# THE DEVELOPMENT OF EGO-RESILIENCY AND SELF-REGULATION AND THE TRANSITION TO PRIMARY SCHOOL

BY

# **HOLLY MCLEAN**

# A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIRMENTS FOR THE DEGREE OF BACHELOR OF INTERDISCIPLINARY STUDIES

We accept this thesis as conforming to the required standar	ds:
William Roberts (Ph. D.), Thesis Supervisor, Dept. of Psycho	ology
Kim Calder Stegemann (Ph.D.), Dept. of Education	
David MacLennan (Ph. D.), Dept. of Sociology	

Mark Rowell Wallin (Ph. D.), Co-Coordinator, Interdisciplinary Studies

# **ABSTRACT**

Thesis Supervisor: Dr. William Roberts

The emerging ability to regulate and adapt emotions, behaviours and attention according to situational demands is paramount in children's successful transition into primary school. Literature devoted to child development states that developmental trends and experiences that occur in the first five years of life will set the stage for subsequent development. This suggests that for children to successfully meet the expectations of the primary school environment they must first have a strong foundation of self-regulation strategies.

This paper summarizes key principles that underlie the developmental pathways of self-regulation and ego-resiliency, focusing on the period from early infancy to the beginning of primary school. The forming of a caregiver-infant attachment relationship in the first year of life is discussed. This caregiver-infant attachment is key as the child shifts from guided regulation into the early stages of self-regulation in the toddler years. Next, this paper focuses on the child's ability to independently self-regulate, and the development of confidence and ego-resiliency in preschool. Finally, this paper looks at how previously developed ego-resilient self-regulation affects a child's ability to successfully meet the novel expectations and responsibilities that accompany the transition into primary school.

# **ACKNOWLEDGEMENTS**

First, I would like to thank my committee. Thank you to my thesis supervisor Dr. William Roberts, without whom I may never have discovered the concept of self-regulation. I appreciate the time, knowledge, guidance and patience he has provided me throughout this process. Thanks to Dr. Kim Calder Stegemann, for providing me with valuable resources and participating in my thesis defense. And thank you to Dr. David MacLennan for his participation in my thesis defense.

Thanks to Dr. Mark Rowell Wallin for encouraging me to tackle this project and opening my eyes to the world of interdisciplinary studies.

Thank you to Beau Labrecque for his editing advice, support, encouragement and love throughout this process.

Finally thank you to my mom, Barb McLean for her knowledge, advice, encouragement and having the patience to listen to me talk my way through ideas. I couldn't have done this without her!

# TABLE OF CONTENTS

Abstract	ii
Acknowledgements	iii
Introduction	1
Chapter 1 - The Early Development of Attachment and Guided Regulation	5
Chapter 2 - Continued Guided Regulation and Problem Solving Competence in Toddlerhood.	11
Chapter 3 – Shift From Guided Regulation to Self-Regulation.	14
Chapter 4 - Self-Regulation and Peer Competence in the Preschool Years	17
Chapter 5 - Ego-Resiliency, Self-Regulation and the Transition to Primary School	23
Conclusion	27
Literature Cited	29

#### INTRODUCTION

The purpose of this paper is to look at the developmental pathways of self-regulation through early childhood and to examine how being self-regulated and having the ability to shift levels of control affects a child's transition into primary school.

Interest in the concept of self-regulation has increased in recent years and much attention has been paid to children's ability to self-regulate in school or classroom contexts (Shanker, 2010). This is because the ability to self-regulate is increasingly being seen as a good predictor of a child's academic success (Zimmerman, 1994).

Kopp (1982) defines self-regulation as the ability "to initiate and cease activity according to situational demands, to modulate the intensity, frequency, and duration of verbal and motor acts in social and educational settings, to postpone acting upon a desired object or goal, and to generate socially approved behaviour in the absence of external monitors" (p. 199). However, it is important to note that self-regulation isn't solely about one's ability to restrain and control impulses and desires, but also about one's ability to adapt actions and expressions of emotions to individual situations. Block and Block (2006) remind us that there are "many life situations in which spontaneity rather than self-control is psychologically desirable, in which expressiveness is positively adaptive, enhancing the experience and savoring of life" (p. 318).

Jack and Jeanne Block have proposed a set of constructs, ego-control and egoresilience, that speak to this ability to adapt emotions and behaviours to situational demands. Ego control refers to the expression or containment of impulses, feelings and desires (Block & Block, 1980). This construct is a continuum with over-control at one end and under-control at the other. Over-control refers to the containment of impulses, inhabitation of action and affects, delay of gratification and insulation from distractors in the environment (Block & Block, 1980). Under-control, found at the other end of the continuum, refers to the inability to delay gratification, insufficient regulation of impulse coupled with immediate and direct expression of motivations and affects, and increased vulnerability to distrators in the environment (Block & Block, 1980). Block and Block (1980) state that having an ego-control level located in the middle of the continuum is optimal.

Block and Block (1980) define ego-resilience as the capacity of an individual to adapt their preferred or model level of ego-control. Thus, high levels of ego-resilience are characterized by "resourceful adaptation to changing circumstances and environmental contingencies" (Block & Block, 1980, p. 48). In contrast, low levels of ego-resilience or ego-brittleness, are characterized by the inability to adapt to situational changes. Following Block and Block's definition, Sroufe, Egelend, Carlson & Collins (2005) state that ego-resiliency is a premier measure of one's capacity to self-regulate. Therefore a well-regulated person could be called an ego-resilient individual. In contrast, one can see how being ego-brittle could create problems through childhood, particularly in the transition to school, where situational demands change frequently. In school context, the child is required to be flexible, able to focus on academic tasks in the classroom but spontaneous and expressive in social interactions with peers.

