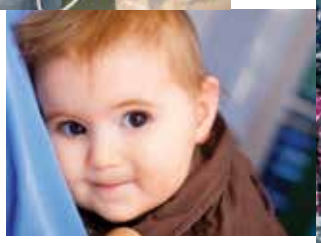
Zero to Three journal

NOVEMBER 2015
VOL 36 NO 2

Parenting Under Stress

FEATURED IN THIS ISSUE:



This Issue and Why It Matters

Most parents will agree that raising children is a stressful endeavor, and all parents can benefit from supports and services that enhance family functioning. To learn more about the issues and concerns of young parents today, ZERO TO THREE recently conducted a series of focus groups with Millennial parents in Washington, DC, and Los Angeles. The groups were designed to help us learn directly from parents about the challenges being faced by parents across cultural and socio-economic backgrounds, to test some key messages that would capture common sources of parental stress, and to get to the underlying issues that influence parents' behavior. The messages were used to spark discussions that revealed parents' thoughts and feelings about child rearing. The opening article in this issue provides a summary of the insights gained from these discussions. It was interesting that participants reported that the opportunity to have in-depth conversations about complicated issues led to parents' rethinking some of their ideas about their children and their approaches to parenting.

Other articles in this issue of *Zero to Three* describe a variety of approaches to serving children and families and strengthening parent–child relationships. One "port of entry" to families with newborns is the pediatric well-child visit, and an article describes how the structure of a group well-child visit integrates primary care with mental health supports. Preliminary data from this pilot program suggests that parents appreciated the opportunity to connect with other parents, share parenting concerns with peers and professionals, and provide positive medical experiences for their child. Another article explores the quality of parent–child relationships using the framework of "emotional availability" which refers to balanced and healthy emotional communication. The goal is to offer relationship skills for daily practice that reduce stress for both parent and baby.

When life circumstances—such as disability or health issues, family separation, or early trauma—add additional stressors, parents may need specialized help. Additional articles in this issue of *Zero to Three* describe programs that address the particular needs of military families, children prenatally exposed to alcohol, and children adopted from abroad.

Taken together, we hope the articles in this issue of *Zero to Three* provide some context, insight, and inspiration in approaches to supporting the diverse needs of parents with very young children. Be sure to visit the Parent Portal on the ZERO TO THREE website (**www.zerotothree.org/parenting-resources/**) for a range of resources to help parents understand and best support the children in their care.

Stefanie Powers, Editor
spowers@zerotothree.org

A **"Celebration of the Life and Legacy of Dr. Kathryn E. Barnard"** will be held Saturday, December 5th at 10:00 AM at the Washington State Convention Center, 800 Convention Pl, Seattle, WA 98101.

A brief reception with light refreshments will be held afterwards from 11:30-12:00.

All are welcome to join her Estate and ZERO TO THREE to remember Dr. Barnard, and honor her extensive contributions to the field and to her friends, family, colleagues, and community.

ZERO TO THREE

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Zero to Three journal

NOVEMBER 2015
VOL 36 NO 2

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Parenting in the 2000s: Learning From Millennial Moms and Dads

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Washington, DC

ABSTRACT

Who are Millennial parents? What strengths and struggles do they face, and what kind of messages and information about parenting and child rearing are most meaningful and relevant to them? To learn more about the people who account for 80% of the 4 million U.S. births per year (Millennial Marketing, 2015), ZERO TO THREE conducted a series of focus groups with Millennial parents in Washington, DC, and Los Angeles in the summer and fall of 2014. This article explores what was learned in extended conversations with these mothers and fathers and how the insights that were gained can help ZERO TO THREE and others who are invested in supporting families with young children provide information and guidance that helps these parents get their children off to the best start possible.

ZERO TO THREE (ZTT) has a long history of listening to parents in order to ensure that the resources we develop are relatable and meaningful. A series of focus groups were designed to test some key messages with parents from a range of cultural and socio-economic backgrounds and for their relevance and usefulness in supporting their children's early development. The approach to these groups was different from the traditional model—in which 8 to 10 strangers come together to a research facility to share their thoughts and opinions on a specific resource or issue. The format ZTT used involved selecting a target parent who then invited several friends to participate in a group in his or her home. This "social network" approach meant that the parents who participated knew and trusted one another; this familiarity led to a greater sense of intimacy and resulted in deeper discussions in which participants were incredibly frank and open in sharing their experiences as parents of young children and the often-intense emotions that get evoked in the process.

The groups represented a culturally diverse range of parents, including Caucasian, African-American, and Hispanic mothers and fathers, and married, single, and co-parenting families. None of the parents were receiving any type of formal parenting support. This selection was done purposefully because ZTT was seeking to understand the needs of parents who tend to be out there on their own; they don't qualify for social services such as home-visiting or Early Head Start but aren't wealthy enough to afford a lot of support from nannies or private child development services. The income range was $50,000 to $125,000 for a family of four. In total, 34 parents participated.

Following is a summary of the insights gained from these groups. It is important to note that findings from this kind of research are not considered "representative" or conclusive given the small number of participants. However, the themes that emerge and the consistency in experiences found across groups provide important insights to guide those working with families with young children.

Message Testing

In addition to asking about the challenges parents face in raising young children, ZTT presented a set of 8 messages, developed using the literature on primary prevention of child abuse and neglect, that would capture common sources of parental stress as well as get to the underlying issues that drive parents' behavior. These messages served as powerful conversation-starters that elicited parents' deepest thoughts and feelings about child rearing.

MESSAGE 1: The Impact of a Child's Early Experiences Can Last a Lifetime.

When asked about their reaction to the idea that "the impact of a child's early experiences can last a lifetime," parents reported mixed feelings. Some found it motivating—they were excited by the opportunity they have to shape their children's lives and, in many cases, to do it differently from their own parents, whom many felt had behaved in ways that had a detrimental impact in the early years. Gisele from LA shared, "When my mom would get mad, she would call me a name. To this day, it still hurts me. I still feel resentment to her because of certain things she did to me as a child."

For others, this message felt scary and overwhelming—they worried that they would "mess it up." As Bethany from DC shared, "Now I've screwed them up, and there's nothing I can do to go back and fix it. It's a death sentence." And Candie from LA said,

I think to myself all the time, "Am I being too hard on him? Is he going to remember this 10 years from now?" It's hard, as a parent. You're responsible for a human being. I question myself every day—if I'm doing the right thing.

MESSAGE 2: There Is No Such Thing as a Perfect Parent. We All Make Mistakes. We Just Need to Learn From Them and Try Again.

It was not surprising that parents enthusiastically responded to this message, which resonated universally across the groups. They felt validated by the idea that parenting involves a lot of mistakes and that no one has all the answers. They fully embraced the concept of the "redo"—learning from what doesn't work by trying a different approach from the one that "failed." Shandela from DC explained, "There is no such thing as a bad mistake if you gain something from it. It's not a loss if you have a growth, a learning experience."

Parents also noted that there is a need to adapt their parenting from one child to another. Breanne from LA stated, "What works for one child isn't going to work for another—it's trial and error for everyone." Parents also noted that there is a learning loop—children teach parents as parents teach children, and that it sometimes takes several tries to "get it right." Tyeana from DC explained, "You have to really start to learn your child; they are learning you, too; they are new to this earth." And Rob from DC noted, "We all have frustrations and get angry. We need to just take a step back and recognize where we went wrong for next time. That's beyond parenting, that's just life."

One particular theme that emerged in response to this message was the feeling that most parents are "just trying to do their best," but that everyone is judging them—strangers in the mall or grocery store, as well as their own parents. Bethany from DC summarized for her group, "There's a lot of status and a lot of pressure to look and appear perfect. If you're making mistakes and someone sees it...it's really embarrassing." For some parents, the stakes are even higher. Michael from LA shared that his friend, another African-American dad, refused to give in to his screaming toddler's demands for a toy. A bystander called the police to report possible child abuse. As a result, Michael reported that he and his friends now feel they have to compromise their values—in this case, setting appropriate limits with their children—in order to avoid public judgment.

MESSAGE 3: Tuning in to and Accepting Your Child's Individual Identity Is Important for Nurturing His or Her Self-Esteem.

Parents want to love their children unconditionally, and find the idea freeing—that they can accept their children for who they are. At the same time many find it challenging to always act on this idea. Michael captured it this way, "As parents, we may have an urge to have our child like the same things we like. And they may go a completely different route. As parents, we have to let them go their own way."

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Parents acknowledged that establishing discipline strategies that they feel are appropriate and effective is one of their greatest challenges.

An important distinction that many parents pointed out is that accepting a child is different from accepting ALL of a child's behavior—that it's still important to set limits on what is appropriate and expected for the child's age. Parents expressed a strong desire to guide their children in the right direction—not wanting them to get involved with the wrong crowd or make bad choices. Ben explained,

Accept them for who they are, but at the same time try to show them where they can go. There's always a balance between making sure your kids know you love them no matter what. I will always be their advocate, have their back, and be their biggest fan, as long as they're doing their best. It's accepting, but shaping.

And Tyeana noted,

I accept her for who she is and try to help develop who she is, but with limits. You can be who you are, and I'll give you space to do that, but I'm going to teach you along the way and give you some kind of structure.

MESSAGE 4: Love Means Setting Limits.

This message received instant approval from most participants; they fully appreciate the importance of setting limits to teach right from wrong. Typical comments included, "I can't cater to everything she desires, then I'd be setting her up for failure and disappointments." And, "If you love your child, you're going to set rules, limits. Otherwise, when they go into the real world, they're not going to get anything but a slap in the face!" At the same time, parents acknowledged that establishing discipline strategies that they feel are appropriate and effective is one of their greatest challenges. Belinda shared, "He was biting, and I had another parent say 'bite him back and he won't bite anymore'; so I did it… I bit his little hand…and I was upset with myself for that."

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Parents commiserated on how hard it is to cope with tantrums and children's upset while staying calm.

Most participants said they spank or "pop" their children, but most also explained that they don't want to use physical discipline, they just don't know effective alternatives. Many were spanked and some beaten as children, and most who were disciplined in this way talked about not liking it and not wanting to use it with their own children. Michael spoke for many when he shared, "I got my fair share of spankings…It's tough for our generation, and maybe males who are black to break that cycle of 'this is what I got, so this is how I'm going to raise you.'"

Almost universally, parents commiserated on how hard it is to cope with tantrums and children's upset while staying calm. ZTT explored this challenge in greater depth when considering a message specifically addressing managing emotions (see Message 6).

MESSAGE 5: Parents Sometimes Have Unrealistic Expectations for Their Child. Understanding What to Expect Based on a Child's Age Is Important for Being an Effective Parent.

Parents in all the groups related to this message, which elicited rich discussion about their concerns that they lack a clear understanding of what to expect—an issue that arose when discussing the challenge with limit-setting. Participants realized that they often have higher expectations for their children than they are capable of and that being unrealistic can lead to frustration for themselves and their child and to feeling ineffective as a parent. Nicole from LA put it this way, "Sometimes I catch myself treating her as if she was older. I have to re-ground myself. She is 2. I can't expect her to act like she's 5. She doesn't have as many reasoning skills yet." And Gisele said, "There are times where I do expect more of her, but I can't be doing that all the time. She's 4 years old and still has a lot to learn." Tyeana spoke to an issue all the parents in the groups grapple with—how to deal with other people's expectations of their child: "Sometimes you get so caught up in what other people think your child is supposed to be that you lose sight of the reality of your child."

MESSAGE 6: Sometimes Young Children Push Your Buttons, Triggering Intense Emotions. Learning to Identify and Manage Your Feelings and Reactions Helps You Be a More Effective Parent.

Most participants have been pushed to their breaking point and feel very regretful after they have lost control and either shout at, shame, or physically discipline their child. Ben from DC shared, "Sometimes you have moments of parenting genius, other times you don't; I told my [child] to shut up…then I said 'Dad needs a redo.' " Cindy from LA shared,

When we were grocery shopping she didn't get what she wanted and then wouldn't help me with the groceries. I got mad and let my anger get the best of me and I slapped her. I cried and cried and felt so bad.

The concept of becoming aware of one's "triggers"—the importance of recognizing when the breaking point is approaching and responding more constructively—had a lot of support. Ben put it this way, "It's important to learn to recognize your own triggers before you reach out and parent. It's not fair to expect your children to deal with your baggage."

This message led to a rich, candid discussion about how intensely emotional parenting is and that managing their own emotions is one of their greatest challenges and one they want to work on, given their keen awareness of the importance of the early years and the impact their reactions have on their children's development. Priscilla from LA put it this way. "It does become overwhelming sometimes. You have to check yourself before your wreck yourself ... Or your kids!" And Shandela said, "If you don't have a disciplinary plan in place, you're going to end up yelling and saying or doing something you regret."

