offers us a profound model of intrinsic motivation. Krishna's injunction to perform action without attachment to its fruits (Radhakrishnan, 1948, 2.47) is a fundamental process-focused motivational orientation. The statement aligns with the concept of intrinsic motivation from Self-Determination Theory, whereby an individual values the act of being engaged because of its inherent meaningfulness rather than receiving a reward from an external source (Deci and Ryan, 2000; Ryan and Deci, 2020). Researchers have shown that intrinsic motivation leads to deeper learning and persistence while extrinsic motivation has the opposite effect (Vansteenkiste et al., 2006). Nevertheless, Karma Yoga provides further depth by rooting intrinsic motivation in ethical obligation and commitment to the community, thereby adding a moral meaning dimension that SDT does not fully theorize.

Mindfulness, Metacognition, and Character Development: The concept of sakshi bhava (witness consciousness, Yoga Sutras 1.2), as delineated in the Yoga Sutras, is a deliberate practice, rather than a mere passive inner witness, that encourages the cultivation of an observing awareness that watches over the contextual stream of information in the mind without identification with it. This awareness arises as a product of metacognition, which goes beyond the cognitive monitoring strategies, as described in the mainstream SRL literature. Empirical studies report that the use of contemplative practices has positive effects on metacognitive awareness and academic self-regulation (Hagger et al., 2022; Zoogman et al., 2015). The ethical foundation of the learning process, which includes the development of Satya (honesty), Tapas (self-discipline), and Karuna (compassion), is also a relevant aspect of IKS traditions that align with research showing that grit, conscientiousness, and overall non-cognitive competencies are strong predictors of academic achievement and sustained well-being (Duckworth et al., 2007).

Summary: *As shown in Table 1, the convergence of IKS and SRL is deep and multi-dimensional. The contribution of Sankalpa, Swadhyaya, Samatva, Karma Yoga, Sakshi Bhava, and the systematic framework of the Yoga Sutras seeks to enhance every key component of SRL, thus adding ethical, emotional, and contemplating dimensions that cannot be found in mainstream models.*

Academic Procrastination as a Failure of Self-Regulation: Insights from IKS

Understanding Academic Procrastination: Academic procrastination is the voluntary postponement of an intended activity despite the expectation of negative outcomes (Steel, 2007). Most college students, 70 to 95 percent, admit to having an issue with procrastination. Around half of the college students report chronic or problematic procrastination (Steel, 2007). Lower academic achievement, more anxiety, worse health, and less psychological well-being are associated with it. From the vantage point of SRL, procrastination is a basic failure of self-regulatory functioning; that is, the inability to coordinate goal-setting, self-monitoring, self-control, and motivation management. It usually involves a failure of emotion regulation in which relief from short-term discomfort related to the task overrules more far-reaching academic goals (Sirois & Pychyl, 2013). In fact, both Boekaerts' (1999) well-being pathway model and the Bhagavad Gita's Tamas analysis give remarkable insight into this failure.

Psychological Causes and Self-Regulation Deficits: The contributing factors to procrastination include low self-efficacy, fear of failure, perfectionism, impulsivity, and poor emotion regulation (Steel, 2007; Klingsieck, 2013).

Students lacking in self-regulatory skills weak goal orientation, poor metacognitive awareness, and low self-efficacy are particularly prone to procrastination (Klassen et al., 2008). These deficits are mutually reinforcing in nature, as procrastinating behavior leads to poor outcomes that further reduce self-efficacy, motivation, and self-regulating ability. To interrupt this cycle will take interventions that get to the deeper motivational, affective, and characterological bases of self-regulation, an area where IKS has plenty to offer.

IKS Perspectives: Bhagavad Gita and Yoga: The Bhagavad Gita is very insightful regarding the psychology of inaction. According to Radhakrishnan (1948), Krishna refers to the psychological obstacle to purposive action as Tamas (inertia, lethargy, and confusion). The causes of failure and misery are delays, avoidance, and laziness, which follows a tamasic tendency. The Gita indicates that one should first cultivate Rajas (energy and directed activity) and finally Sattva (clarity, discrimination, and disciplined purposefulness). This developmental montage from inertia through activity to luminous self-regulated action closely resembles contemporary models of SRL skill development. Practices derived from yoga the pranayama reduce anxiety and improve prefrontal cognitive control (Brown & Gerbarg, 2012). Further, dharana (sustained concentration) strengthens the attentional capacities that have been weakened by procrastination. And swadhyaya, as the practice of honest self-observation, facilitates students' awareness of their avoidance patterns, task aversions, and self-defeating cognitive patterns with the clarity necessary for making genuine behavioral change.