To be well-regulated is to be ego-resilient, but ego-resiliency looks different at various stages in an individual's development. According to Arend, Gove and Sroufe (1979) the "assessment of quality (or effectiveness) of attachment at 18 months, problem

solving style at 24 months and ego- resiliency at age 5 [are] all viewed as age-appropriate assessment of the same construct" (p. 956).

For optimal development, a child needs to build on earlier learning. Arend, Gove and Sroufe (1979), along with other developmental researchers, have found that an "earlier developmental phase lays the groundwork for later effective adaptation" (p. 956; Sroufe, Egeland, Carlson, & Collins, 2005; Bronson, 2000, Kopp, 1989). For example, an infant who develops a healthy caregiver-infant attachment lays the foundation for effective problem-solving skills in toddlerhood. Healthy attachment and problem-solving skills will support the child's development of self-regulation and the ability to adapt egocontrol levels when they enter school. Borkowski and Thorpe (1994) suggest that competent and successfully achieving students, who can appropriately self-regulate, will go on to become competent and successfully achieving adults, both in occupation and interpersonal realms.

Self-regulation isn't something that we are born with; it is a lifelong process of development. Calkins and Hill (2007) state that "[t]he mastery of earlier regulatory tasks becomes an important component of later competencies and by extension, the level of mastery of these early skills may constrain the development of later skills" (p. 232). With the knowledge that early regulatory skills will affect later development, it is important that we understand how an optimal self-regulation is developed and factors that encourage its development. This paper reviews the developmental stages children go to through as they move towards self-regulation and ego-resilience. Starting from infancy the early development of attachment and guided regulation are discussed. Attachment and guided regulation remain important as the infant transitions into toddlerhood, supporting

the toddler's confident exploration and the development of problems solving skills. Also in the toddler years there is a gradual shift from guided regulation to voluntary self-regulation, which supports the child's peer competence in preschool. Lastly, children's transition into primary school is considered. The last chapter highlights the influential role that self-regulation and ego-resiliency have in a child's successful transition into the school environment.

#### **CHAPTER 1**

# The Early Development of Attachment and Guided Regulation

It has been suggested that the early development of attachment is influenced by the attitudes and affection mothers' display towards their unborn infants (Siddiqui & Hägglöf, 2000). These attitudes are found to be good predictors of the early caregiverinfant interactions, interactions that are essential to the development of a healthy caregiver –infant attachment relationship (Siddiqui & Hägglöf, 2000). According to Calkins and Hill (2007), a positive interactive history between an infant and a caregiver in the first year would "produce an attachment relationship that would provide a sense security for the infant" (p. 236) and significantly influence the child's development. Arend, Gove & Sroufe (1979) argue that by 18 months attachment reflects ego-resilience, but again this attachment is tied to a healthy caregiver-infant relationship. Securely attached relationships and emerging self-regulatory abilities are intertwined, developing together through a series of stages as infants grow. The relationship moves from a stage of complete dependence on caregiver, to caregiver guided or dyadic arousal regulation and finally into self-regulation, but at each stage having an emerging securely attached relationship is essential for optimal development.

From birth infants are aroused by internal factors like hunger and discomfort and also by external stimuli, such as interesting sights, sounds and motions. As newborns we are hard wired with some innate self-soothing mechanisms and reflexive behaviours for alleviating distress and altering unpleasant states. Kopp (1982) suggests that the activation of these innate but minimal neurophysiological mechanisms work to protect

the immature individual from intrusive stimulation. These species-typical mechanisms include tonic neck-reflex, mouth-to hand movements, and non-nutritive sucking of hands and fingers (Kopp, 1989).

Although an infant does have some innate self-soothing abilities and reflexive behaviours these abilities are limited and the infant relies heavily on a caregiver to act as an external brain and support healthy stress levels. Sroufe, Egeland, Carlson and Collins (2009) found in their longitudinal study that "effective regulation of the infant is only possible within a supportive caregiving system" (p. 87). The caregiver's role of modulating arousal is essential to the infant's developing regulatory abilities and this stage is often referred to as the dyadic or guided regulation phase (Bronson, 2000; Sroufe, 1996).

Goldberg (2000) refers to this first period of attachment development as the "preattachment phase" (p. 16). At this point in the attachment development process, the caregiver is getting to know the infant's specific characteristics; their signals, needs and qualities. Also, the caregiver is required to provide a warm, responsive, appropriately stimulating and predictable interactions and environment for the infant (Sroufe, 1996).

The caregiver's role of providing warm, sensitive and consistent interactions and environments continues to be important as the caregiver-infant dyad transitions into the second phase of the attachment development process. Goldberg (2000) calls this phase the "attachment in the making" phase (p. 16). This second attachment phase occurs during the period from 6 weeks to 6 months of age, and builds on the pre-attachment phase (Goldberg, 2000; Sroufe 1996). During this "attachment in the making" phase, the visual ability of infants at around 3 months allows them to better discriminate between

caregivers and others in their environments (Bronson, 2000). This increasing ability to differentiate new from familiar people in the environment assists infants in building more thorough and consistent patterns of interaction with caregivers. With these patterns of interaction the infant will begin to show preference for the main caregiver, contributing to the development of a secure attachment relationship (Goldberg, 2000).