Many parents talked about the importance of using calming strategies for themselves, such as taking a "parent time-out"—stepping out of the room, taking a deep breath, and then coming back to deal with the situation calmly—but also acknowledged that this can be very hard at times. Judi from LA explained, "This is so true. When my son pushes my buttons, I have to get up, excuse myself, and go take a breather. I don't want to react on my first instinct." Belinda shared, "I am a very emotional person. I want to try to have more control in front of my child, have more patience." And Kathy from DC said, "I got to a point where I was just burned out; I needed time to collect myself, so I wouldn't just yell at them."

Ultimately, parents expressed a desire to learn how to better manage their own emotional reactions. Tyeana put it this way,

I want to have more control and patience in front of my child. But at the same time, I need to be allowed to have my own feelings. If I need

to cry and scream, it needs to be okay for me to do that, but I don't want to teach him to do that.

Many parents find that dealing calmly with children's natural defiance and tantrums is especially difficult because they did not experience a calm, consistent parent when they were children. Lacking a model, they are unsure of what to do or say in these high-intensity situations. As a result, these parents often revert to what is most familiar, although they readily acknowledge (sometimes with tears) that they are repeating negative cycles. As Gisele shared, "I'm doing to [my child] exactly what was done to me."

MESSAGE 7: Shaming Your Child—Such as Calling Him/Her Names and Putting Him/Her Down—Can Be Emotionally Abusive, and as Detrimental as Physical Abuse.

Participants vehemently agreed with this statement. Nicole from LA said, "Calling names is attacking them as a person." Priscilla from LA succinctly put it, "It's bullying!"

Many cited incidents from their own childhood that they don't want to repeat with their children.

They want to deal effectively with misbehavior, but know there is a fine line between trying to teach a lesson and name-calling or shaming in order to get the point across or to get their child to behave. Priscilla from LA explained that it's usually coming from a place of frustration and wanting their child to succeed when she yells, *"Stop acting stupid! You know how to do this! You're a smart little girl!"*

This message also revealed some more pronounced cultural differences. Latina mothers explained that in their culture, name-calling is seen as form of endearment—such as calling a child "stupid." But beliefs about this practice may be changing among Millennials, as Priscilla noted, "I don't want my children growing up thinking that's okay." African-American fathers also mentioned their desire to "break the cycle" of name-calling and disparaging statements that, in their experience, often characterized parent–child relationships. Mafulay from DC explained, "To say, 'You're bad, stupid, ugly,' that is emotional abuse, and they're going to believe it and look for love elsewhere."

MESSAGE 8: Reflecting on Your Own Childhood Experiences Helps You Consciously Choose Which Practices You Do and Don't Want to Continue With Your Own Child.

This message catalyzed a charged discussion about participants' own experiences of physical or emotional abuse as children and their strong desire to "break the cycle" with their own children. At the same time, they find this goal challenging. Many described how easy it is to find themselves saying and doing things that their parents did ... both positively and negatively. Most acknowledged their parents "didn't know better," but that they do, and that they can make different choices, do things differently. Gisele explained,

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Parents expressed a desire to learn how to better manage their own emotional reactions.

You don't want your child to go through the same thing you went through and have bad memories. It still affects me. I don't want her to go through the same thing. But I guess I am still sort of doing it. My goal is just for her to be something better than me.

And Priscilla said, "My mom used to hit me with a belt or a sandal. I wouldn't do that to my daughter. It made me feel really bad when I was younger and would make me want to do bad things and rebel."

All the fathers we talked to had uninvolved or absent fathers, and are dead-set on being a major participant in their children's upbringing. As Armand from LA described, "It was a new experience in deciding to be active in my kid's life. My dad wasn't active in mine. For me, it's all about being present." Michael from LA explained,

I grew up without my father; I saw him very seldom. So I'm trying to, I guess, make up for that time I didn't get with my father with my kids now. There are a lot of things from childhood that sit with me; some positive, some not so positive. I'm trying to tweak the not so positive into positive and keep the positive right where it is.

Implications of the Findings

The most valuable insight ZTT gained from these groups was about the desire and need parents have to simply talk about their parenting experiences, especially the tough stuff that they rarely discuss openly or think about regularly. Just presenting these messages got parents' wheels turning on these critical issues, eliciting incredibly deep discussions that led to parents' rethinking some of their ideas about their children and their approaches to parenting, without ZTT providing any specific information or guidance. Simply put, the groups became an "intervention" in and of themselves. Many parents gained valuable insights which they hoped to act on. None wanted the 2-hour group to end, asking if the moderators could stay longer to continue the dialogue. Most

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Millennial dads want to be perceived and valued as equally important as moms.

telling was that when moderators asked at the end of each group what the best way would be to get these messages out to other parents, they spontaneously responded—"Hold these groups with all parents."

The take-home message for professionals—let parents do more of the talking. While there is certainly a place for providing information and guidance, it can also be very helpful to just put forth a concept or idea that you want to get across and encourage parents to share their thoughts about it. Ask a lot of questions to help parents think more deeply about an issue; avoid overwhelming them with advice. Giving them the space to reflect may result in greater insights for them; and coming up with the answers on their own can build their confidence in their ability to provide the best care and nurturance for their child and to solve the parenting challenges they face.

Also, find ways to bring parents together in groups of their peers, not for a typical parent workshop, but to provide an opportunity for them to share and learn from each other, to reduce isolation, and to provide an opportunity to explore ways to approach parenting positively.

Key Learnings

There is a generational consciousness among Millennial parents; they share common attitudes and values which appear to exist across segments. This includes an understanding and appreciation of the importance of the early years of a child's life and the critical role parents play in shaping their child's development. Ben summed it up this way, "What I have learned from my own experience is the way kids see themselves well into adulthood is the way you teach them to see themselves as [young children]. I feel tremendous responsibility." They all want to be the best parent possible so that their children get the best start in life. One aspiration moderators heard repeatedly, especially from parents who had come from disadvantaged backgrounds, was their wish for their child to be "better than me." At the same time, parents need reassurance that there is no such thing as a perfect parent; that good parenting involves trial and error, learning from mistakes, and seeking help when needed. This is a critical message to communicate to parents, especially those experiencing a lot of stress, as it makes them feel less defensive and more open to reflecting on what is not working, which can ultimately lead to greater positive change.

Millennials are experiencing a generation gap. They are aware that there has been an explosion in research and, hence, understanding about the importance of the early years that their parents were not exposed to. As a whole they don't feel their parents are on the same page as they are. Ben shared an incident that captured many parents' sentiments. His 2-year-old was "acting-up" and his father told Ben to "smack him." Ben told his dad, "No, we don't do that, Dad. He's just 2, he doesn't know any better." The parents are committed to "breaking the cycle" of the negative experiences from their own childhoods, specifically uninvolved fathers and the use of emotionally and physically hurtful discipline strategies by mothers, fathers, and grandparents. But they are without a roadmap or the support of their own parents which previous generations of parents so heavily relied on. They are looking for new role models and new parenting strategies.

Millennials are eager for help. They believe parenting can be learned, and they are avid "researchers," spending a lot of time seeking out parenting information, especially from digital resources. At the same time they are overwhelmed by the amount of content available on the internet and are wary of the sources of much of this information. They rely less heavily on guidance from "experts" than the previous generation of parents. They often don't feel their guidance is relevant or relatable. Further, they don't want to be told what to do; they want to "see" what it looks like to set limits in real-life situations that they can relate to—such as YouTube videos or even in TV sitcoms and dramas. These are some of the most powerful key influencers of today's parents.

Parents are most interested in the advice and support of other parents (on- and off-line) whom they see as "experiencing their pain," and who are also in the thick of it and can best relate to what they are going through. This desire highlights the need to meet parents where they are—integrating information into the sources they rely on and ensuring the guidance doesn't come off as patronizing. These findings again point to a need to establish ways to bring parents together in groups, ideally a group of friends whom they trust and in somebody's home. ZTT believes that it was these key features of the groups that led to the intimacy and honesty of the discussions, and to the learning that took place.

Millennials struggle with the most effective and "right" form of discipline and limit-setting. Most use a range of methods including redirection and time-out but have varying

success with these strategies. A majority use some form of physical discipline. Most refer to it as "popping"—a swift spanking—that is not done out of uncontrolled anger, but intended to correct behaviors they are concerned will get their children into trouble in the outside world. Gisele noted, "I'm not trying to make her afraid of me, I'm just trying to discipline her, make her a good kid…I don't want her to get older and be a bad kid; I'm scared she's going to be a bad kid." But many use it with regret, wishing they knew of other ways to set limits that are effective that aren't hurtful. Despite the thousands of professionals out there trying to help parents with this challenge—educating about discipline strategies that are effective but not harsh—there is a lot of work to be done.

Millennial dads want to be perceived and valued as equally important as moms. Dads want to be present—play a more active role in their kids' lives than their own dads were with them. They want to be more accepting and supportive of their children and to discipline differently than their parents did. They don't want their kids to "be the negative statistic." This finding suggests that professionals should do whatever possible to bring fathers in to their services, address gatekeeping, and make resources more relevant to dads. Groups like the ones ZTT held in which fathers meet with their peers, whom they feel safe with and who "get" them, are a promising approach. Many of the groups with dads resulted in their providing very helpful ideas to each other and led to some potentially transformative changes. One father in LA concluded that he needed to forge a less angry and tense, more amicable, co-parenting relationship with his toddler's mother as a result of the discussion about how deeply influenced children are by the way those closest to them interact.

Final Thoughts

This focus group series helped ZTT hone a set of positive parenting messages that are both resonant and relevant for today's parents, regardless of race, culture, and socio-economic and educational status, and that can be useful to the range of professionals providing services to parents of young children. ZTT is using the insights gained from these groups to inform all of the work at ZTT, especially in ways to reach and provide meaningful guidance to parents. ZTT is also engaging media content creators to embed these messages into the popular media outlets that serve as a key influencers of parents.

ZTT is strongly committed to this area of work—listening to parents to ensure that all of our training, resources, and guidance to "The Field" meets parents in their reality. To that end, ZTT held another series of focus groups with parents during the summer in Chicago and Dallas, and conducted a national parent survey—the results of which will be released at ZTT's National Training Institute in December 2015. Stay tuned.

Claire Lerner, LCSW-C is a licensed clinical social worker and child development specialist. She served as the director of Parenting Resources at ZERO TO THREE (ZTT) for more than 18 years, overseeing the development of all print and digital parenting content. Recently she has taken on the position of senior parenting advisor to focus on expanding the organization's reach directly to parents. Claire has also been a practicing clinician for more than 27 years, providing parent education and consultation to families with young children, as well as to local preschools. She also provides training to early childhood professionals and pediatricians on behavior, development, and parenting. Claire has participated on numerous national advisory panels and task forces related to early child development including the National Parenting Education Network and the American Academy of Pediatrics' Committee on Early Childhood Development.

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Strong Military Families Program: A Multifamily Group Approach to Strengthening Family Resilience

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ABSTRACT

Military families frequently display remarkable resilience in the face of significant challenges, and yet deployment and parental separation are significant stressors for parents, particularly those with infants and young children. The Strong Military Families preventive intervention is a multifamily parenting and self-care skills group that aims to strengthen protective factors and promote military family resilience. In this article the authors present the core pillars of the Strong Military Families program and how they contribute to the strengthening of protective factors that help parents cope with stressors and promote family resilience.

More than a million American troops have deployed to Iraq and Afghanistan, with one third having served at least two tours. Children and families have also cycled through these deployments, as 46% of service members have children, and 39% of these children are less than 6 years old (U.S. Department of Defense, 2011). In the face of many challenges associated with deployment, many military families display remarkable resilience. Prior research has identified several protective factors related to military family resilience, such as communication, problem solving, stress management, emotion regulation, and a shared understanding of the deployment experience (Luthar, 2006; Walsh, 2006). Yet the demands of service can pose unique and stressful challenges that may complicate family adjustment (Maholmes, 2012). In particular, deployment and parental separation are significant stressors for families, with difficulty often continuing through the reunification phase. These challenges may emerge early as parents and children prepare for a long-term separation (Osofsky & Chartrand, 2013). During deployment, parents who remain at home report high levels of parenting stress, mood symptoms, and adjustment difficulties (Bender, 2008). Reunification, while often eagerly anticipated, can also pose challenges, including both the normative task of reestablishing relationships, roles, and routines, as well as potentially having to accommodate injuries or psychological impacts (Walsh et al., 2014).

