#370 - Distillation of Common Elements to Support Child Social, Emotional, and Behavioral Competencies: Implications for Intervention Development

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Objectives/aims
Identifying what works for whom and under what conditions will speed efforts to develop interventions tailored to meet children's social, emotional, and behavioral (SEB) needs within schools. Childhood is an important time to promote SEB competencies. Comprehensive intervention models (i.e., manualized programs that include multiple practices such as behavior-specific praise) and discrete practices (i.e., a specific behavior or action) exist that improve SEB outcomes of children. Still, these models and practices do not demonstrate the same level of efficacy across all children. As a result, it is difficult for researchers and stakeholders to access the literature to determine what models or practices have the strongest evidence for improving the SEB outcomes of children within a specific school context. This evidence-to-practice gap can be addressed by identifying what models and practices work for whom and under what conditions. Innovations in research synthesis informed by implementation science are needed to achieve this goal. We have addressed this gap by using the Distillation and Matching Model to synthesize the literature focused on models and practices designed to improve the SEB outcomes of children.

Methods
The Distillation and Matching Model is a novel approach to research synthesis developed for the mental health field that is designed to identify what works for whom and under what conditions. Our application of the Distillation and Matching Model to the education literature involves three steps. The first step, distillation, involves the identification of "practice elements", defined as the goal or general principle that guides a discrete practice (e.g., *praise*) targeting a specific domain of SEB outcomes (e.g., social skills, problem behavior). A comprehensive literature review is conducted and then practice elements designed to improve the SEB outcomes of students from group design and single-case design studies that meet standards of methodological rigor are distilled. The distillation process produces a common set of terms for the individual practices used across the literature that are both studied in isolation and the individual practices that comprise comprehensive intervention models. The second step involves

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identifying "common elements"–i.e., practice elements found in studies that meet standards of methodological rigor <u>and</u> report significant improvements in child SEB outcomes. Using meta-analytic methods, we will calculate effect sizes at the study level across the two designs (group, single case) and use vote-counting procedures to identify "common" elements. The third step, matching, is a method for matching common element profiles (combinations of common elements) to intervention (universal, indicated, tertiary) and child characteristics (problem type, age, gender, race/ethnicity) to identify what combinations of common elements work for whom and under what conditions.

Main applications
Applying the Distillation and Matching Model to the education literature represents the next step in a research program designed to produce actionable information about common elements that researchers and stakeholders (administrators, teachers) can use to develop and evaluate tailored interventions. Examples of how the distillation of practice elements can inform intervention development and the development of treatment fidelity tools will be presented.