A consistent pattern of caregiver-infant interaction is important during the "attachment in the making" phase, as the caregiver's role is to help keep the infant's arousal levels within appropriate bounds. Kopp (1989) suggests that this guides the infant by supporting the "associations between their own actions, certain caregiver actions and changes in their own feeling states" (p. 346). Essentially, the infant develops a set of expectancies about the caregiver's behaviours that modulate the infant's own feeling states. With this expectancy of caregiver assistance, and the growing awareness of its own feeling states, infants have the opportunity to begin to adapt their innate regulatory systems to their environment and begin to develop internal control strategies that encourage voluntary, self-directed actions (Bronson, 2000). One example of self-directed voluntary actions is the development of infant's ability to move and control their hands and arms and to voluntarily activate and modulate head rotations. With these new capabilities, Bronson (2000) suggests that infants are developing an increasingly active role in regulating their own arousal levels.

Kopp (1989) reminds us that although the infant's reflexes and emerging capabilities are strengthening through repetition and practice, between the third and sixth months, the infant's self directed voluntary actions are still relatively unplanned and unmonitored. The infant still has limited capacity to control and regulate arousal and

paired with the infant's inability to alter the cause of felt distress, the infant's levels of arousal can quickly become heightened. In these situations Kopp (1989) suggests that heightened arousal levels quickly become unmanageable, leading to diminished control over the internal and emerging mechanisms that may have been recruited for regulation, and so, the role of the caregiver to guide the infant's regulation remains important. Each time the caregiver responds to the infant's arousal, fulfilling the infant's expectancies, the development of a secure attachment is supported.

As an attachment relationship emerges infants learn which signals bring results and can begin adapting their signals, so caregivers can understand what their needs and interests are (Bronson, 2000). Bronson (2000) suggests that at this stage the infant is learning how to try to communicate. Encouragement of this communication and consistency in the caregiver's response will reinforce the infant's communication efforts and will strengthen the developing attachment relationship (Sroufe, 1996).

It is during the second half of the first year that Goldberg (2000) states that the infant enters into the third phase of attachment development called the "clear-cut-attachment" phase. This means that the infant and caregiver are ready to move into a more reciprocal relationship. At this stage there is active exploration of the world and expanding self-soothing strategies by the infant, which moves the attachment relationship to a new level.

In the "clear-cut-attachment" phase, infants have a growing awareness of their own feeling states, and they begin to rapidly expand techniques for self-soothing, self-stimulating and regulating emotion. While caregiver's roles remains essential, they are now required more for assistance. At this stage the caregiver becomes a facilitator of the

infant's explorations. The caregiver's role is to remain close and responsive as the infant reacts to novel situations and wait for the infant's signal for assistance. This provides the infant the chance to experiment with maintaining its own arousal levels (Bronson, 2000). A caregiver's ability and flexibility in responding to infants cues, creates caregiver-infant synchrony and supports the infant's more active role in exploration and arousal modulation (Calkins & Hill, 2007).

This caregiver-child synchrony and reciprocal attachment provide the infant a secure base for exploration. The infant develops from a relatively immobile to a mobile state, beginning to crawl, stand and eventually walk (Sroufe, 1996). With increased mobility, and the infant's voluntary efforts to control their own motor activity and behaviours, the infant becomes progressively more goal-directed and purposeful in interactions with the environments (Bronson, 2000).

As the infant's ability to explore increases, the caregiver's role is to provide a secure home base for the infant to center growing exploratory activities around (Sroufe, 1996). The caregiver's role is to monitor and support the infant's interactions with the expanding environment, and to provide appropriate cues to guide their responses to novel situations. A secure attachment base gives the infant more balance between exploration and proximity with the caregiver (Sroufe, Egeland, Carlson & Collins, 2005). For example, in the presence of a stranger, infants may use social referencing or make eye contact with caregivers from a distance to assess how they should react to the company of the novel person. From the safety of a secure attachment and positive experiences the infant gains confidence in their ability. They are able to move further away from their

caregiver and familiar objects and are able to actively seek out social stimulation and new experiences (Bronson, 2000, Sroufe, 1996).

In summary, the increasing exploration of novel stimuli and experimentation with problem solving and mastery of the environment are influenced by the infant's felt attachment and confidence in the caregiver's support and availability. Bowlby states that through these early experiences, infants area able to construct 'internal working models' that provide them with expectations about self and others that integrates into their emerging behavioural repertoire and regulatory abilities (as cited in Calkins & Hill, 2007).

#### **CHAPTER 2**

# Continued Guided Regulation and Problem Solving Competence in Toddlerhood

Arend, Gove and Sroufe (1979) found that children who display more successful problem solving strategies and effective use of adult resources at 24 months had previously exhibited more "effective infant-mother attachment relationships at 18 months" (p. 950). Developing a secure attachment relationship early in life sets a foundation for confidence and success in the toddler years as the child begins exploring and controlling objects more deliberately, and is increasingly interested in goal-oriented mastery activities (Bronson, 2000). Arend et al. (1979) found that a child's ability to independently and enthusiastically engage in exploration and persistent problem solving, and to seek caregiver support when needed are components of ego-resiliency.

Sroufe, Egeland, Carlson, & Collins (2005), state that "[f]or each of us, self-regulation is a dual task, involving both expression and containment of impulses, desires and feelings" and these tasks can be extremely challenging for toddlers (p. 106). Rapidly developing motor capabilities, combined with burgeoning autonomy, persistent impulses and limited ability to inhibit them, makes self-regulation at this stage difficult. For a toddler to remain regulated and be able to sufficiently contain and direct impulses, appropriate help from a supportive and flexible caregiver is required. An example of appropriate help would be redirecting a child's impulses to grab a toy from another child, while explaining why the child may need to wait for their turn.