Coping with the deployment cycle poses particular challenges for families with infants and young children given the centrality of attachment relationships early in life and the impact of disruptions associated with deployment (Maholmes, 2012; Sroufe, 2005). Indeed, prior work has suggested that young military children are likely to display confusion and distress during reunification with the deployed parent (Barker & Berry, 2009). Up to 80% of service members report significant parenting stress during reunification with their young children (Louie & Cromer, 2014). To illustrate, a qualitative study conducted by Strong Military Families program faculty and staff (Walsh et al., 2014) highlighted the stress veteran fathers experienced around reconnecting with a child who may not remember or recognize them. As one father described, "He was born, and before he was walking was when I was deployed. And um, I came back, he was standing, gripping onto [my wife's] leg— looking at me like, that's who? She had to tell him, that's Daddy. . . . I have no idea what our relationship would be like if there was no Iraq war. I don't think it would be anything like it is today, I think it would be a lot different" (Walsh et al., 2014, p. 40).

Parenting stress during deployment and reunification impacts not only the service member/veteran, but also affects at-home caregivers, with approximately half of spouses of deployed service members reporting clinically significant parenting stress (Flake, Davis, Johnson, & Middleton, 2009). These findings are important because research suggests that parenting stress in military families is a strong predictor of child maladjustment and increased child behavior problems during wartime (Barker & Berry, 2009; Flake et al., 2009).

The goal of early childhood providers is to mitigate the potentially harmful consequences of the normative challenges faced by military families by strengthening and promoting family protective factors to enhance child and family well-being. Frameworks for intervention that emphasize family resilience and an inherent capacity to address challenges are particularly appropriate for military families, where an emphasis on resilience is strong. Strengthening Families™ (Center for the Study of Social Policy, 2015) provides a relevant framework with an emphasis on protective factors that promote the resiliency, health, and success of young children and families. Within this approach protective factors are the conditions or attributes of individuals, families, and communities that reduce the impact of risk and increase positive outcomes for families. They include: (a) parental resilience, (b) social connections, (c) knowledge of parenting and child development, (d) concrete support in times of need, and (e) social–emotional competence of children (2015). Programs and services for families are understood as best enhancing family resilience through promotion of these protective factors.

Consistent with this approach, prior work does indicate that the risks associated with deployment and reunification can be mitigated through strong protective factors. For example, Flake and colleagues (2009) observed that although parent well-being is the greatest predictor of child well-being, parents' perceived social support also can reduce the effect of parenting stress on child outcomes. Similarly, resources such as a strong military community, social and family support, and access to health care and other services have all been shown to minimize the negative outcomes associated with deployment (Chapin, 2011; Flake et al., 2009; Maholmes, 2012).

Given the evidence for the role strong protective factors can play in promoting military family resilience, there is a clear need for effective preventive intervention programming. A gap exists, however, with regard to availability of tailored, culturally relevant, evidence-based programs for this population. Thus, Strong Military Families program faculty and staff developed a brief, attachment theory-driven multifamily group intervention to enhance positive parenting in military families with young children called Strong Military Families (SMF; Rosenblum & Muzik, 2014).

The SMF Multifamily Group Model

SMF is a 13-session parenting and self-care skills group that aims to strengthen protective factors and promote military family resilience. It was adapted and tailored for military families from an existing civilian model ("Mom Power"; Muzik et al., 2015). SMF has conceptual roots in attachment (Bowlby, 1969) and trauma theory (Cloitre et al., 2009; Herman, 1992), and blends elements from several evidenced-based modalities (Muzik et al., 2015). The SMF curriculum highlights military family experiences and aims to engage participants in a dynamic, interactive, and supportive experience, offering families an opportunity to come together to learn, support one another, and grow in their ability to navigate the challenges associated with deployment and reintegration (Rosenblum & Muzik, 2014).

Photo: Kiwi Street Studios

Frameworks for intervention that emphasize family resilience and an inherent capacity to address challenges are particularly appropriate for military families.

The SMF program is held in the format of a weekly parent group and a concurrent children's group, and is typically led by two trained facilitators who are master's-level clinicians. Recognizing the important role that may be played by multiple caregivers in military families, including the service member/veteran and his or her spouse as well as other caregivers who "step in" to help provide critical support during deployment and reunification, all parenting partners (e.g., spouses, stepparents, grandparents) are welcome to participate in the group. Given the curriculum emphasis on young children, families must have at least one infant, toddler, or preschool-aged child, but all siblings are

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The risks associated with deployment and reunification can be mitigated through strong protective factors.

welcome to the sessions. Each session starts with a meal (typically dinner as most families prefer that this group happen during a weekday evening). During each parent session, facilitators present evidence-based parenting and self-care skills concepts in a friendly, interactive, nonjudgmental, and accessible format. The curriculum is structured but personalized, building a framework for understanding children's behaviors paired with tailored feedback that addresses the unique experiences of each parent–child dyad. While parents attend their group each week, their children attend a child session. Children are each paired with a "buddy" from the Child Team, typically a university student or agency volunteer, who is responsible for providing individual attention and support to each child, thus creating a safe and validating experience for children.

Many parents join the program wondering how they can, as one parent described it, "build a re-connect" with their young child. The SMF curriculum emphasizes that relationships between parents and young children are built and repaired through everyday experiences of nurture and support, delight and play. Through day-to-day experiences parents and children build and strengthen relationships and heal disruptions that have occurred. The curriculum therefore emphasizes helping parents understand and meet children's everyday needs for exploration and connection.

To illustrate, early in the curriculum facilitators introduce a key metaphor: "the Tree." The Tree represents core attachment and parenting concepts (see Figure 1), depicting the balance of attachment and exploration and the ways that children need both a secure base and a safe haven in order to grow and thrive (Bowlby, 1988). When children have a "secure base" and feel safe and secure they are able to explore and grow—that is, to "branch out." Yet in order to support tall branches a tree needs deep roots, and thus children can only branch out when their roots are strong and deep. In the Tree metaphor, these roots are built through connection. At times of stress or vulnerability, children need a safe haven, and when parents meet this need for connection with nurturance, emotional restoration, and relational repairs, roots take hold and grow stronger. The sun behind the Tree underscores the importance of an atmosphere of warmth, joy, and delight that parents provide to nourish growth and help the child to thrive (Muzik et al., 2015). In SMF parents learn how to function as both a secure base and a safe haven for their child, meeting their child's needs for exploration and connection. Elaborations on the Tree metaphor describe the patience it takes to nurture and grow a seedling, as well as how at times of hardship trees are likely to do less branching out and require more "focus on the roots" and needs for connection. These elaborations connect to military family experience around re-building relationships and the need to provide extra nurture and care at times of challenge such as during deployment and reunification.

Consistent with an infant mental health approach that appreciates the critical need for a reflective process, space is intentionally protected each week for the parent and the child team staff to debrief each session. In addition, the parent and child team leaders participate in a weekly reflective supervision with an SMF supervisor, creating a space to consider and discuss observations of each family as well as process any emotional or personal reactions that have come up. This allows the leaders to tailor the intervention to meet each family's unique needs, plan for the next session, and strategize regarding how to connect each family to extra support when indicated.

The SMF Pillars: Promoting Protective Factors

The foundation of SMF rests on five main pillars: attachment-based psychoeducation, self-care, parent–child interaction,

FIGURE 1. **The Strong Military Families "Tree" Metaphor**

enhancing social supports, and connecting to community resources (see Figure 2). These pillars are consistent with and address components of the protective factors identified within the Strengthening Families (Center for the Study of Social Policy, 2015) framework. A description of each of these pillars, how they aim to promote protective factors and family resilience, and brief case illustrations from our group experience, follows.

THE ATTACHMENT-BASED PSYCHOEDUCATION PILLAR: PROMOTING THE KNOWLEDGE OF PARENTING AND CHILD DEVELOPMENT PROTECTIVE FACTOR

The SMF attachment-based psychoeducation pillar focuses on helping parents understand typical reactions of young children to military family experiences, including deployment and reunification, and developing attachment-based parenting skills to meet young children's everyday needs. Decades of research confirms that the foundation of strong relationships and emotional security in young children rests on parenting that is sensitive to children's emotional, behavioral, and physical needs; is responsive and available; and establishes predictability. Yet issues such as traumatic brain injury, posttraumatic stress disorder, prolonged separations, and the stress that often accompanies military service can interfere with parents' ability to meet their children's needs. Parents often find relief in knowing what to expect and what is normal, and in having more skills and knowledge to guide their parenting responses to challenges faced. The curriculum engages parents in activities (e.g., videos, role plays) that are designed to practice skills and strengthen insight and sensitive responsiveness to children's emotional needs.

During an intake interview, Valerie, an Army National Guard Spouse whose husband was deployed to Iraq, shared her frustration regarding her just-turned 2-year-old daughter Liza's refusal to stay in her "big girl bed" at night. She hoped the group would give her tips for getting Liza to sleep in her own room. During the group, as part of the curriculum, facilitators introduced topics related to helping children manage their "big feelings" in everyday situations, noting that this, in turn, helped children address feelings related to deployment and military family stress. During this discussion Valerie made a connection between Liza's feelings about sleeping alone and her father's absence. The other parents in the group and the facilitators helped Valerie brainstorm ideas about how to meet Liza's emotional needs during this "nightly separation," as well as how to talk with Liza about her feelings regarding missing her daddy. At a later session Valerie noted that she felt she understood Liza in a much deeper way having learned about what to expect from young children under stressful circumstances and acknowledged that she also realized her own stress related to single parenting during deployment sometimes made it harder for her to see and meet her daughter's needs for support.

FIGURE 2. **The Strong Military Families Pillars**

Photo: Kiwi Street Studios

The Strong Military Families curriculum emphasizes that relationships between parents and young children are built and repaired through everyday experiences of nurture and support, delight and play.

THE SELF-CARE PILLAR: ADDRESSING THE RESILIENCE PROTECTIVE FACTOR

The self-care pillar focuses on helping parents develop skills they can use to promote stress-coping to enhance resilience and be more effective in meeting their children's needs. Parenting is a challenging job under any circumstances. Stressors, including those associated with parental deployment, visible or invisible injuries, or both, can make it very difficult for parents to focus on

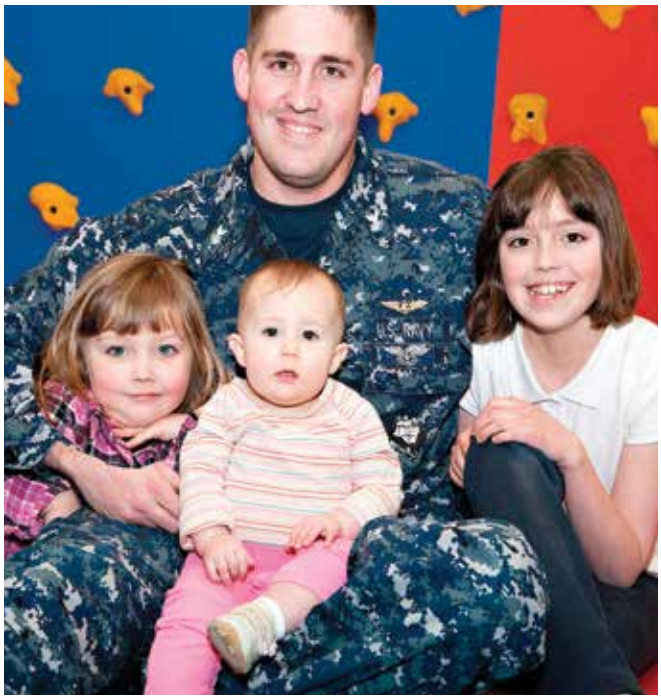

Photo: Kiwi Street Studios

Parents often find relief in knowing what to expect what is normal, and in having more skills and knowledge to guide their parenting responses to challenges faced.

their children's needs when they have needs of their own that go unmet. SMF places a strong emphasis on teaching parents how to manage stress so they can feel empowered to be present and welcoming to their children. When these stressors are reduced parents are able to more successfully "try out" and implement new strategies. Thus, by helping parents regulate their own feelings, their capacity for co-regulating with their children increases. Self-care skills taught in the SMF curriculum are mind–body skills designed to reduce stress and lead parents to a calm state of mind and include deep breathing, progressive relaxation, positive coping thoughts, containing distressing emotions, and other evidence-based strategies (Muzik et al., 2015). Each group ends with parent facilitators teaching the skill or leading a visualization and then allowing parents to discuss how it felt and how they might incorporate the skill into their daily lives.

