Child SEL Skill PROTOTYPICAL PROFILES

Exemplary

Children characterized by exemplary SEL Skill "always" (i.e., during "every home visit") demonstrated very strong basic regulation, beliefs about the self and world, and sustained attention skills. This exemplary pattern of child SEL skills (which emerged at Time 2) indicates that these children have developed secure attachment styles (e.g., feelings of safety), ample amounts of exploratory behavior (e.g., curiosity), and strong self-regulation skills; that is, an overall SEL skill set optimal for coping with, and learning from, most averageexpectable social environments (cf. Cicchetti & Rogosch, 1997). Notably, this was the only profile group in which child SEL skills were characterized by both beliefs about the self and world and sustained attention occurring during every home visit. The proportion of children in this skill profile changed from 0% to 31% during the PC+ program.

High

Children characterized by high SEL skill scored relatively-highly (i.e., "more than half of the home visits") on basic regulation and beliefs about the self and world but very highly (i.e., "always") on sustained attention. Given that sustained attention is expected to follow naturally from basic regulation and beliefs skills, this near-optimal pattern of child SEL skills suggests children who attend to social stimuli less as a function of their basic regulation and beliefs skills and more as a function of other factors (e.g., fear based on a previously unpredictable or harsh parenting These children are expected to style). sometimes find it difficult to cope with, or learn from, most average-expectable social environments. The proportion of children in this skill profile changed from 26% to 44% during the PC+ program.

31% PC+ Child SEL Skill Profiles Moderate-Low 13% Schema 😰 Beliefs 🗧 Attention VI 4 V IV Ш Moderate 12% Ш 3 High 2 44% 1 0

Moderate-Low

Moderate

Moderate

Children characterized by moderate SEL skill were marked by moderate levels of basic regulation and beliefs skills (i.e., about half of the home visits) and relatively-high levels of sustained attention skill (i.e., more than half of the home visits). This non-optimal pattern of child SEL skills suggests that these children (a) attend to social stimuli less as a function of their basic regulation and beliefs skills and more as a function of other factors, (b) will have some difficulty coping with, and learning from, average-expectable social environments, and (c) have substantial room for growth in developing the kinds of SEL skills associated with healthy child development. The proportion of children in this skill profile changed from 41% to 12% during the PC+ program.

Moderate-Low

Children characterized by *moderate-low SEL Skill* were marked by moderate scores on all three of the cluster-input variables, indicating the use of constructive SEL skills during about half of the home visits. This less-than-optimal pattern of child SEL skills suggests that these children have substantial room for growth in developing the kinds of SEL skills associated with healthy child development. The proportion of children in this skill profile changed from 20% to 13% during the PC+

program.

Low

Children characterized by low SEL Skill were characterized by relatively-low scores on all three of the cluster-input variables, indicating that they "rarely" demonstrated the basic regulation and belief skills, and almost "never" demonstrated the sustained attention skills, necessary to cope with and learn from most average-expectable social environments. This maladaptive pattern of child SEL skills suggests that these children are in desperate need of a high-quality socialization environment and have substantial room for growth in developing the kinds of SEL skills associated with healthy child development. The proportion of children in the this skill profile changed from 7% to 0% during the PC+ program.

Very Low

Children characterized by very low SEL Skill were characterized by very low scores on all three of the cluster-input variables, indicating that they almost "never" demonstrated the basic regulation, belief, and sustained attention skills necessary to cope with and learn from most average-expectable social environments. This maladaptive pattern of child SEL skills suggests that these children are in the most desperate need of a high-quality socialization environment and have substantial room for growth in developing the kinds of SEL with skills associated healthy child development. The proportion of children in the very low skill profile changed from 9% to 0% during the PC+ program.

The figure below presents standardized socio-emotional skill profiles for children at the conclusion of the PC+ program. Note that there are no children in the low and very low profiles at the end of the PC+ program. Low and Very Low

0%

Low

RTURN

Exemplary

High

Very Low

Exemplary

Child SEL Skill explanation of measures

QTurn's Multilevel Person-in-Context~*neuroperson* (MPC*n*) model (Smith, Peck, & McNeil, 2019) was used to select CBT items corresponding to three different kinds of *mental skills* required for children to build *behavioral skills* (e.g., social interaction). As described below in more detail, we use the terms Schemas, Beliefs, and Attention because they reflect core differences in how mental skills are represented in the brain. For example, *attachment schemas*, centered in the limbic system, dominate the first few years of life and constitute *basic regulation* skills; *beliefs about the self and world*, centered in the neocortex, emerge during the second year and constitute *advanced regulation* skills that become increasingly dominant across childhood; and *executive attention*, centered in the prefrontal cortex, emerges during infancy but plays a relatively minor role until blossoming during early adolescence, when it can then be used to intentionally authors one's own identity. The following figure shows how aspects of parenting quality and child SEL skills interact dynamically within the integrated MPC*n* system.



The term *schemas* refers to non-verbal, non-symbolic, affectively-charged representations of the self and world, as in attachment schemas (Bowlby, 1988). Schemas are initially formed and elaborated automatically during child-caregiver interactions and have been described in terms of four primary forms of *attachment style* (i.e., secure, insecure [anxious, or avoidant], and disorganized). We describe attachment schemas as constituting basic regulation skills because, as relatively-enduring parts of the identity system, they act like *set points* for the way children initially engage in and respond to parenting practice quality.

The term *beliefs* refers to verbal-symbolic representations of the self and world. Basic beliefs differentiate and integrate across time to form complex belief systems, such as attitudes that combine to form goals that combine to form plans. During childhood, beliefs are formed automatically during social interactions but, from adolescence onward, can be formed intentionally via self-reflection. We describe beliefs as advanced regulation skills because they reflect the values, goals, rules, and norms (conveyed to them via parenting practices) that allow children to successfully understand and participate in increasingly complex social situations.

The term *attention* (or *executive attention*; or *awareness*) refers specifically to consciously controlling the focus of awareness in relation to ongoing thoughts and feelings. In addition, given that there are several distinct attention networks in the brain, we also use the term attention to describe the entire subset of beliefs and schemas that are *currently-activated* in the brain, hence experienced as conscious thoughts and feelings. Eventually, the *executive functions* (e.g., shifting and focusing awareness) can operate on thoughts and feelings to provide the basis for all forms of self-reflection (e.g., the effortful control of impulses).

The following table provides descriptions of the child behaviors used to measure child SEL skill in the NTE PC+ impact evaluation.

Attention
Child Concentrates
Beliefs
Child is cooperative with adults
Child follows necessary rules in family setting
Child understands and completes activities that are developmentally appropriate Child approaches play in a systematic way.
Child can describe in words or sentences the picture in book
Schemas (Basic Regulation)
Child initiates interaction or responds to others with little hesitation Child demonstrates sharing and tolerates delays in having needs met Child
is creative and inventive during playtime activities
Child tolerates necessary frustration
Child's moods are appropriate to situations