In addition to the need for caregiver availability, it is also important for toddler's worlds to be "structured in ways that allow [them] to detect its categories and rules and to

have experiences of successfully influencing or controlling people, events, and objects within that world" (Bronson, 2000, p. 133). In this stage the environment must be coherent, consistent and predictable, which provides opportunity for children to notice the effects their actions have (Bronson, 2000). The caregiver is responsible for both providing an optimum environment and also for teaching and assisting problem-solving and regulation strategies for the child to practice and build on.

Through the child's developing capabilities, the expanding understanding of the environment and confidence in a secure base, the children are showing awareness that not only can they influence objects and people, they also have choice (Bronson, 2000; Kopp, 1982). With this increasing awareness the child begins to act more intentionally and goal-directed in the interactions with the world (Bronson, 2000). In addition, children are increasingly capable of monitoring progress towards goals, correcting their mistakes, and experimenting with new approaches and strategies (Bronson, 2000). An example of monitoring progress towards goals, while correcting mistakes would be attempting to solve a puzzle. The child may try a piece, realize it doesn't fit, and try and manipulate it till it fits or move on to a new piece. As toddlers continue to experiment with controlling and manipulating objects through trial-and-error exploration, problem-solving and self-regulated action strategies will gradually become enhanced and strengthened.

As problem-solving and regulation strategies develop the toddler begins to show enhanced awareness of the causes of felt distress (Kopp, 1989). With this awareness toddlers begin to develop more planful strategies for how to change or remedy offending situations and when faced with frustration they remain involved, while examining alternate strategies before seeking assistance (Matas, Arend, & Sroufe, 1979). With time,

and practice toddlers will eventually be able to recall, manipulate and use these strategies in a variety of different situations (Bronson, 2000). For example, a toddler is dropped of at daycare and begins to feel distressed as the caregiver leaves for work. Instead of crying the toddler copes with the distress by engaging in an activity as a form of distraction, a strategy that was successfully applied in a previous situation. It is important to note that these early stages of experimenting with trial-and-error problem solving and various regulatory strategies are often accompanied by periods of frustration that can lead to dysregulation. The role of the caregiver remains essential, as Sroufe (1996) states that, "regulation may be readily reachieved by utilizing support available from the caregiver" (p. 205).

Along with the ability to independently and enthusiastically problem solve, a component of ego-resiliency at this stage is reflected in the toddler's ability to effectively seek out and use caregiver assistance when their personal resources are exhausted (Arend, Gove & Sroufe, 1979; Matas, Arend & Sroufe, 1978; Sroufe, Egeland, Carlson, & Collins, 2005). A history of responsive care, assistance and encouragement promotes the child's confidence and willingness to seek out resources (Sroufe et al., 2005).

Matas, Arend and Sroufe (1978) state that the child's ability to be flexible and resourceful can be predicted by the child/caregiver attachment relationship at 18 months. Matas et al. describe a well functioning 2-year-old as a child who has made a movement toward autonomy. This autonomy is indicated by "flexibility, resourcefulness, and ability to use adult assistance without being overly dependent on it" (Matas et al., 1978, p. 548).

#### **CHAPTER 3:**

# **Shift From Guided Regulation to Self-Regulation**

Around 24 months there are significant advances in children's self-regulatory abilities and Bronson (2000) suggests that there is a gradual shift towards voluntary, independent self-control. This shift is due in part to the toddler's increasing understanding of the external rules, as well as the demand characteristics of particular situations (Kopp, 1982; Bronson, 2000). Bronson (2000) states that as toddlers enhance their ability to form and carry out intentions, the ability to act in accordance with external rules and to appropriately express emotions are expanding.

Key to the ability to accommodate rules is the awareness of self as separate from the external world. Before the toddler period Piaget and Inhelder (1969) state that the child's universe is centered on his/her own body and actions. They argue that during infancy and toddlerhood children undergo a general decentering process, whereby they begin to regard themselves as objects among other objects and people in the environment (Piaget & Inhelder, 1969). This awareness of self as separate also aids in the understanding of external rules. These external rules are guidelines provided by caregivers that create an awareness of what behaviours and emotions are appropriate in different situations. The strengthened salience of external rules can also be partially attributed to an increase in verbal direction by caregivers, which conveys to toddlers that they are expected to begin controlling certain behaviors (Sroufe, 1996). For example, when a child hits a younger sibling, and the caregiver's reprimand is delivered as a general rule ("Don't hit!"), the toddler comes to understand that certain types of self-

restraint are always expected. But the child's burgeoning autonomous functioning combined with increasing recognization of self as separate, pitted against external rules, can generate challenges in toddlerhood, often referred to as the "terrible twos" (Sroufe, 1996).

With the identification and acknowledgement of self wants and desires, toddlers begin to realize that sometimes these wants are contrary to those of the caregiver's (Sroufe, 1996). Toddlers may resist external control and/or expectations of caregivers, especially when these are seen as a challenge to the child's growing interest in plans, goals and self-guidance (Bronson, 2000). Sroufe (1996) argued that a certain degree of non-compliance or challenge is unavoidable at this time because the "self cannot emerge without recognition of one's own inner aims" (p. 206). Matas, Arend & Sroufe (1979) state that ego-resiliency during this stage refers to a child who shows interest in carrying out own plans, followed by gradual cooperation with caregivers. Along with this interest in their own plans one can expect children at this age to be somewhat resistant, even within a secure attachment relationship. The caregiver's role at this stage is to recognize that children sometimes have separate plans and to encourage these plans by validating and attempting to incorporate them into his/her own plans. If caregivers are creative in encouraging and integrating their children's plans with their own, a certain degree of resistance can be avoided. And gradually toddlers will begin to voluntarily adopt the caregiver's values and plans as their own.