Learn More

ZERO TO THREE's Military Family Projects
www.zerotothree.org/about-us/funded-projects/military-families

University of Michigan's Military Support Programs and Networks
http://m-span.org/programs-for-military-families/strong-families

National Child Traumatic Stress Networks Resources for Military Families
http://nctsn.org/resources/topics/military-children-and-families

Early in the SMF program, Jason, a member of the Air National Guard with a wife and four children ranging from 15 months to 8 years old, acknowledged his own struggles with posttraumatic stress disorder, and how since returning from Afghanistan he would often yell at his wife and children. He felt badly about this, as he could see how it affected everyone in his family, but he felt helpless to control his emotions. During each SMF session a new self-care skill was taught; as a core skill "deep breathing" is practiced several times across the first several sessions, and is assigned as "homework." Although initially hesitant, Jason eventually practiced the skill after hearing other dads talk about how "powerful" deep breathing could be. At a subsequent session Jason shared that he had used deep breathing to calm himself when his toddler-aged son threw a tantrum at the swimming pool, refusing to get in the water. Jason said that he took deep breaths and, once he was calmer, was able to sit down with his son and physically and verbally reassure him that he was there and it was "OK." Eventually his son was able to enter the pool, and they were able to enjoy the moment together. Jason described how his son had been having "big feelings" and needed a "safe haven," and talked with pride regarding his resilience in the moment that allowed him to provide Chris with what he needed.

THE PARENT–CHILD INTERACTION PILLAR: STRENGTHENING THE SOCIAL–EMOTIONAL COMPETENCE PROTECTIVE FACTOR

The supported parent–child interaction pillar focuses on creating a safe, predictable, and supportive environment for children and parents, and it creates opportunities for parents to practice and engage in playful, sensitive, and responsive caregiving to their children. For example, separations and reunions that occur routinely as parents leave for and return from group sessions provide special opportunities to practice new skills. Separations and reunions are acknowledged by the entire team as they sing a song to signal to children what is about to happen, and during the parent session children are provided opportunities to engage in mastery activities and games that help young children cope with the separation and anticipate their parents' return (e.g., "peek-a-boo"). The program curriculum also brings the attention of parents to the interactions they have with their children during separations and reunions by asking parents to observe and reflect on what they notice their children doing, how they are responding, and how they feel about the interaction. Parents are encouraged to try new ways of responding based on what they are learning in order to address their children's feelings during separations and reunions. This "in vivo" practice allows parents and children to make incremental changes with the support of the facilitators present. This pillar helps parents to actively engage in promoting social–emotional competence in their children by being emotionally responsive to their children's needs and creates an environment for children to feel safe in expressing their emotions and have their needs met.

Lindsay, the ex-spouse of a Navy veteran, had much going on in her life with a new job, financial stresses, a recent divorce, and trying to deal with her 2-year-old, Adam's, challenging behavior. Understandably given the many life stresses she was managing, Lindsay had a hard time figuring out how to respond to Adam's emotional needs. At the first session Adam cried and clung to her when

it was time for the parent group to start. Lindsay said she did not like the good-bye song because it made Adam realize she was leaving, and indicated she preferred to try to leave without his noticing. The following week in parent group she was asked to reflect on what reunion had been like, and Lindsay expressed that "Adam didn't care" when she entered the room. Over time the group facilitators helped parents understand how children can send confusing signals, and yet nonetheless have needs for support in managing their big feelings. Group leaders acknowledged that separations and reunions might be particularly vulnerable times for children and families who had experienced big disruptions in the past. Lindsay was responsive to the guidance and coaching offered during the group, and started to use separation and reunion moments as opportunities to practice different ways of responding to Adam's needs. By the end of the SMF group, Lindsay was able to acknowledge that Adam needed extra support from her during this hard time for their family and described how she was working hard to find ways to acknowledge and help him with his feelings. She noticed that as she met his needs, he was more responsive to her, and she could acknowledge that he "really did need [her]."

ENHANCING SOCIAL SUPPORTS PILLAR: MAINTAINING THE SOCIAL CONNECTIONS PROTECTIVE FACTOR

Social support is enhanced by creating a shared group experience with informal opportunities for parents to build relationships with one another. The social support pillar plays a very important role for military families, particularly for those who are geographically dispersed, for example, veterans separated from service, or those living off base (e.g., Guard and Reserve families). Military families often reference the importance of the "military family" and the sense of esprit de corps and connection to other families who "get it." Thus, the SMF multifamily group approach plays an important role in helping parents to feel less isolated and more connected in their experience of being a military family. During the shared mealtime and parent sessions, parents have the opportunity to share personal experiences, provide guidance and advice to each other, validate one another's experiences, and bounce ideas off of each other. These opportunities to rely on each other as valuable resources allow for parents to bond in a way that supports them in having their needs met so they can be more attuned to their children's needs.

Melanie, a National Guard spouse, arrived to most sessions in a frazzled and upset state; she had three young children, a full-time job, and a husband who was deployed and whom she was considering divorcing. Initially Melanie was very subdued during parent group sessions, but during one group session midway through the 10-weeks, Melanie burst into tears and shared all that was happening with her deployed husband and how hurt and stressed she was about everything. Other parents in the group listened very intently and provided words of encouragement and support. One father in particular acknowledged what a tough time she was going through and that it only seemed natural for her to have such strong feelings. Throughout the remaining sessions other parents actively "checked in" with Melanie to ask for updates and share support. The impact of this peer support was very evident as Melanie appeared much calmer and more regulated toward later sessions. During the final session she acknowledged to the group how important it had been to her to feel "less alone," and disclosed her plan to start seeing a therapist.

THE CONNECTING TO COMMUNITY RESOURCES PILLAR: DELIVERING THE CONCRETE SUPPORT IN TIMES OF NEED PROTECTIVE FACTOR

The connecting to community resources pillar is a critical component of the SMF model. Throughout the 13-week program the facilitators are closely attuned to what family needs may be and how these may be met through resources outside of the SMF program. Facilitators connect families to ongoing services or resources to meet needs in a tailored and individualized way. Referrals can include, for example, connection to high-quality early childhood education programs in the community, mental health resources that take military family insurance, or programs that provide tangible supports for veterans and their families. This individualized approach aims to ensure that families will continue to get the care they need and want once the intervention has ended. Thus SMF can act as a treatment engagement program for families, increasing access to services that the families may not realize were available or did not know how to access. Facilitators can provide a warm hand-off for each family to a culturally competent community resource by helping to make an initial phone call or appointment or by discussing possible barriers to receiving ongoing services.

Katie, the wife of a Marine and mother of two older children and a newborn, was struggling with feeling overwhelmed. During a parent group session she expressed being at her wits' end because she felt she had no support and just could not handle it all on her own. During the group session, it was very clear that she was exhausted—she had a hard time staying awake during sessions. Although she described taking a great deal away from the SMF parent sessions, at her exit interview Katie indicated that the factor she was most thankful for was help finding the support she "really needed." Facilitators had helped her identify a community provider that accepted Tricare (military dependents' health insurance) and who was trained in treating postpartum depression.

SMF: Impacts and Future Directions

The SMF program recognizes that deployment and reunification impacts infants, young children, and the whole family, and aims to support families that have served by strengthening protective factors that promote family resilience (Rosenblum & Muzik, 2014). Preliminary outcome data suggest that this approach is efficacious, demonstrating that SMF is associated with improvements in parent mental health, parenting, and reports of improved child social–emotional adjustment. With the recent draw down of troops, and as the nature of US engagement in global conflicts undergoes changes, it is important that early childhood providers maintain a focus on the needs of infants and young children in the care of veterans and service members, recognizing that needs persist even after the family member that served returns from duty. With this in mind, SMF program faculty and staff are continuing to work on the dissemination of SMF, training community providers in the model to deliver services

to families with a broader geographic reach, and identifying adaptations that can further increase accessibility, including, for example, a multifamily weekend-retreat approach. Through this programming SMF program faculty and staff will continue to support parents in military and veteran families as they help their young children develop resilience, grow, and thrive.

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Holding the Holders: An Interdisciplinary Group Well-Child Model

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ABSTRACT

Using the structure of the group well-child visit model, the St. Luke's Interdisciplinary Group Well Child (IGWC) model integrates primary care and mental health, recognizing the power and importance of dyadic and family relationships in the first years of life. The pilot of this model attempted to harness the "port of entry" afforded with the birth of and adjustment to a baby into the family system. In this model a pediatrician, pediatric nurse, and infant mental health provider partner to create a "holding" environment (Winnicott, 1960) for a cohort of caregivers and their children during regularly scheduled well-child visits. The article describes the structure of group well-child sessions and the authors share preliminary outcomes of the program.

St. Luke's Interdisciplinary Group Well Child (IGWC) model is a pilot program consisting of a co-facilitated, interdisciplinary group well-child visit. The primary focus of the intervention is to support the management and mitigation of parental stressors associated with the care and nurturance of infants and toddlers. The entry of a new baby into the family is "nodal" or significant to the life course of the mutigenerational family system. Within the event of the baby's birth lies the potential to bolster the strength and well-being of the family system (Bowen, 1978; Carter & McGoldrick, 1998).

In the St. Luke's Interdisciplinary Group Well Child Care (IGWC), a pediatrician, pediatric nurse, and infant mental health provider partner to create a predictable and nurturing environment for a cohort of caregivers and their children during regularly scheduled well-child visits. These visits serve as a touch point to celebrate and activate the capacity of caregiver–child relationships through recognition of the baby's language and caregiver questions and concerns. The "group" model of well-child visits creates a unique context in which to harness and foster support amongst caregivers and infants sharing a common developmental experience. For example, the interdisciplinary representation of group facilitators (i.e., pediatrician, nurse, and infant mental health specialist) provides a venue for comprehensive observation and referral in the event that relational, mental health, and/or development challenges exist.

What Is Known About Group Well-Child Care Models

The advantages of group well-child care models are well established, with documented applications dating back to the mid-1970s (Feldman, 1974). Chart reviews of participants of group well-child models have suggested that infants in these families report fewer illness visits between well-child visits when compared to nonparticipants (Taylor, Davis, & Kemper, 1997). More recently, examination of group well-child visit models has suggested that group visits offer an appropriate alternative to individual care with respect to efficiency, clinical effectiveness, and parent and provider satisfaction (Saysana & Downs, 2012). Specifically, group well-child care participants reported the following associated benefits:

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The entry of a new baby into the family is "nodal" or significant to the life course of the mutigenerational family system.

(a) support from other caregivers, (b) opportunities to observe the development process in other same-age infants, (c) learning from the experiences of other participants, and (d) increased access to their provider through group and individual portions included in each session (Page, Reid, Hoagland, & Leonard, 2010). Additional work in this area has suggested that group well-child care models are feasible and valuable to standard training experiences for future health care professionals striving for the promotion of patient-centered care (Page, Reid, Andrews, & Steiner, 2013).

Using the structure of the group well-child visit model, the St. Luke's IGWC Visit Model integrates primary care and mental health, recognizing the power and importance of dyadic and family relationships in the first years of life. To date, limited documentation exists that specifically addresses group well-child models and that implements interdisciplinary co-facilitation. However, there is evidence supportive of the use of additional nonmedical providers to enhance individual well-child visits. For example, the Healthy Steps Program (Zuckerman, Parker, Kaplan-Sanoff, Augustyn, & Barth, 2004) includes well-child care visits facilitated by a physician and child development specialist (typically a nurse, social worker, or early childhood educator) in partnership. Other services are included as part of the Healthy Steps Model for children during the first 3 years of life and their families. These services include home visits, monthly parent group sessions, and written information on prevention. Chart reviews of participating children have suggested positive outcomes when compared to nonparticipants. Apparent benefits include increased timeliness in well-child visits at 30–33 months old and up-to-date immunization records at 24 months. Further, participating parents reported higher frequency of discussions focused on anticipatory guidance topics during well-child visits (Minkovitz et al., 2003).

Increased follow-through with routine health care and motivation to learn about and support their child's development suggest movement in the right direction toward positive child outcomes.

Along with increased follow-through with the medical aspects of care, such as participants in IGWC models using nonmedical facilitators such as infant mental health specialists, additional benefits are noted. For example, parents reported decreased engagement in the use of harsh discipline strategies. Further, parents who were at risk for depression reported that they were more likely to share their feelings of sadness with their provider (Schuster, Duan, Regalado, & Klein, 2000). Collectively, the relational and interdisciplinary qualities of programs such as Healthy Start appear to buffer the impacts of early risk and enhance caregiver capacity toward favorable outcomes. As a component, group well-child care affords a point of continuity across early development.

Our Story: Coming Together for Change

Many professionals believe that effective work on the behalf of young children and families rests on collaborative efforts. Change happens in the presence of synchronicity……when the right combination of people, and resources, are in the right place at the right time. Further, child and family initiatives are best supported when external systems (e.g., funding sources, policy) are available to catalyze and support the work. Systems converge to optimize possibilities for change. The St. Luke's IGWC model emerged as a result of the systemic convergence of state policy and related funding sources. This convergence brought professionals and families from across the northeastern region of the state together on a monthly basis. Their charge was to identify concrete action steps focused on promoting long-term child and family well-being for citizens of the region. With apparent synchronicity, the right people were together at the right moment, and change was set in motion. Several factors, described in the following paragraphs, provided indirect and direct impact for change to happen.

