Formal literature reviews from the Evaluation Lab For PB&J:

PB&J's home-based services are supported by evidence from randomized controlled trials (RCT) of several home visiting programs. Although the Nurse-Family Partnership (NFP) is the best known, of more relevance to the PB&J model are studies of First Born, conducted in Santa Fe, New Mexico and Child FIRST, conducted in Bridgeport, Connecticut.

First Born is similar to the NFP in that it delivers a set curriculum covering infant and maternal health and child development. It differs in replacing a nurse with a trained paraprofessional for many of the visits. And whereas NFP was targeted to serve a high-risk population, First Born was offered to all first-time parents. The study used an RCT design and found, first, that the ACEs of enrolled mothers were very prevalent, and, second, that the program reduced emergency room visits for infants, similar to the reductions reported for NFP.¹ This study is encouraging on two counts. First, it shows that trained paraprofessionals can be effective home visitors. And second, it offers validation for the effectiveness of home visiting programs in New Mexico.

Child FIRST is a home visiting program that provides services to families with atrisk children from 6 months to 6 years of age. There is no set curriculum. Instead, an MA-level counselor and a BA or Associates-level care coordinator deliver a highly individualized program. The care coordinator helps the family access needed services and the counselor supports the parent-child dyad through psychotherapy and child development education. The study, also an RCT, recruited at-risk families with infants and toddlers up to 36 months old. Mothers and children were assessed on a variety of measures at baseline and 6, 12 and 36 months later. The program had positive effects on access to services, mother's mental health, children's language development, and it reduced the incidence of child abuse allegations.² Child FIRST and PB&J share several core components. Both emphasize individualized services based on client goals, both involve the whole family, and both work with the parent-child dyad therapeutically and to convey knowledge about child development.

The evidence that is most congruent with PB&J's model comes from a recent report from the Center on the Developing Child at Harvard University.³ The report, "Applying the Science of Child Development in Child Welfare Systems," highlights

¹ Kilburn, M. Rebecca and Jill S. Cannon. Forthcoming, 2016. "Home Visiting and Utilization of Infant Health Care: A Randomized Clinical Trial." *Pediatrics*.

² Lowell DI, Carter AS, Godoy L., Paulicin B., and Briggs-Gowan MJ. 2011. "A Randomized Controlled Trial of Child FIRST: A Comprehensive Home-Based Intervention Translating Research into Early Childhood Practice." *Child Development* 82 (1): 193-208.

³ Center on the Developing Child at Harvard University. 2016. Applying the Science of Child Development in Child Welfare Systems. htttp://www.developingchild.harvard.edu. Accessed December 2, 2016.

why PB&J's long established "heart-centered approach" represents a best practice in working with high risk families. The report does not reflect findings from an RCT, rather it makes the case based on the most recent science available about how toxic stress and ACEs derail healthy child development. We now understand that prolonged exposure to adverse childhood events without appropriate support, and especially for those most vulnerable to stress, "can prime biological systems to become hyper-responsive to adversity," and result in "a system that is set to learn fear rapidly, shift into defensive mode with very little provocation (act now, think later), react strongly even when not needed, or shut down completely" (p. 6). These behaviors, which appear to be pathological, are in fact adaptive responses to dangerous environments.

Unfortunately, the behaviors tend to attract more trauma and neglect. The child who acts out defensively will be punished in school; the fearful child will avoid potentially enriching learning opportunities. And neurologically, these defensive responses become hard-wired into the child's developing brain, crowding out the neurological pathways that promote the self-regulation and executive function that are essential to an adult's pro-social behavior, including holding a job and parenting effectively.

The report describes the "triple burden" for at-risk adults. First, they perceive threats everywhere and react strongly, as the legacy of childhood adversity. Second, their ongoing exposure to stressful environments keeps them in a heightened "flight, fight or freeze" state, which impairs self-regulation and inhibits executive function. Third, multiple negative interactions with teachers, the law and employers since childhood have convinced them "that they are fundamentally flawed and unable to change their condition" (p. 8).

According to the report, the science of how toxic stress and ACEs disrupt healthy development in children and compromise self-regulation and executive function in adults can be applied to organizations serving at-risk families. Organizations should address immediate stressors by helping families with immediate needs, such as housing and food. They should acknowledge childhood and ongoing trauma that explain "what happened" to their clients. They should build relationships with clients to build trust, create hope, and model supportive parenting. They should help parents learn by doing, by encouraging and facilitating positive parent-child interactions. And they should help parents recognize their triggers and learn to pause and consider before they react. Remarkably, this has been PB&J's approach for decades. The "new" science has now, thankfully, validated what we have learned from responding directly to family needs for 42 years.

From the 2017-2018 Evaluation Plan for Enlace Comunitario

The Nurtured Heart Approach was developed by Howard Glasser, through the Children's Success Foundation as a philosophy for creating healthy relationships among people. The approach consists of a set of strategies which help children develop

their "self- regulation" and "focuses on transforming the way children perceive themselves, their caregivers and world around them" (Children's Success Foundation 2015).

Brennan *et* al. (2016) assess the effectiveness of the Nurtured Heart Approach by evaluating survey responses from two volunteer groups of parents. The first group attended a course in the Approach that consisted of 7.5 hours of classroom instruction over five weeks. Of the 503 parents who attended, 326 completed a survey before and after the training. The second group, was recruited through advertisements in the local and school newspapers in surrounding areas and received a nine-page document outlining the Nurtured Heart Approach. The 92 parents in this group completed a survey before receiving the document, and again after five weeks.

In the survey, parents reported on their well-being, parenting practices, and their perceptions of their child's interpersonal strengths. The authors found that parents who attended the five-week training sessions "increased in providing positive attention to their children and decreased in yelling, scolding, and responding with negativity; in the comparison group parents demonstrated no changes with regard to these practices" (1).

Brennan *et* al. (2016) outcomes reported by the parents may be problematic for a few reasons. The first is that they may be based on the parent's assumption that they performed better after taking the Nurtured Heart Approach Training, because they anticipated this to happen as a result of taking the training. The second reason the results may lack credibility is the parent's responses may not be completely truthful. Some possibilities for this are that parents may feel pressured to answer a certain way on the questionnaire based on what they believe the facilitators want to read.

The staff who work with the children at Enlace use the Nurtured Heart Approach in a different way. Instead of training the parents, staff use this approach when working with the children in the children's groups within the Family Program. The reason for this is Enlace aims to ultimately instill "inner wealth," in the children who receive services, noted as essential for children to build successful relationships with their parents, and in other areas of their lives (Foundation 2015). Although the literature reviewed here does not meet the strict criteria for an evidence-based practice, this approach at Enlace is clinically informed by the work staff are doing on a daily basis. Enlace clinicians have found dramatic improvements in children's behavior after using the Nurtured Heart Approach. Clinicians report that children in the groups where Nurtured Heart has been used have higher self-worth and inner wealth in comparison to when they come into Enlace services. For example, the children can identify positive words to describe themselves, and they can identify their emotions and communicate them more clearly.