It is important during periods of resistance that the caregiver remains available and supportive of the child, explaining appropriate alternatives to expressing emotions and behaviours (Kopp, 1989). Sroufe, Egeland, Carlson and Collins (2005) found that "when

willful challenges are met with firm limits and emotional support, trust is deepening and regulatory systems emerging in infancy are strengthened and elaborated" (p. 107).

According to Sroufe (1996), with confidence in caregivers and firm, coherent limits children learn that they can have both autonomy and connectedness to the caregiver simultaneously.

The importance of consistency in child-caregiver interactions remains critical during periods of resistance and in the setting of limits and boundaries. If limits are not consistently applied it is difficult for children to learn how they are expected to react and behave in certain circumstances. Toddlers "judge their own behaviours largely by the positive or negative reactions of others" (Bronson, 2000, p. 67). This means that if the caregiver reacts and disciplines in inconsistent ways the child will have more difficulty knowing how to appropriately modulate emotions and behaviours in future situations.

Through exploration and awareness of external caregiver standards, Kopp (1989) suggests that toddlers begin to use understanding of past experiences to strengthen old and develop new self-regulation strategies. By allowing the child active and increasingly independent exploration, while providing a secure base, the caregiver is facilitating and strengthening the child's autonomous functioning. By remaining close the caregiver is staying emotionally connected to the child and strengthening attachment bonds, while helping the child achieve a sense of self-competence and efficacy (Sroufe, 1996; Matas, Arend & Sroufe, 1979).

# **CHAPTER 4**

# **Self-Regulation and Peer Competence in the Preschool Years**

Throughout the preschool period children are increasingly expected to resist distraction and to appropriately regulate their emotions and behaviours. Kochanska, Coy and Murray (2001) found that "at 36 months, children begin to be capable of self-regulation, or flexibility of control processes that meet changing situational demands" (p. 1108). As part of this shift children experience a transfer from external to internal regulation. Preschool children increase their ability to use internalized rules and strategies to appropriately guide behaviour and emotional expression (Bronson, 2000). An example of using internal regulation could be seen in a situation where a child has done something that frustrates or angers another child. In this situation, without the presence of an external monitor, a child with internal control would have the ability to use words to express disapproval, instead of acting out in anger and aggression. With the increasing capacities of true internal control, preschoolers begin to require less continuous external support and guidance.

As well as needing less guidance a preschooler's self-controlled choice in activities is becoming more organized and efficient. In addition, preschool children are increasingly persistent and skilled in selecting tasks and learning activities that are appropriate to their skill (Bronson, 2000). Arend, Gove and Sroufe (1979) found that one aspect of ego-resiliency is being self-aware of ability, which is reflected in choice of activity. This suggests that preschool children, who can independently select activities

suitable to personal skill level or can adapt actions to suit individual activities, are egoresilient.

At this stage, not only are preschoolers more persistent and skilled in selecting activities, the ability to engage in a wider range of cognitive activities also increases. Preschool children are increasingly capable of using advanced and effective strategies to attack and carry out tasks and solve problems (Bronson, 2000). The ability to self-regulate at this stage is more intentional, resourceful, organized, flexible and autonomous. Mechanisms of self-regulatory strategies, such as problem solving, are manipulated to effectively focus and monitor progress towards goals. Bronson (2000) suggests that at this stage children are "learning how to learn and how to solve problems in their environments" (p. 134).

The ability to understand and process language increases in the preschool years and assists in internal thought and reflection. It also helps with problem-solving and planning by facilitating the child's ability to mentally consider alternate courses of action.

Language also supports developing memory capacities by helping the child refer back in time, to use past experiences to plan for current and future action (Bronson, 2000).

Language facilitates the creation, recreation, and recombination of information already stored in the memory to form new and reconfigure old concepts, plans and solutions to problems (Bronson, 2000).

With the increase in language abilities, self-speech or giving oneself directions in spoken words begins in the preschool period (Bronson, 2000). Although self-speech may be audible to others, it is not intended or directed towards anyone other than the child himself/herself. Bronson (2000), suggest that this kind of self-communication is thought

to be critical to the development of internally guided self-regulation. Children use self-speech to understand situations, focus on problems, and overcome difficulties. It is thought to be essential for cognitive and emotional control (Bronson, 2000).

Social competence, which involves the development of emotional understanding, is strengthened in the preschool years. Emotional understanding is said to be the ability to "attend to relevant language and information in one's environment, identify one's own and others' experiences and expressed emotions, understand which emotions are appropriate in different contexts and to recognize the causes and consequences of emotions" (Eisenberg, Hofer & Vaughan, 2007, p. 296). With the increase in language and cognitive abilities, preschool children begin to talk about mental states, such as thinking, remembering and believing. These enhancing language and cognitive abilities help to develop a growing awareness and understanding of others' minds, intentions and feelings (Bronson, 2000).

Emotional understanding and the awareness that others have separate feelings becomes important during the preschool years. Many children are for the first time experiencing relationships with peers and adults outside the family. Having experienced a secure attachment in the early years paired with feelings of self-confidence and competence, Sroufe, Egelend, Carlson and Collins (2005) found that "securely attached children bring forward positive expectations regarding encounters with others" (p. 135). Securely attached children also display less negative behaviours in interactions with others, and they bring an enthusiasm to the social exchanges, which make them more attractive play partners (Sroufe et al., 2005).

As children begin experiencing relationship outside their families, they are more

interested in interacting with and being accepted by peers (Bronson, 2000). During the preschool period children are becoming more capable of cooperative interactions with peers and are learning more effective interaction strategies. Research has linked preschooler's ability to portray positive and collaborative behaviour toward peers to egoresiliency and peer acceptance at this developmental stage (Huey & Weisz, 1997). Kopp (1989) argues that "[t]he peer culture, even for young children, generally requires socially acceptable distress management" (p. 349). Which makes the ability to regulate emotions and to effortfully inhibit or activate behaviour in adaptive ways (be ego-resilient) integral to peer interactions and acceptance (Eisenberg, Hofer & Vaughan, 2007).