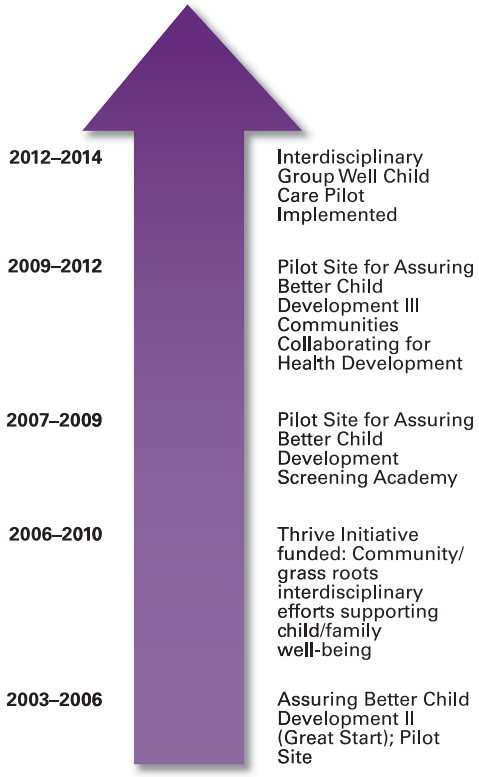
Duluth serves as the county seat for St. Louis County in Northeastern Minnesota. Nestled on the shores of Lake Superior, it is the human services center for small, remote communities on the "Iron Range" and along the North Shore.

Duluth has been described as "large enough" to have the capacity for the mobilization and implementation of innovative programs surrounding child and family health and well-being yet "small enough" to allow for relationships and familiarity across systems of care. In addition, the State of Minnesota has a longstanding record of supporting innovative models of health care and education. The Minnesota Departments of Education, Minnesota Department of Health (MDH), and the Minnesota Department of Human Services promote and enjoy collaborative working relationships across agencies and with networks of administrators and practitioners across the state. As a result of these regional and state characteristics, Duluth and the surrounding area is poised for the creation and implementation of quality preventative programming for infant, toddlers, and their caregivers.

Figure 1 outlines the chronological events foundational to the emergence of the Duluth IGWC. Although not an exhaustive list, several key events fostered the IGWC's beginnings. Supported as a pilot site during three phases of the Assuring Better Child Development (ABCD) grant initiative, the Duluth area was connected to resources that brought community professionals and parents together with the focus on strengthening primary health care services and systems that support the healthy development of young children from birth to 3 years old. ABCD II (2003–2006), consisted of efforts led by the Minnesota Department of Human Services to build the capacity of Medicaid programs in the delivery of care supportive of children's healthy mental development. In 2007, Minnesota was invited to participate in ABCD Screening Academy, which provided technical assistance to 21 states or territories. Technical assistance promoted the use of a general developmental screening tool as a part of health supervision during well-child care provided by primary care providers who act as young children's medical homes. ABCD III, launched in 2009, charged participating communities with the development and testing of sustainable models for improving care coordination and linkages between pediatric primary care providers.

Simultaneous to ABCD participation, the Minnesota Thrive Initiative was launched in 2006 by the Minnesota Initiative Foundation. The Minnesota Thrive Initiative nurtured grassroots, community-based efforts to promote the healthy social and emotional development of young children from birth to 5 years old. In Duluth, monthly meetings representative of a diverse cross sector of community members served as an opportunity to action plan and organize. Among the membership were medical and mental health professionals who recognized the possibility and potential of the Duluth IGWC. While Thrive-funded activities spanned from 2006 to 2010, the organic and cross-disciplinary work of original members continues through alternative funding streams.

FIGURE1. **Systemic Convergence**



St. Luke's IGWC Model

To date, approximately eight cohorts of infants and caregivers have completed or are participating in St. Luke's IGWC. Each cohort includes 4–6 parents or families and their child who share the same natal month. Similar to other group well-child models (Page, et al., 2013; Page et al., 2010; Saysana & Downs, 2012), the visits follow the preventative schedule developed by the American Academy of Pediatrics (2, 4, 6, 9, 12, 15, 18, and 24 months). Visits last 90–120 minutes and are conducted in early evening hours at St. Luke's Pediatric Clinic in Duluth, Minnesota. (See Table 1, which outlines the agenda and role of medical providers and the infant mental health specialist.)

TABLE 1. **Content and Flow of Group Well-Child Care Sessions**

	Role of pediatrician/nurse	Role of infant mental health specialist
Check In (5 minutes)	Parents and babies arrive, check in, and go to group space.	
Baby Mat Time/ observation and anticipatory guidance (45–60 minutes)	▪ Co-facilitate introduction to group discussion and question about parenting concerns. ▪ Co-facilitate discussion about age-appropriate anticipatory guidance on sleep, nutrition, emotion and mood, injury prevention, and violence. ▪ Observations and narration of "in the moment" interactions between babies, caregivers, and the "others" in their environment.	
Individual medical review/ waiting room informal reflection (45–60 minutes)	▪ Physician talks to parents and individual performs and documents medical exam. ▪ Nurse gives immunizations. ▪ Parents help measure and document child's length, weight, and head circumference.	▪ Infant mental health specialist remains in the waiting room with the intent of creating a "holding environment" for parents. ▪ Infant mental health specialist observes narrative dialogue and "presence" of caregivers offering supportive listening.
Wrap Up (5 minutes)	Available staff (typically infant mental health specialist) assists caregivers in the transition as they prepare to leave.	

Photo courtesy St. Luke's Pediatric Associates

Examination of group well-child visit models has suggested that group visits offer an appropriate alternative to individual care with respect to efficiency, clinical effectiveness, and parent/provider satisfaction.

The group well-child sessions are co-facilitated by a pediatrician, a registered nurse, and an infant mental health specialist. The roles of each with regard to the parent(s), child, and one another change across the session. The notions of holding (Winnicott, 1960) and containment (Bion, 1962) permeate the milieu of the St. Luke's IGWC sessions. *Holding*, as conceptualized by Winnicott, describes a feature of maternal care for her infant and the gradual individuation process. Accordingly, this process extends across time and developmental stages, with mother adapting and responding to soothe the infant both physically and mentally. Bion's model of *containment* is represented in an infant's projection of unmanageable feelings onto the primary caregiver, who then "use their minds" to process and reflect their infant's emotion back to the infant in more tolerable form. Central to both concepts of holding in containment is the idea of consistency over time in regard to caregiving. St. Luke's IGWC sessions are short and sporadic, with limited opportunities for direct interactions with the caregiver–child dyads. This limitation serves as a barrier to caregiver access to the full experience of holding or containment. Therefore, in application to the model, these phenomena may more appropriately be termed *provisional holding* and *provisional containment* (Peers & Frost, 2013).

In recognizing the importance of parallel processes (Heffron & Murch, 2010), IGWC facilitators jointly orchestrate and "tune in" to each dyad affording provisional holding and containment. Hence, caregivers are more present and available to hold and offer containment to their infants. This occurs across each session, but is most apparent during the 30–45 minute group time, which takes place in a circle on the floor. During this time, the pediatrician, registered nurse, and infant mental health specialist introduce relevant topics associated with anticipatory guidance on sleep, nutrition, emotion, injury prevention, and violence. In addition, topics of discussion emerge organically from parent reports and questions related to caregiving experiences occurring since the last visit. Spontaneous observation and "in the moment" narration of infant and toddler behavior provide a rich opportunity for shared dialogue between caregivers and for co-facilitators to observe interactions within and across caregiver infant dyads. Observation, in turn, allows a glimpse into the infants' and caregivers' "experience" of their relationship. This information is valuable to supporting containment and continued holding.

Following group time, caregiver–infant dyads alternate between individual medical reviews with the pediatrician and nurse and informal reflection in the waiting room with the infant mental health specialist. During the individual medical review, the registered nurse provides appropriate immunizations if parents desire. The pediatrician performs a physical examination, discusses developmental screening results, and provides individualized care and response to questions.

Caregivers are active participants in measuring, monitoring, and documenting their child's developmental status. During the waiting room reflections, one to two caregiver–child dyads interact with the infant mental health specialist. The focus of the waiting room reflection is either an extension of what emerges during group time or questions that arise spontaneously from caregivers. Collectively, the medical review time and the waiting room reflection offer additional interaction time in which to promote caregiver access to holding and containment. For example, as co-facilitators observe and are in the presence of each caregiver–child dyad they are able to "wonder" and "explore" possible meanings of what they "see" with the parents. This interaction fosters increased caregiver capacity to hold and provide containment for the infant.

As the group well-child visit wraps up, at least one co-facilitator assists caregivers in preparations for departure. Emotional and physical support during this transition is viewed as vital to the parallel process model adopted in the St. Luke's IGWC model. "Being with" caregivers as they pack up and maneuver their bags, car seats, and cold weather apparel serves to communicate a sense of care, safety, and trust. Further, it allows caregivers an additional opportunity to share questions and concerns as they transition to their routine. The availability and presence of an IGWC facilitator during wrap up is intended to further emulate a holding environment for the caregiver.

Following each IGWC session, co-facilitators engage the power of the parallel process through intentional reflective sessions. Intentional time is set aside immediately following each session for co-facilitators to process and unpack what transpires across interactions and observations that occur. Thus, holding for all layers of the IGWC model is provided with the opportunity for co-facilitators to "wonder" about and "reflect" upon their experience.

PRELIMINARY FINDINGS

As stated, the IGWC project is currently in its pilot phase, with preliminary data available with regard to the impacts of participation on parental stress. Anecdotal information collected during the pilot phase of the St. Luke's IGWC model reveals several parent perceived benefits. At the 24-month well-child visit an informal focus group with the participants revealed that parents were highly satisfied with the group well-child visit

model. They specifically noted satisfaction with: (a) access to other parents who were experiencing similar challenges and successes in parenting, (b) adequate time to talk with professionals about parenting concerns, (c) access to a safe place to share questions and concerns related to parenting, and (d) the provision of experiences that create positive perceptions of medical visits for their child.

Future Directions

To date the St. Luke's IGWC visit model extends across 8 cohorts. In this pilot phase, lessons learned inform actions taken to refine project content and monitoring. The following actions steps will be taken:

1. IGWC is in the process of developing intentional curricular content that aligns with caregivers' anticipatory guidance concerns. Conceptual frames such as the Circle of Security (Hoffman, Marvin., Cooper, & Powell, 2006), Newborn Behavioral Observation (Nugent, Kiefer, Minear, Johnson, & Blanchard, 2007), and Attachment Biobehavioral Catch Up (Dozier, Peloso, Lewis, Laurenceau, & Levine, 2008) models will be integrated into group and waiting room informal reflection periods of the group well-child sessions.
2. The IGWC intends to implement a mixed methods research design to determine the efficiency and effectiveness of the group well-child visit model. With an established history and synergy collected across 8 cohorts of group well-child families, it now seems that a rigorous evaluation is timely.
3. Members of the IGWC team have partnered with interested community members and agency representative to establish a task force. The charge of the task force is to explore opportunities for extension of the model to underserved sectors of our region. In the current iteration of St. Luke's IGWC model, participating families represent middle to upper-middle class sectors of the population. The hope is to extend access to the model to families experiencing multiple risk factors and who face multiple barriers to accessing quality health care.

Photo by Mary Ann Marchel

During the individual medical review, the registered nurse provides appropriate immunizations if parents desire. The pediatrician performs a physical examination, discusses developmental screening results, and provides individualized care and response to questions

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ABSTRACT

Caregiver–child relationships offer the first opportunity for a healthy start and the possibility for a secure attachment. Balanced and healthy dyadic emotional communication is referred to as "emotional availability" (EA; Biringen, Robinson, & Emde, 1998). EA in a family is enhanced when there is lower stress, often addressed through meditations. In addition, EA is facilitated when a family is aware of the impact of intergenerational issues and current attachment with one's child. Here, we describe these three pillars of our work (EA, attachment, and mindfulness) and put forth the idea that these are all practices that should be done on a daily basis.

Emotional availability (EA) refers to six qualities of dyadic relationships, including four caregiver dimensions (sensitivity, structuring, nonintrusiveness, and nonhostility) and two child dimensions (responsiveness to the caregiver and child involvement of the caregiver). It is important to note that the two child qualities represent not temperament, but the child's internalization of whether a relationship "feels" good (or not). EA is about dyadic or relational connection, rather than about individual characteristics of the caregiver or child. With that said, however, EA is unique in that it does allow professionals to make pronouncements about whether the child is at a similarly healthy and balanced level as the parent, whether the child looks to be relating better than the parent in some ways (e.g., child looks to be happier or more appropriately engaged than what one might expect based on what the parent brings into the interaction), or whether the child looks to be less available than the parent (e.g., turning away a great deal during interaction though the parent is trying his best). As such, the system is particularly useful in the evaluation of different family structures, including adoptive families (Baker, Biringen, Schneider, & Meyer-Parsons, 2015; Barone, Lionetti, Dellagiulia, Alagna, & Rigobello, 2015) and families undergoing the divorce transition (Sutherland, Altenhofen, & Biringen, 2012). The system also has been useful in program evaluations.