Table 2

Academic Procrastination: Psychological Causes and IKS-Informed Interventions

Psychological Cause of Procrastination	SRL Deficit (Western Framework)	IKS Construct Addressed	IKS-Informed Intervention
Fear of failure; Low self-efficacy	Weak self-efficacy beliefs; Poor goal orientation	Sankalpa; Viveka	Purpose-aligned goal setting Discriminative self-inquiry
Emotion dysregulation; Task aversion	Poor emotion regulation; Short-term mood repair	Samatva; Vairagya	Pranayama; Dhyana; Non-attachment practices
Impulsivity; Distractibility	Low self-control; Poor attention management	Dharana; Pratyahara	Concentration practices; Sense-withdrawal training
Tamasic inertia; Behavioural avoidance	Motivation deficit; Behavioural disengagement	Karma Yoga; Tapas	Gita-inspired purposeful action; Disciplined daily practice
Negative self-talk; Poor self-monitoring	Inadequate metacognitive awareness	Swadhyaya; Sakshi Bhava	Reflective journaling; Witness-awareness meditation

Note. SRL = Self-Regulated Learning; IKS = Indian Knowledge System. Sources: Steel (2007); Klassen et al. (2008); Radhakrishnan (1948); Bryant (2009); Brown & Gerbarg (2012); Boekaerts (1999).

Implications for Student Development

As shown in Table 2, it takes more than time management training or cognitive restructuring to tackle academic procrastination. Counsellors and educational psychologists can use IKS-informed frameworks to assist students in creating Sankalpa (clear, ethically based intentions), achieving Samatva (affective stability in the face of challenging tasks), and practising Abhyasa (a sustained, disciplined daily practice).

Section Summary: *Academic procrastination reflects self-regulatory failure at cognitive, emotional, and motivational levels. The Bhagavad Gita's examination of Tamas, combined with the practices of the Yoga Sutras of disciplined awareness and concentrated action, offers insightful perspectives on counselling and student development.*

Implications for Modern Education and Educational Psychology

Implications for School and Higher Education: In the context of school, the incorporation of IKS principles can transform learning. Practices informed by Swadhyaya, such as reflective journaling and constrained peer evaluation, foster metacognitive skills that research consistently identifies as critical to academic achievement. Regularly integrating yoga and pranayama in school has proven to increase attention, decrease anxiety, and enhance academic engagement (Khalsa et al. 2012). According to the Ministry of Education, Government of India, 2020, NEP 2020 prescribes the necessary policy and institutional framework for values education, experiential learning, and the inclusion of India's heritage and culture. In higher education, universities can embed a range of IKS-informed pedagogies, such as contemplative inquiry, Sankalpa-based project work, and Karma Yoga-oriented community engagement. We are seeing a growth of evidence of the efficacy of mindfulness-based learning interventions (Shapiro et al., 2011).

Implications for Teachers and Educational Psychologists: The Guru-Shishya tradition requires teachers to possess the qualities they wish to develop in students. When teachers develop their own capacities for self-regulation, equanimity, and reflective practice, they create classroom environments that organically support these in learners. Teacher-training programs can develop teachers personally and professionally when they can take into account evidence-based pedagogical strategies and IKS-informed practices. The IKS-SRL framework suggests that educational psychologists should develop tools for SRL assessment that are culturally relevant. Further, it should include constructs that are missing in standardized tools, such as purpose orientation, ethical commitment, and contemplative self-awareness. Furthermore, the framework suggests designs and evaluates IKS-informed intervention programs across a range of educational settings.

Implications for Counseling and Holistic Education: For counseling psychologists, IKS concepts such as Samatva, Vairagya (non-attachment), and the Yoga Sutras' model of progressive psychological integration offer culturally grounded frameworks for working with students grappling with anxiety, procrastination, identity issues, and lack of motivation. Yoga is an effective intervention for both anxiety and depression in adolescents and young adults (Cramer et al., 2013). A more expansive view of IKS challenges the simplistic conception of education solely as knowledge transmission or skill acquisition and encourages the integrated development of the person intellectually, morally, emotionally, and spiritually. This vision resonates with NEP 2020's focus on holistic, value-based education as well as with the positive psychology movement's call for education to help people flourish.

Section Summary: *Broadly, IKS-SRL has implications for school education, higher education, teacher development, educational psychology, and counseling. The growing base of empirical evidence supports these implications, and they are also in consonance with the policy directions of NEP 2020.*

An Integrative Framework of IKS-Based Self-Regulated Learning

Conceptual Framework: The IKS-SRL framework proposed in this chapter brings together the major components of contemporary SRL theory with IKS principles, resulting in a proposal for self-regulated learning that is culturally enriched and psychologically comprehensive. As per Table 3, the framework consists of a total of 7 core dimensions, ordered sequentially, which are from self-awareness to goal-oriented practice to regular and intentional practice to self-monitoring to emotional control to deeper self-reflection to self-transformation.