Recent research states that failure to acquire the skills needed to manage emotional responses and adapt behaviours appropriately may lead to difficulties in social interaction (Calkins & Fox, 2001). Since preschool children are continually asked to react against impulses, as well as to coordinate behaviours with others, it is essential for caregivers/educators to provide a variety of emotion and self-regulation learning activities and opportunities (Boyer, 2009). The importance of providing learning opportunities makes the role of caregiver or educators as facilitator critical. Self-regulation learning opportunities combined with guidance from caregivers will "foster in children a sense of connectedness to others and encourages discovery of their own personal competencies" (Boyer, 2009, p. 181).

At this stage it is the role of the caregiver is to help children learn how to listen to each other and how to use caring language and empathetic behaviours to make one another feel better (Boyer, 2009). As preschoolers develop, they begin to see how certain behaviours affect other people, both positively and negatively. When encouraged to take

responsibility for treatment of others, children begin to develop their own ideas on how to work, play and be active participants of the larger community (Boyer, 2009). Bronson (2000) suggests that children in this period are capable of giving, cooperating, sharing, helping and comforting, and are beginning to understand reciprocity and the needs of others. When these are combined with a concrete understanding of what is socially expected, the capacity for cooperative and positive interactions with peers increases (Bronson, 2000; Kopp, 1989).

Along with developing language, emotional understanding and peer interaction, preschool children begin to engage in dramatic play. This gives children the opportunity to experiment with different roles and to sharpen understanding of the surrounding world (Bronson, 2000; Kopp, 1989). Dramatic play also provides children the opportunity to enhance cooperative behaviours, and increases social understanding. This kind of play will lead to situations that require children to control and regulate impulses and will improve their conflict resolution strategies (Bronson, 2000).

In addition to experimenting with different roles, dramatic play provides an excellent opportunity for children to develop and express creativity. In dramatic play children can pretend to do or be anything they desire, giving children an opportunity to use and broaden imaginations. Imaginativeness and originality are thought to reflect egoresiliency and children who display these characteristics in play and other activities with peers are often considered to be confident and socially competent children (Arend, Gove, & Sroufe, 1979).

Arend, Gove and Sroufe (1979) found that the "competent preschooler is enthusiastically involved with school tasks and peers; is (affectively) expressive in

situationally appropriate ways; and is organized, persistent and flexible when encountering problems and stress" (p. 958). A child's ability to display these capabilities are directly connected to the child's prior experiences. A child who developed a strong attachment with a caregiver and experienced guided-regulation of emotions, behaviour and attention in the early years, will likely develop into a toddler who can confidently explore and problem solve. Through exploration and problem solving, the child has opportunities to develop and strengthen self-regulatory abilities. Experiencing success while employing emerging problem solving and self-regulatory abilities, combined with positive expectancies of self and others, instills a sense of competence and confidence that the child will bring forward into subsequent relationships. This results in egoresiliency in the preschool years, which supports a successful transition into the school system.

# **CHAPTER 5**

# Ego-Resiliency, Self-Regulation and the Transition to Primary School

As children enter primary school, they are expected to control most emotional outbursts and aggression, and conform to school rules (Bronson, 2000; Zimmerman 1994). They are also expected to become active participants and regulators of their own learning and interact cooperatively and successfully with other children (Bronson, 2000; Zimmerman, 1994). The ability to successfully meet these expectations depends on the child's previously developed self-regulatory skills, and the ability to flexibly adapt preferred level of control to fit new experiences and situations.

Also critical to meeting school's expectations is the child's self-confidence. Self-confidence in the early school years is important, as it has been found that academic achievers tend to have higher self-concepts than underachievers (Borkowski & Thorpe, 1994). Higher self-esteem comes from previous successful interactions with the environment, successful use of self-regulatory strategies, and early supportive care. Block & Block (2006) say "that a person's self-perceptions are both a reflection of the life that has been led and an influence on the life that will be lived" (p. 321). Self-confidence and regulation promote and enhance learning because a perception of greater self-competence sustains an individual's motivation and self-regulation to achieve new goals (Schunk & Zimmerman, 1994). This influences subsequent achievement patterns and self-regulatory abilities (Meece, 1994). In comparison, it has been found that deficits in ability to regulate behaviour and lower self-perception of capabilities, discourages and impairs a

child's positive transition and adjustment into the school system (Miech, Essex, & Goldsmith, 2001).

A child with deficits in self-regulatory and adaptive abilities will probably have little long-term motivation or confidence for pursuing the complex and novel problem-solving activities and situations presented in school (Borkowski & Thorpe, 1994).

Confirming the importance of early skill and confidence development, Miech, Essex, & Goldsmith (2001) found that, "the start of formal schooling is a critical period in which children's performance at school has lasting effects that may matter more for their academic success than at any other time" (p. 104).