EA Components

In the most current version of the system (Biringen, 2008), the parent or caregiver is rated on four qualities, while the child is rated on two qualities. Here is a brief description of these six dimensions. **Caregiver sensitivity** (7-point scale) describes a range between highly attuned, affectively positive, and

appropriately responsive (on the high end) to overly connected, warm yet not sensitive to the child's cues or simply inauthentic (middle) to withdrawn and emotionally unavailable (low end). **Caregiver structuring** (7-point scale) ranges between appropriate guiding, commenting, limit setting in a way that the child is able to understand (high end) to over-the-top structuring efforts that may go unnoticed or be unwelcomed by the child (middle) to unstructuring, neglecting behaviors (low end). **Caregiver non-intrusiveness** (7-point scale) refers to the caregiver's availability and presence without being overcontrolling and taking away the autonomy of the child, with a nonintrusive emotional presence (on the high end) to benign behaviors that are nonetheless over-controlling (middle) to intrusions that include physical interventions (low end; e.g., leaning over to take toys away or moving the child's person without appropriate language to prepare the child). **Caregiver nonhostility** (7-point scale) ranges from a peaceful, calm style (high end) to impatience and mild discontent (middle) to openly hostile, threatening, or frightening behavior (low end).

Child responsiveness to the caregiver (7-point scale) ranges from appropriate responsiveness, happy presence (high end) to over-connection through distress and crises (middle) to emotional unavailability to the caregiver (low end). Over- and under-responsiveness are also coded on the low end. **Child involvement of the caregiver** (7-point scale) ranges from appropriately engaging behaviors, such as bringing toys to the caregiver (high end) to over-involving behaviors, including through negative means (middle) to uninvolving, unengaging behaviors (low end). Again, over-involvement as well as under-involvement are noted.

To evaluate the child as being on the high end of the spectrum, it is important that the child shows a balance between age-appropriate independence and connection to the caregiver, very similar to the attachment concept of "attachment-exploration balance" or "secure base behavior" (Ainsworth, Blehar, Waters, & Wall, 1978). The EA Scales (Biringen, 2008) were designed as an instrument that can be used to evaluate child–adult relationships across a wide developmental spectrum and show documented evidence of applicability for children ranging from just a few weeks to 14 years old (Biringen et al., 2014).

EA is a subtle, yet user-friendly and verstatile, tool to understand and evaluate adult–child relationships (Biringen et al., 2014). In addition to the six scales described in the previous section, the system also yields an attachment measure, referred to as the Emotional Attachment and Emotional Availability Clinical Screener (EA2-CS), or more briefly, Attachment Screener (AS). This is a 100-point scale divided into 4 categorical zones (Emotionally Available; Complicated; Detached; and Problematic/Disturbed) that (at least) theoretically map onto the four traditional attachment categories.

A few studies using the screener have shown that it is associated with attachment and relationship indicators. For example, Baker and Biringen (2012), using the Attachment Q-Sort (AQS; Wasters & Deane, 1985), showed that the screener is associated with the AQS. Another study by Espinet and colleagues (2013) used the Parent-Infant Relationship Global Assessment Scale-Revised (ZERO TO THREE, 2005) and showed similar results. An additional study tested EA's contribution to child and parent outcomes in adoptive families (in the context of an attachment-based intervention), with positive findings (Barone et al., 2015).

EA and Child and Parent Outcomes

EA in adult–child relationships predicts a wide range of parent and child outcomes, associated with stress. EA significantly relates to child attachment security, both with parents and teachers (Altenhofen, Clyman, Little, Baker, & Biringen, 2013; Easterbrooks & Biringen, 2009). A secure attachment indicates a positive and balanced response to the stress of a separation from the attachment figure. EA has also been linked to a child's emotion regulation: Children from low-income households who experienced higher EA in their mother–child relationships demonstrated better emotional control during the stress of a challenging situation (Little & Carter, 2005). Another study found that higher levels of maternal EA predict better regulation of stress responses among highly reactive, inhibited children (Kertes et al., 2009). On the parental side, maternal anxiety as well as depression (both self-reported as well as diagnosed) have been associated with lower EA (Biringen et al., 2014).

Interventions Using the EA Framework

The construct and assessment of EA as an evidence-based tool in basic science as well as program evaluation studies is extensive, with 359 studies to date and on average 15 publications a year (Lotzin et al., 2015). We also believe that these six qualities are important features in any program effort, be it evidence-based or not. Each and every child is entitled to an environment that is conducive to emotional connections that are healthy, and each and every individual who bears, adopts, fosters, or teaches a child needs to embody these qualities.

How do we get this to happen? We have developed two different (but related) programs to "plant seeds" in adult minds and behaviors that contribute to EA: a manualized 4-week program and a one-session EA module. The idea is that most people have some of these skills but they may also have life issues that serve as psychological obstacles. Such life issues include one's relational and attachment history or stressful life experiences (e.g., personal or family trauma, or historical or cultural traumas such as those that may exist for American Indians or African Americans). Other issues include current or ongoing life stress or a personal physiology that is reactive to stressful circumstances.

The Manualized 4-Week Program for Parents

We have developed a 4-week program (delivered in either group or individual formats) which involves a video playback component. This parenting curriculum has been evaluated and shown to improve observed EA (Baker et al., 2015) and to reduce levels of self-reported stress as well as self-reported depression in

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Emotional availability is a subtle, yet user-friendly and verstatile, tool to understand and evaluate adult–child relationships.

parents. In addition to reductions in parenting stress, the parents rated their children as less demanding after going through this program, suggesting it was less stressful to live and interact with them (Biringen et al., 2010). In order to conduct evaluations, surveys and videos of parent–child interactions are collected before the program begins and then at the end of the program participation.

Recent modification of the program has included a mindfulness component. Mindfulness has become a burgeoning field of study for enhancing physical, emotional, and mental well-being. Originally derived from Buddhist philosophy but now secular in approach (Kabat-Zinn, 1990), mindfulness is a mental technique that includes purposeful, nonjudgmental, awareness that is characterized by openness, curiosity, and acceptance. Mindfulness (or mindful meditation) has been shown to increase empathy, compassion (toward oneself and others), emotion regulation, communication, tolerance, and acceptance of one's interactional partner. The mindfulness literature suggests that these attributes surface because of lowered stress and reactivity in the individual. Many professionals have speculated that mindfulness promotes perspective-taking which allows interactive partners to exhibit more tolerance and acceptance during stressful times.

In contrast to a full mindfulness intervention, the program uses "micro-mindfulness," or a mindfulness strand or pillar—a pillar that helps prepare the adults for interactions that are more calm, peaceful, and aware of the moment. The sessions start and end with meditation, while the middle of the 2-hour program involves EA and attachment. Some of the meditations used include: 3-minute meditation (with a focus on one's breath), walking meditation (being aware of one's slow and deliberate walking in the room where the training is taking place), and kindness practice (speaking in language of kindness, gratitude, and appreciation, to both the self and to others, with practice of doing so in session). The facilitators also encourage people to see activities such as regular running, yoga, "taking in" awe-inspiring scenes such as the mountains or the ocean, or artistic creations of such as part of such a practice.

The program has been tested not only with parents (of children birth to 14 years old) but also with expectant parents during the last trimester of pregnancy, and then repeated during the postnatal period. There is so much for most parents to learn related to mindfulness, emotional attachment issues, as well as EA. Most important, there is so much to practice in each of these areas, be it the daily practice of 3-minute breathing, the practice and art of being emotionally available and recruitable (e.g., even when one is working at home with ready access to technology), or knowing that when one raises one's voice, it might be because of similar happenings in one's family of origin (and practicing restraint in this area).

Session 1 begins with an introduction to the ideas of self-care, self-compassion, and mindfulness practice. The facilitator states, "When stressed, it is not possible to be our best in relationships. Sometimes, stressors are short-term ones, and sometimes they are long-term ones that come from our own childhood, but being calm and at peace within ourselves (biologically) can be a big boost to our emotional availability.…At the beginning and end of sessions, we will nurture mindfulness. This is a practice in which we stay in the moment, in a calm and relaxed state, and focus mostly on the body, such as breathing, walking, or other simple activities. Mindfulness allows us to be present with our children and others (such as spouses/partners)."

Participants are then shown videos of other parents (from previously administered programs). Participants are reminded to watch for the four parental qualities (sensitivity, structuring, nonintrusiveness, and nonhostility) and two child qualities (responsiveness to the parent and involvement of the parent). Group discussion of the videos ensues, with the question, "What do you see in this relationship?"

- Secure base or not?
- Language used?
- Emotional tone?

Participants complete their observations of this in a parent workbook that provides a chart with EA qualities, and the facilitator assists parents to "see" instances of sensitive behavior, instances of intrusive behavior, and so on. Parents are reminded to watch for:

- Parent sensitivity: How sensitive is she to her child? Remember to attend to how this child is responding to her, which reflects their history of interactions together.

- Parent structuring: Did this parent structure interactions with this child appropriately, at the right amount, not too much, not too little, keeping his child's reactions on the radar screen?
- Parent nonintrusiveness: Is the parent available to this child without being intrusive, again keeping the child's reactions on the radar screen?
- Parent nonhostility: Is there any sense of obvious or hidden hostility?
- Child responsiveness: Does this child look happy and ready for connection?
- Child involvement: Is this child actively involving and engaging the parent?

After gaining an introduction in these areas, the group discusses other important relationships (e.g., significant others) with whom they might want to be more emotionally available, or receive more EA. The kick-off question for this is: "Now that we are on this topic and can take a focused look, what do you think will happen when you apply these qualities to your relationships with your partner/spouse/ex/other family?" In so doing, they begin to see that a ripple effect of relationships on relationships can be created through this training.

Session 2 introduces the actual practice of mindfulness, the 3-minute breathing space as described by Segal, Williams, and Teasdale (2002) in *Mindfulness-Based Cognitive Therapy for Depression*.

The first thing we do with this practice, because it's brief and we want to come into the moment quickly, is to take a very definite posture… relaxed, dignified, back erect, but not stiff, letting our bodies express a sense of being present and awake.

Now, closing your eyes, if that feels comfortable for you, the first step is being aware, really aware, of what is going on with you right now. Becoming aware of what is going through your mind; what thoughts are around? Here, again, as best you can, just noting the thoughts as mental events…so we note them, and then we note the feelings that are around at the moment…in particular, turning toward any sense of discomfort or unpleasant feelings. So rather than trying to push them away or shut them out, just acknowledge them, perhaps saying, "Ah, there you are, that's how it is right now".….And similarly with sensations in the body…Are there sensations of tension, of holding or whatever? And again, awareness of them, simply noting them. OK, that's how it is right now. (p. 197)

The session then introduces the language of emotional attachment. The session covers the topic of participants' attachment memories and how that can affect their parenting. Sometimes people are more concerned about this than the possible pain of childbirth. The emphasis is that attachment qualities can be improved with practice—attachment is the quality of the emotional connection between a parent and child, and whether it is "secure" or "less secure" or even "'insecure" is something that can be work on and changed if need be. Babies begin to show the clear signs of an attachment by the end of the first year.

Here are the instructions to one of the activities: "The attachment style you have may influence the way you parent your child(ren). This worksheet lists your parents' behaviors as you were growing up. If a particular box seems to best describe your memory of your own parents' parenting qualities, write down three specific events, where indicated, that make you think about your parents in this way. You might feel and remember your mother versus your father in different ways (such as, mother in loving ways vs. father in less loving ways), and where different focus on your experience of your mother for the purposes of this exercise."

Box 1	**Box 2**
I felt I could seek out a parent immediately when needed. I remember being happy. I remember getting a lot of positive attention. It was easy to connect with others, including parents and friends.	I did not go to a parent when I was sad, angry, or hurt. I felt like a loner. I didn't have many people I could turn to. I felt rebuffed when I made efforts to get close; I don't remember.
Box 3	**Box 4**
I was overly emotional and "sensitive." I remember being overprotected or catered to a lot. I constantly needed people around me. I constantly tried to please others; I took care of others.	I was a mix of things in boxes 2 and 3. I experienced many frightening or threatening things in my life as a child.

The facilitator then illustrates that being in one or another box is a choice, a positive and optimistic stance.

Choice 1	**Choice 2**
I feel I can seek out others immediately when needed; I am happy; I get lots of positive attention from others; It is easy to connect with others.	I don't go to others when I am sad, angry, or hurt; I am a loner. I don't have many people I can turn to; I feel easily rebuffed when I make efforts to get close.
Choice 3	**Choice 4**
I am overly emotional and "sensitive"; I constantly need people around me; I constantly try to please others; I take care of others. I tend to be pretty negative in my outlook, deep down.	I am a mix of things in choices 2 and 3. I experienced many frightening or threatening things in my life as a child and continue to feel those negative feelings at the extreme.