Table 3

The IKS-Based Self-Regulated Learning (IKS-SRL) Integrative Framework

Sl. No.	IKS-SRL Dimension	SRL Parallel	Educational Function	Pedagogical Practice
1	Self-Awareness (Atma-Bodha)	Metacognitive Awareness	Observe cognitive processes, emotional states, and habitual patterns with clarity and honesty.	Meditation; Journaling; Antar Avalokan (inner observation)

Sl. No.	IKS-SRL Dimension	SRL Parallel	Educational Function	Pedagogical Practice
2	Goal Orientation (Sankalpa)	Goal Setting	Form purposeful, ethically grounded intentions aligned with values and aspirational identity.	Sankalpa practice; Values clarification exercises
3	Self-Discipline (Yoga)	Self-Control	Systematically cultivate physical, emotional, and cognitive self-regulation through structured practice.	Ashtanga Yoga; Pranayama; Asana
4	Self-Monitoring (Swadhyaya)	Self-Monitoring	Continuously observe progress, effort, and strategy effectiveness through reflective self-study.	Reflective journaling; Self-assessment rubrics
5	Emotional Regulation (Samatva)	Emotion Regulation	Cultivate affective equanimity as the stable foundation for sustained undistorted learning.	Dhyana (meditation); Breath-based regulation
6	Self-Reflection (Atma Chintan)	Self-Reflection	Inquire into the meaning, purpose, and ethical implications of one's learning and actions.	Structured reflection; Philosophical inquiry seminars
7	Self-Transformation (Atma-Vikas)	Lifelong Learning & Growth	Understand learning as holistic self-transformation, not merely academic performance optimisation	Community engagement; Karma Yoga service projects

Note. IKS-SRL = Indian Knowledge System-Based Self-Regulated Learning. The seven dimensions are presented in a developmental sequence from foundational self-awareness (Atma-Bodha) to holistic self-transformation (Atma-Vikas). Sources: Zimmerman (2000); Pintrich (2000); Boekaerts (1999); Bryant (2009); Radhakrishnan (1948); Rao & Paranjpe (2016).

Educational Significance and Relevance for Twenty-First Century Learners

The IKS-SRL framework is educationally important for several reasons. It offers a model that is culturally grounded and psychologically comprehensive in ways that are operational at different educational levels and in different contexts. The framework brings together the empirical efficacy of established SRL strategies with contemplative ethical practices, especially from IKS, making it both scientific and culturally rooted for the Indian learner. The addition of emotional regulation, ethical commitment, and purposeful dimensions directly addresses what research increasingly finds critical for deeper, sustainable learning (Boekaerts, 1999; Ryan & Deci, 2020), namely, the most remarkable limitations of cognitive SRL models. For twenty-first-century learners navigating information overload, rapid change, and existential uncertainty, cultivating Sankalpa, Samatva, Swadhyaya, and Atma-Bodha equips them to manage their studies effectively and to navigate life's broader challenges with clarity, purpose, and resilience.

Future Research Directions

The IKS-SRL framework presents spaces for several future investigations. The initial step is to study for the first time, systematically and empirically, IKS-derived practices (like yoga and meditation Swadhyaya, Sankalpa-based goal-setting, etc.) on SRL outcomes in Indian contexts. This can be done using culturally adapted and psychometrically validated SRL assessment tools. Longitudinal research following the evolution of IKS-SRL competencies from school-age through adulthood would strengthen the evidence base. In the next place, it is proffered that randomized controlled trials of IKS-informed interventions for academic procrastination, demotivational

difficulties, and stress in higher education would generate the robust evidence necessary for wider institutional take-up. Fourth, qualitative and phenomenological research to capture students', teachers', and counselors' lived experiences of IKS-informed practices would ensure essential ecological validity and depth. Fifth, the construction of psychometrically sound instruments serving to measure dimensions of IKS-SRL, particularly one's purpose orientation, ethical commitment, and contemplative self-awareness, is an important and timely methodological opportunity. Ultimately, research on the cross-cultural comparability of IKS-SRL could greatly enhance global SRL research by testing its universality and cultural specificity.

Conclusion

This chapter argues that the Indian knowledge system contains rich and sophisticated principles of self-regulation, which can meaningfully enrich contemporary SRL theory and practice. Systematic scrutiny of the convergences between the IKS concepts of Swadhyaya, Sankalpa, Samatva, Karma Yoga and the framework for mental discipline in the Yoga Sutras and the main SRL components (as in Table 1) indicates that dialogue has conceptual coherence and functional significance.

The IKS-SRL framework proposed in Table 3 is a genuine integrative synthesis of the empirical rigour of modern educational psychology and the classical wisdom traditions of India. This contribution to educational psychology is not a nostalgic return to past practices but one that is principled and future-orientated. It takes the evidence seriously while also drawing upon the intellectual traditions of the world's oldest continuous civilisation. As shown in Table 2, the examination of academic procrastination more clearly demonstrates the pragmatic qualities of IKS. The self-regulatory failures that contemporary interventions target rely on deeper capacities of self-awareness, purposeful intention, and affective equilibrium, which IKS has developed over thousands of years.

As per NEP 2020, the Indian education sector of the future must strive for a real synthesis between ancient knowledge and modern knowledge, one that equally values solid empirical research and the depth of India's civilisation. The chapter tries to make a significant conceptual contribution to that important and timely project.

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