As in previous developmental stages, competent children are active forces in their own development. As children age they continue to seek out, engage in, interpret, and react to various opportunities and challenges in ways specific to the individual (Sroufe, Egelend, Carlson & Collins, 2005). In school, children continue to take more and more active roles in choosing and structuring their own experiences and goals. But at this stage the success as students involves their ability to adopt the school and teacher's academic values and objectives as their own (Piaget, as cited in Smith, 2009). If students accept and internalize the goals of teachers, they can better develop into intrinsically motivated self-regulated learners of the school curriculum (Piaget, as cited in Smith, 2009). It is suggested that a major difference between academic achievers and nonachievers is the degree to which they as children became regulators of their own learning experiences (Bronson, 2000). Randi & Corno (2000) state that self-regulated learners "seek to accomplish academic goals strategically and manage to overcome obstacles using a battery of resources" (p. 651). Self-regulated learners also demonstrate self- starter

tendencies, persistence in learning tasks, and possess good time-management techniques. They are confident in their own ability, are strategic, resourceful and flexible in overcoming problems and are more likely to use and adapt effective learning strategies. In addition, they are meaningfully engaged in their own learning and are motivated to attain achievement goals (Zimmerman, 1994; Wigfield, 1994). Reading is an example of children's ability to engage in learning and be motivated to achieve goals. As children begin to make associations between sounds, letter and words, they feel a desire and motivation to continue learning words and reading for themselves the books they love.

During the school years, the desire to be accepted and develop close relationships with peers increases. Bronson (2000) states that, peer rejection in childhood is associated with a wide variety of negative outcomes in school and also in later life. The previously developed ability to internalize standards of acceptable behaviour and regulate emotions and distress is essential to the child's subsequent capabilities to interact cooperatively with peers and form meaningful, reciprocal relationships. To be successful with peers' children need to be ego-resilient and have confidence in their ability to interact.

By definition, to be ego-resilient children need to appropriately adjust levels of control, or ego-control, as required by individual circumstances (Sroufe, Egeland, Carlson & Collins, 2005). A child in the classroom needs to concentrate and inhibit impulses appropriately. On the playground the child needs to adjust ego-control levels and display spontaneous and flexible behaviours. A child who can adapt preferred control levels according to the situation will likely have the capacity to be both a successful academic achiever and popular and well-liked among peers.

With the transition into school, the child is spending more time away from home,

but it remains important for the caregiver to be involved in the child's regulatory development. The child's value in learning and achievement, which underlies successful interactions in the classroom, in part stem from the values and attitudes portrayed by involved caregivers (Corno, 1994). If the caregiver places an emphasis on achievement in warm and appropriate ways, and is confident in and supportive of the child's abilities, the child will likely display these same values and beliefs. If the caregiver is invested in the child's schooling, chances are that the child will also be invested as well.

In addition to the significance of values and attitudes portrayed by caregivers with regards to schooling, it is important that they remain facilitators of learning. Upon entry to the school system, children are still developing and enhancing regulatory strategies to resist distractions and concentrate during learning. External monitoring and support is often still needed to support the child's ability to successfully eliminate or ignore distactors in the environments when circumstances call for concentration (Corno, 1994). The presence of external support will help children develop strategies for future control and regulation of their own learning.

With all the new responsibilities and expectancies placed on children upon school entry, a strong foundation of self-regulation strategies is essential to the ability to meet these demands. The nature and impact of the individual's new experiences and environment are conditioned by history; therefore future experiences will be influenced by current interactions and outcomes (Sroufe, Egelend, Carlson & Collins, 2005).

# **CONCLUSION**

Children's ability to self-regulate and to adapt ego-control levels according to circumstance are essential in their healthy emotional, social and cognitive development, as well as lifetime academic successes. This ability to self-regulate and be ego-resilient takes a lifetime to develop and looks differently at each stage of development.

From birth infants are equipped with innate regulatory capabilities, but these are no match for the stimulation provided by the environment. During the early stages of life infants rely on caregivers to keep arousal levels manageable. How the caregiver responds to, cares for, and supports the infant in these first interactions will ultimately influence the infant-caregiver attachment relationship. If the caregiver's interactions with the infant are predictable, warm and supportive, a secure attachment relationship can form. The attachment relationship during infancy is found to be both a component of ego-resiliency, and the foundation for children's expectations about future relationships (Arend, Gove & Sroufe, 1979; Sroufe, Egelend, Carlson and Collins, 2005).

As children become toddlers they begin to experiment with, and take more control of, their own arousal, starting to modulate their own emotions and behaviours. These abilities, combined with developing motor capabilities, provide children greater opportunity to actively explore their environments. A securely attached caregiver relationship acts as a secure base from which to explore and provides external support when the child has exhausted own resources.

Having the ability to confidently engage in and experiment with a variety of

activities is essential to children's developing self-regulation skills. Arend, Gove and Sroufe (1979) say that evaluating a child's problem-solving style and willingness to engage assesses competency and ego-resiliency at this age.

The child continues to develop, employ, and enhance emerging self-regulation strategies as they transition into the preschool stage. An ego-resilient child at this stage demonstrates enthusiastic involvement in school task, effective employment of self-regulations strategies, and problem-solving techniques. These successes are all hinged on a child's prior history.

Also important during this stage is that children begin to interact more with peers. Establishing peer relationships at this time becomes a primary focus. Peer competence, the ability to interact in cooperative and flexible ways with other children, is another way to assess ego-resiliency in preschoolers. And having experienced a positive attachment relationship early in life is critical to a preschooler's peer competence (Sroufe, Egeland, Carlson & Collins, 2005). The attachment relationship allows the child to bring forward positive expectations regarding encounters with others (Sroufe et al. 2005). Furthermore, it allows for the development of more effective regulatory strategies and teaches the child how to interact in more appropriate and enthusiastic ways (Sroufe et al., 2005).

The development of ego-resilient self-regulation happens at a rapid rate during early childhood. With an understanding of the development of self-regulation, we can recognize factors that foster or inhibit successful self-regulation (Shanker, 2010). When these factors are known, a better understanding can be gained of how caregivers and significant people in children's lives can facilitate the development of ego-resilience and self-regulation and enhance school-readiness (Shanker 2010).