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Babies begin to show the clear signs of an attachment by the end of the first year.

Session 3 involves checking in about self-care during the week. The facilitator begins mindfulness practice, with 3-minute breathing. Then the facilitator begins a discussion of the practice of mindfulness in the face of stress. The facilitator states,

Distinguish stressors from stress—we are faced with potential stressors. Stress is the response we experience within our own bodies in reaction to what the world brings our way. While we can't control most of what life brings our way, we can have a sense of agency in how we respond to what life hands us. By being present, we increase the chance that we will see clearly what is happening so that we can choose a more skillful response, rather than going on automatic pilot and engaging in our habitual patterns of reactivity.

The facilitator shares the following ideas:

- It is helpful to remember that we all have difficult moments, good moments, and lots of ordinary moments—this is true of life and parenting.
- Mindfulness helps us tune in—to our experience, our needs, our child's experience, our child's needs—and to manage difficult parenting moments.
- Mindfulness is not about changing circumstances, but rather about changing how we relate to circumstances. Often our suffering arises from our reactivity (in the mind), not our actual felt experience.

Given the practice of mindfulness, participants are then ready for video reflection of their own and other group members' videos. It is important for the facilitator to study the videotapes beforehand and prepare feedback. In particular, the facilitator should find a segment or two of strength that can be shared. It is also important for facilitators to see and point out some areas of growth (lest participants think that this review is all things they know already).

Session 4 is very similar to the third session, and involves continued check-in about self-care, mindfulness practice in daily life, and whether any issues related to what participants might want to do differently than in their family of origin or in some other historical way. In addition, to put it all together, the remainder of the videos of the group are viewed and discussed, as a way to nurture EA practice. Just like mindfulness, EA and emotional attachment are daily practices and goals. Note that the program is used with expectant parents and introduce the idea of prenatal attachment, and both assess and nurture this quality through discussion.

One-Session EA Module

We have developed a one-session EA module that can be integrated into other intervention programs so that they can be "emotionally" enhanced. We believe there are three active ingredients or pillars to this program that help address stressed parenting. The first is mindfulness practice, and the program uses a *micro-mindfulness* practice, meaning bringing in the different practices of mindfulness (3-minute breathing, walking mediation, and kindness practice) at the beginning and end of each session. The two additional pillars associated with relationships involve EA and emotional attachment. To get ready for relationship practice, facilitators discuss the six qualities of EA in the context of videos from a prior program (where the facilitators have permission) as well as the videos of members of the group, and then ask participants to become aware of this practice during the week with their children or with their partners, emphasizing the ripple effect of relationships on relationships. In other words, caregivers are not emotionally available or emotionally unavailable, but need to have a daily practice in which they are aware of the importance of this in their lives and grow in sensitive, appropriately structuring, and nonintrusive and nonhostile ways. In addition, we do some psychoeducational work on secure and insecure forms of attachment as well as family attachment history and start a practice of being aware of how participants' history might affect the present. While mindfulness practice involves a focus and awareness of the moment, relationship practice involves a practice of using the past and history to strengthen the moment.

The four-session full EA program provides a fuller understanding of these ideas and practices, and may be repeated. For example, we have delivered the program to expectant families and then repeated it during the postpartum period. The one-session EA module, on the other hand, is an emotional enhancement to

any program already being implemented. The latter provides an introduction to what we now view as the three pillars of practice (mindfulness, attachment, and language of EA). All formats provide direct coaching via videoplayback about real interactions—asking participants "What do you do in the moment?" We believe that helping parents to calm by use of meditation, to understand and appreciate their early relationships during their formative years, and to have a language of EA to which they can turn when they need or want guidance is a simple, yet meaningful practice.

Acknowledgment

We acknowledge and appreciate funding from the Colorado School of Public Health.

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Lia Closson is a graduate student at Colorado State University, working toward a master of science degree in human development and family studies. Lia obtained her bachelor of science degree in human development and family studies from Colorado State University. She is currently working on research projects that examine emotional availability, emotional attachment, mindfulness, and psychological flexibility. Lia is interested in working with families during the perinatal period, concentrating on perinatal mood and anxiety disorders, infant sleep, and the couple relationship.

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Building an Evidence-Based Mental Health Program for Children With History of Early Adversity

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ABSTRACT

Adoption is a major intervention in a child's life, however internationally adopted (IA) children remain at risk for long-term neurodevelopmental and mental health issues due to the fact that most of them have a history of early adversity prior to their adoption. In the last 20 years, extensive research with this population has increased the understanding of the risk factors related to early adversity and their long-term outcomes. This article illustrates how this information can be integrated into clinical practice, specifically the identification of physical and mental health areas that should be the focus of an initial clinical evaluation for higher risk children.

Parents of newly internationally adopted (IA) children are faced with an overwhelming number of decisions to make and questions to ask, such as How is my child's current physical health? Where is my child developmentally? How can I develop an attachment relationship with my child? What can I expect for the future? How can I help my child to reach his full potential? Lessons from research can help professionals to answer to these questions and help parents to make the best choices for their child's future health and well-being.

Advances in professionals' understanding of the impact of early adversity on lifelong health underscore the need for a more comprehensive clinical approach to meet the needs of at-risk children such as IA children (Garner et al., 2012). Given the need for prompt and early interventions to stave off potential negative outcomes later in life, the earlier these children are assessed and supported, the better their chance of having positive future outcomes (Shonkoff et al., 2012). The majority of IA children are adopted within the first years of life (Bureau of Consular Affairs, 2013) and prior to adoption they often face a range of adverse experiences, including institutional care, neglect, multiple placements, and physical abuse (Johnson, 2002). Furthermore, many of these children have a history of malnourishment and lack of appropriate medical care (Johnson & Gunnar, 2011). As a result of these experiences, more than 85% of IA children have either physical health problems or developmental delay at the time of adoption (Johnson et al., 1992).

Fortunately, children coming from adverse environments experience dramatically improved health status, physical growth, and general cognitive development after adoption (Johnson & Gunnar, 2011; Nelson et al., 2007). However, in spite of these improvements, IA children continue to experience long-term neurodevelopmental and mental health challenges after adoption, including problems with specific cognitive and social–communication functions, as well as behavioral and emotional regulation issues (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003, 2008). Given that adoption clearly demarks the period of early adversity, this population has drawn increased attention of researchers in the last 20 years. The research findings have helped professionals to learn more about the domains at risk for long-term challenges and about underlying mechanisms that translate early adversity into long-term negative outcomes. The next step is to apply these findings to develop a new framework for clinical practice.

Consequently, the overarching goal of this article is to explain how this advanced understanding of the effects of early adversity can be translated into a more comprehensive clinical framework for helping to identify at risk children and provide

early interventions aimed at improving long-term mental health and neurodevelopmental outcomes soon after adoption. This framework also emphasizes addressing needs of adoptive parents during the initial post-adoption period. Parents may initially feel stressed and overwhelmed by their child's extensive medical needs in addition to stress associated with family transitioning. It is necessary to help parents to understand and navigate the developmental and mental health needs of their child post-adoption and to introduce coping strategies with the child's transition into their new family. Finally, this framework will give additional guidance to medical and mental health providers to identify children at risk, which would complement the existing American Academy of Pediatrics recommendations for the initial medical assessment and for hearing, and vision, and developmental screenings (Jones et al., 2012).

In summary, this article will lay out a framework for the assessment and appropriate interventions for each domain recommended during the initial assessment (see box Sam's Story). In the domain of physical health status, the framework encompasses physical growth markers and nutrition status. In the domain of mental health status, this framework emphasizes the ability to signal emotional needs, communication skills, and social engagement. These domains are subsequently incorporated into a multidisciplinary model for use in clinical practice which aims to optimize long-term positive outcomes.

Initial Health Status Evaluation

The American Academy of Pediatrics recommends that every IA child should visit a medical provider for an initial health status evaluation in the first few weeks after arrival in the US (Jones et al., 2012). The aspects of a child's health status that

Sam's Story

Sam, who was from an African country, was placed into institutional care when he was a few weeks old. He was severely malnourished. There was no information available regarding his family or health prior to his placement in institutional care. Based on the medical reports available to his adoptive parents, throughout his stay in orphanage care his physical growth was reported to be compromised but there were no other major medical issues. His adoptive parents report that his orphanage was clean and children had sufficient food. Each group within the orphanage was comprised of 15–20 children and 2–3 caregivers.

Sam arrived to the U.S. with his adoptive parents when he was 18 months old. His initial post-adoptive clinic visit 1 month after his arrival included medical and mental health evaluations. The physical exam revealed his length-for-age was 3 standard deviations (*SD*) below the norm, his weight-for-length was 1 *SD* below the norm, and his head circumference was within the normal range. In accordance with standardized international adoption guidelines, blood work and stool were sent to the lab for immunization titers, complete blood count, thyroid studies, and screenings for major infectious disease and nutrition. Sam had received immunizations in Ethiopia and, except the polio vaccination, they were effective. Laboratory tests showed no acute infectious issues, normal thyroid testing, and no intestinal parasites. However, Sam was found to be iron deficient: hemoglobin 11.8 g/dL (118g/L); serum ferritin 11 ng/mL (24.7 pmol/L). He was able to walk, and his fine motor skills were in the normal range.

During the initial visit, Sam showed some affection toward his adoptive mother. He frequently sought to make eye contact with her, smiled at her, and rested his hand on her leg. During the physical exam when the stethoscope was put to his chest, he looked frightened but did not move—he did not move closer to his mother and was sitting completely still with his eyes wide open. He didn't talk or make any sounds, nor did he look to his mom for support. Sam was mildly curious, but he did not fully explore his environment. According to Sam's parents, Sam has temper tantrums at home as well as issues with sleeping, specifically not wanting to go to bed and frequently waking up. He was reported not coming to his parents when physically hurt or upset. They also reported that he is very friendly with new people who come to their home and likes to climb into their laps. He did not speak in his native language and was not yet using English words at home.

Conclusions

Recommendation for Physical Health Status:

Sam shows his growth to be stunted physically and is identified as iron deficient, thus follow-up for his trajectory of catch-up growth and nutritional intervention has been recommended. Given that both these factors are associated with high risk for problems with neurodevelopment, Sam will also be followed for his developmental trajectory at 6 months and 1 year post arrival.

Recommendations for Mental Health Status:

It was explained to the parents that Sam is in the process of developing close emotional relationships with his parents, but due to his early experience of adversity he doesn't know how to signal distress, how to regulate emotions, or how to organize them around his caregiver or parent. At their initial visit, a mental health provider helped the parents to recognize how he is coping with distress, like the freezing observed in reaction to the stethoscope, and they will be encouraged to reassure Sam when they learn to recognize that he is distressed and to provide useful coping strategies. It was important for parents to understand that his experience of early adversity impacts his ability to signal his needs and come to them for help, and it does not reflect that he is "independent" or "does not need them." Helping parents to understand addresses one of the most stressful aspects of parenting for newly adopted children. It was also explained that his challenges in inhibited social approach are not related to the formation of his relationships with parents. The provider also helped parents to observe Sam's communication skills—specifically gesturing, pointing, and joint attention—and explained how they can be promoting interactions. Given that several domains were identified as at risk, the provider helped the parents to understand that Sam would benefit from a referral for additional interventions to lead to improved emotional regulation, including fewer tantrums and sleep issues.

are associated with long-term neurodevelopmental and mental health outcomes are described in the following sections.

INITIAL PHYSICAL GROWTH STATUS

At adoption placement, most IA children show a compromised physical growth status (Johnson & Gunnar, 2011). It has been suggested that initial height status can be used as an estimation of the severity of pre-adoption adversity (van IJzendoorn, Bakermans-Kranenburg, & Juffer, 2007). Multiple risk factors have been linked to the degree of stunting, and it is mostly the result of a combination of multiple risk factors including malnutrition and suppression of growth hormone levels due to the social–emotional adversity (Johnson & Gunnar, 2011). The other risk factors include age at adoption, low birth weight, and prenatal alcohol exposure (Miller et al., 2009; Miller et al., 2010). Given that information of pre-adoption history for the majority of children is very limited or not available, the degree of stunting (≤2 *SD* for height/length-for-age) may be the only indicator available for medical and mental health providers regarding the degree of early adversity that the child faced pre-adoption, and it is also an important factor given it is associated with a child's general cognitive status (Kroupina et al., 2015).