#### **Literature Cited**

- Arend, R., Gove, F. L., & Sroufe, L. A. (1979). Continuity of individual adaptation from infancy to kindergarten: A perspective study of ego-resiliency and curiosity in preschoolers. *Child Development*, *50*, 950-959.
- Block, J., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. Collins (Eds.), *Minnesota symposia on child psychology Vol. 13: Development of cognition, affect, and social relations*, (pp. 39-102). Hillsdale: Erlbaum.
- Block, J. & Block, J. H. (2006). Venturing a 30-Year longitudinal study. *American Psychologist*, 61, 315–327.
- Borkowski, J. G., & Thorpe, P. K. (1994). Self-regulation and motivation: A life-span perspective on underachievement. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 45-74). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Boyer, W. (2009). Crossing the glass wall: Using preschool educators' knowledge to enhance parental understanding of children's self-regulation and emotion regulation. *Early Childhood Education Journal*, *37*, 175-182. doi. 10.1007/s10643-009-0343-y
- Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York: The Guilford Press.
- Calkins, S. D., & Fox, N. A. (2002). Self-regulatory processes in early personality development: A multilevel approach to the study of childhood social withdrawal and aggression. *Development and Psychopathology, 14,* 477-498. doi 10.1017.S095457940200305X
- Calkins, S., & Hill, A. (2007). Caregiver influences on emerging emotion regulation:

- biological and environmental transactions and early development. In Gross, J. (Eds.), *Handbook of emotion regulation* (pp. 229-248). NY: Guilford Press.
- Caspi, A., Elder, G. H., & Bem, D. J. (1987). Moving against the world: Life-course patterns of explosive children. *Developmental Psychology*, 23 (2), 308-313.
- Corno, L. (1994). Student volition and education: Outcomes, influences and practices. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 229-251). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development*, 66 (5),1360-1384.
- Eisenberg, N., Hofer, C. & Vaughan, J. (2007). Effortful control and its socioemotional consequences. In Gross, J. (Eds.) *Handbook of emotion regulation* (pp. 287-306). NY: Guilford Press.
- Goldberg, S. (2000). Attachment and development. London: Arnold Publishers.
- Huey, S. J., & Weisz, J. R. (1997). Ego control, ego resiliency, and the five-factor model as predictors of behavioral and emotional problems in clinic-referred children and adolescents. *Journal of Abnormal Psychology*, 106 (3), 404-415.
- Kochanska, G., Coy, K.C., & Murray, K. T. (2001). The development of self-regulation in the first four years of life. *Child Development*, 72 (4), 1091-1111.
- Kopp, C. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology, 18,* 199-214.
- Kopp, C. (1989). Regulation of distress and negative emotions: a developmental view. *Developmental Psychology*, 25, 343-354.
- Matas, L., Arend, R. A., & Sroufe, L. A. (1978). Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child*

- Meece, J. L. (1994). The role of motivation in self-regulated learning. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 25-44). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Miech, R., Essex, M. J., & Goldsmith, H. H. (2001). Socioeconomic status and the adjustment to school: The role of self-regulation during early childhood. *Sociology of Education*, 74 (2), 102-120.
- Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.
- Randi, J. & Corno, L. (2000). Teacher innovation in self-regulated learning. In Boekaerts,
  M., Pintrich, P. R., & Zeidner, M. (Eds.), *Handbook of self-regulation* (pp. 651-685). San Diego: Academic Press.
- Rheinberg, F., Vollmeyer, R., & Rollett, W. (2000). Motivation and action in self-regulated learning. In Boekaerts, M., Pintrich, P. R., & Zeidner, M. (Eds.), *Handbook of self-regulation* (pp. 503-529). San Diego: Academic Press.
- Rothbart, M. K. & Sheese, B. E. (2007). Temperament and emotion regulation. In Gross, J. (Eds.) *Handbook of emotion regulation* (pp.331-350). NY: Guilford Press.
- Schunk, D. H. (1994). Self-regulation of self-efficacy and attributions in academic settings. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 75-99). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Schunk, D. H., & Zimmerman, B. J. (1998). Self-regulated learning: From teaching to self-reflective practice. New York: Guilford Publications.
- Shanker, S. (2010, October) What exactly is self-regulation and why is it so important for learning? PowerPoint presented at the Early Childhood Education Regional Conference, Kamloops, B.C.

- Siddiqui, A., & Hägglöf, B. (2000). Does maternal prenatal attachment predict mother-infant interaction? *Early Human Development*, 59 (1), 13-25.
- Smith, L. (2009). Piaget's pedagogy.. In Müller, U., Carpendale, J. I. M., & Smith, L. (Eds.), *Cambridge Companion to Piaget* (pp. 324-343). (Cambridge companions to philosophy). New York: Cambridge University Press.
- Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. Cambridge: Cambridge University Press.
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood.*New York: The Guilford Press.
- Teo, A., Carlson, E., Mathieu, P., Egeland, B. & Sroufe, L. (1996). A prospective longitudinal study of psychosocial predictors of achievement. *Journal of School Psychology*, *34*, 285-306.
- Thompson, R. A., & Meyer, S. (2007). Socialization of emotion regulation in the family. In Gross, J. (Eds.) *Handbook of emotion regulation* (pp. 249-268). NY: Guilford Press.
- Wigfield, A. (1994). The role of children's achievement values in the self-regulation of their learning outcomes. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 101-124). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Zimmerman, B. J. (1994). Dimensions of academic self-regulation: A conceptual framework for education. In Schunk, D. H. & Zimmerman, B. J. (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 3-21). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.