In more than 60% of the IA children catch up in growth and positive changes in the function of the growth hormone system has been documented during the first 6 months post-adoption (Miller et al., 2010). A child's physical growth catch up is associated with better general cognitive skills after placement and correlates to an improved environment (Johnson et al., 2010). Given that the growth hormone system is involved in normal brain development, it is not surprising that the catch up in growth is also related to an improved cognitive status years later. However, children who are older at the time of adoption and children who don't have appropriate dietary intake may experience limited catch up in growth post adoption which can potentially impact their neurodevelopmental trajectory (Miller et al., 2010).

Recommendations

Research findings suggest that IA children identified as stunted at arrival who do not show a normal rate of catch-up growth by 6 months post adoption should be followed by a medical specialist to provide appropriate early interventions (Miller et al., 2010). Moreover, children who were identified at the initial post-adoption clinical visit as stunted require that both their physical growth and neurodevelopmental trajectories be monitored and referred for early intervention services as needed.

INITIAL NUTRITION STATUS

Researchers have determined that about 70% of new IA children have at least one micronutrient deficiency, commonly including vitamin D, iron, and zinc deficiencies, at the time of arrival (Fuglestad et al., 2015). Micronutrients are critical for normal brain development early in life and, in cases of deficiency, intervention during the sensitive periods of brain development is critical (Wachs, Georgieff, Cusick, & McEwen, 2014). Micronutrient deficiencies, specifically iron deficiency, were found to be associated

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Most internationally adopted children come from an environment of extreme early adversity and lacking any experience of a sensitive and responsive early relationship with a caregiver.

with long-term compromised neurodevelopment in IA children (Doom, Georgieff, & Gunnar, 2015; Doom et al., 2014; Fuglestad et al., 2013). At initial visits post adoption, children with iron deficiency exhibit more fearful behaviors (Fuglestad et al., 2013). Long-term, iron deficiency at the initial health evaluation is associated with more compromised general cognitive development. (Doom et al., 2014; Fuglestad et al., 2013). Moreover, the initial iron deficiency is associated with long-term attention regulation issues, the area that has been found to be compromised long-term in many IA children (Doom et al., 2015).

Recommendations

Currently it is a national recommendation in the U.S. for medical providers to measure the iron levels in blood at the initial medical evaluation for IA children (Fuglestad et al., 2008). This screening facilitates early intervention to address iron deficiency that is particularly critical for children less than 3 years old when the brain's demand for iron is highest, and to promote normal brain development. Given the long-term impact of iron deficiency and other micronutritional deficiencies on neurodevelopmental outcomes, children who are identified as deficient at their initial health evaluation also need long-term follow up on their neurodevelopmental trajectory.

Initial Mental Health Status Evaluation

In addition to the health status evaluation, the American Academy of Pediatrics recommends that a mental health status evaluation be included in the initial evaluation protocol. The domains important to consider for the mental health assessment of just-arrived IA children are described in the next sections.

CHILD'S ABILITY TO SIGNAL EMOTIONAL NEEDS

Most IA children come from an environment of extreme early adversity and lacking any experience of a sensitive and responsive early relationship with a caregiver. This experience impacts their ability to signal their physical and emotional needs. Some IA

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Researchers have determined that about 70% of new internationally adopted children have at least one micronutrient deficiency.

children show capacity to signal distress, but others have extreme challenges in this domain (Zeanah & Gleason, 2015; Zeanah et al., 2004). The children at highest risk show a consistent pattern of inhibited, emotionally withdrawn behavior toward caregivers and rarely or minimally seek or respond to comfort when distressed (Zeanah & Gleason, 2015). These behaviors can give adoptive parents the impression that their child does not need their nurturance and can put these children at additional risk post placement (Dozier & Bick, 2007).

Fortunately, adoption is associated with a reduction in inhibited, withdrawn behaviors (Smyke et al., 2012; van Londen, Juffer, & van IJzendoorn, 2007; Zeanah, Smyke, Koga, Carlson, & Bucharest Early-Intervention Project Core Group, 2005). Within the first 3 months after adoption, 40% of post-institutionalized children have already formed an attachment with their adoptive parents and this rate increases to 90% within 7–9 months (Carlson, Hostinar, Mliner, & Gunnar,. 2014). However, IA children are more likely to form high-risk attachment relationships with their adoptive parents compared to biological children, thus complicating parents' ability to read the child's cues (Carlson et al., 2014; Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2005). Moreover, even children who spend just the first few months of life in adverse environments are at risk for long-term social relationship issues (O'Connor & Rutter, 2000). Both compromised cognitive status and a high degree of early adversity put a child at risk for forming close emotional relationships (Carlson et al., 2014; Smyke, et al., 2012). Extensive research with other high risk populations and adopted children, shows that forming a secure and organized attachment post-adoption is shown to have a buffering effect on a child's long-term mental health (Elovainio, Raaska, Sinkkonnen, Makipaa, & Lapinleimu, 2015; Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, & Roisman, 2010; Groh, Roisman, van IJzendoorn, Bakermans-Kranenburg, & Fearon, 2012; McGoron et al., 2012).

Recommendations

Given that simply having a history of early adversity isn't an infallible predictor of relationship issues, clinical observations are an imperative tool for identifying children at-risk. The focus of the observation during the initial clinical evaluation has to be on the child's ability to signal emotional needs to obtain proximity and reassurance from a parent, and on the parent's ability to recognize and respond appropriately (Crowell, 2003; Zeanah, Berlin, & Boris, 2011). There are several tools available for clinicians to use (Clark, Tluczek, & Gallagher, 2004; Zeanah & Gleason, 2015; Zeanah, Larrieu, Heller, & Valliere, 2000). Children who have minimal capacity in this area and parents who have difficulties responding to these children benefit from early interventions that aim to foster more sensitive and nurturing care. These interventions also aim to reduce parenting stress by helping parents to interpret their child's signals when he is distressed and by helping caregivers to override their own issues that interfere with providing nurturing care (Bakermans-Kranenburg et al., 2003; Bernard et al., 2012; Dozier & Bick, 2007). Thus, including evaluation of parent–child interactions in an initial mental health evaluation is critical to refer the child and family for appropriate interventions.

EARLY COMMUNICATION SKILLS

As a consequence of early social–emotional adversity, IA children have limited opportunities for normal social interaction opportunities with adults. The interactions stimulate the creation of neural circuitry in all areas of the brain and set the stage for all future health and behaviors (Almas et al., 2012). Without reciprocal exchanges through babbling, crying, and gesturing between infants and caregivers, the foundational neural circuitry, upon which all other brain architecture will be constructed, can be disrupted and potentially impair social communication skills (Levin, Fox, Zeanah, & Nelson, 2015).

Thus, a broad range of disturbances in the social–communication domain has been identified in IA children, and in some children it can rise to the level of disorder (Rutter et al., 2007). They may demonstrate social behaviors and communication impairments often seen in children with autism spectrum disorders. The deficits and confusing signaling observed in many children with history of early adversity potentially result from a disrupted neural circuitry or the child's proclivity to be inattentive or impulsive (Fox, Almas, Degnan, Nelson, & Zeanah, 2011). Furthermore, children with a history of early adversity show a greater deficit in initiating joint attention (Mundy & Newell, 2007). In IA children clinicians see increased severity of impairment of their ability to initiate joint attention, which also correlates with an increase in the child's age at arrival (Kroupina, Ocken, Iverson, & Johnson, 2007).

Exposure to a nurturing environment—specifically sensitive, responsive parenting—can bring about positive changes and moderate the effects of early adversity in IA children (Garvin, Tarullo, Van Ryzin, & Gunnar, 2012). Although children's emotional neural circuitry appears to be readily adaptive to typical social interaction, not all children show the same rate of positive change (Levin et al., 2015). Children who lack this foundation may be ill-equipped to manage the increasingly demanding social exchanges that take place during adolescence and adulthood (Fox et al., 2011). Furthermore, social communication skills have an impact on the development of attachment relationships, social development, language, and future cognitive development (Dalen & Theie, 2014; Kroupina, et al., 2007) in turn creating additional stress and challenges for parents.

Recommendations

Early identification of a child at risk for impaired social–communication skills is helpful in promoting optimal development in multiple domains for an IA child. Therefore, it is critical to evaluate both the current social communication skills of a newly arrived IA child as well as the potential for these skills to be promoted and developed through interactions with their parents. This domain can be observed by a clinician during semi-structured parent–child interactions (Clark et al., 2004; Zeanah et al., 2000). Given that sensitive parenting can moderate the negative outcomes of social communication impairments (Garvin et al., 2012), it is crucial to refer children at risk for early intervention to promote parent sensitivity.

DISINHIBITED SOCIAL ENGAGEMENT

Another social domain that can impact children with a history of early adversity is the child's ability to understand social boundaries and inhibit social approach. Children with a history of severe social–emotional adversity are twice as likely as children living with their biological families to be indiscriminately friendly (Dobrova-Krol, Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2010). Children particularly at risk are those placed in foster care or adopted after they are 24 months old, or those who have experienced emotional neglect (Oliveira et al., 2012; Smyke et al., 2012). The degree to which disinhibited social engagement behaviors (previously referred to as indiscriminate friendliness) are exhibited can vary from mild to pathological and are recognized as a mental health disorder. This behavioral pattern includes reduced reticence when approaching and interacting with unfamiliar adults, overly familiar verbal or physical behavior in contrast of age- and culturally appropriate behaviors, diminished checking back with caregivers, or willingness to go off with strangers (American Psychiatric Association, 2013).

Despite the positive effects of adoption and the development of a secure and organized attachment, children with a history of social–emotional adversity continue to exhibit long-term challenges in inhibiting social approach behaviors, even after placement in improved environments (Bruce, Tarullo, & Gunnar, 2009; Zeanah, Smyke, & Dumitrescu, 2002). Disinhibited social engagement is found to be one of the most persistent social abnormalities with major long-term consequences (Miellet, Caldara, Gillberg, Raju, & Minnis, 2014).

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Supporting the very early parent–infant relationship is an important intervention focus for service providers, policymakers, and those who care about the healthy development of infants and toddlers.

Recommendations

It is important to assess a child's behavior pattern as soon as possible after adoption and closely monitor the neurodevelopmental trajectory of children demonstrating a high-risk behavior pattern. Currently, there is no specific standard measurement for disinhibited social engagement, so it's hard to distinguish normal behavior from abnormal behavior (Lawler, Hostinar, Mliner, & Gunnar, 2014). Observation measures and semistructural interviews have been developed that can be helpful for clinicians to use to identify children at risk (Smyke et al., 2012). Moreover, adoptive parents need clinicians' help to understand that these behavioral issues are not related to a child's capacity to form close relationships. Unfortunately, there is no established intervention to address these issues, however a promising approach may capitalize on parental sensitivity, as this has been associated with less disinhibited social engagement later in life (McGoron et al., 2012; Van den Dries, Juffer, van IJzendoorn, Bakermans-Kranenburg, & Alink, 2012). Thus, these children will need to be referred for additional intervention and long-term monitoring for mental health issues.

GENERAL RECOMMENDATIONS

In summary, the findings from extensive research of children with histories of early adversity have been instrumental in defining major principles for building clinical programs for young IA children. These principles include: (a) the importance in considering biological and social–emotional risk factors that can effect brain development; (b) using a multidisciplinary approach including medical and mental health specialists; (c) accounting for the age at adoption, the duration of the exposure to early adversity, and the timing of evaluation post-adoption; and

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Children who exhibit stunted growth and iron deficiency at their initial assessment need to have their physical growth and iron status monitored long term.

(d) understanding the domains at risk depending on the nature of a child's early adverse experiences and sensitive periods for interventions for each domain. The first 3 years of life constitute a sensitive period of brain development during which children will be the most responsive to nutritional and relationship-based interventions (Wachs et al., 2014). All these aspects of the framework are critical for identification of children at risk.

Researchers have learned that children who exhibit stunted growth and iron deficiency at their initial assessment need to have their physical growth and iron status monitored long term. Moreover, given the association between neurodevelopmental outcomes and initial physical growth and iron status, the neurodevelopmental trajectory for an at-risk child has to be monitored in order to provide appropriate interventions as soon as possible. Children who are not able to signal their emotional and physical needs are at risk for long-term mental health issues. Furthermore, their parents may need assistance in deciphering confusing signals to help to foster close emotional relationships with their children. IA children who show disturbances in their social communication skills must be identified at their initial clinical evaluation, and parents may need help in learning how to promote these in the context of interaction with their newly adopted child. Another component of a child's developing social abilities that needs to be assessed and identified is the ability to inhibit social approach behaviors. If children are demonstrating indiscriminately friendly behavior, they are at-risk for future mental health issues and require long-term follow-up. Furthermore, given the difficulties in some areas, long-term follow up for children who have experienced early adversity is particularly important. In the future, there is a need for increased standardization of assessment protocols for early identification of at risk IA children.

Researchers have learned that this multidimensional framework of clinical practice lends itself well to clinical work with other high-risk populations of young children including, but not limited to, children who have experienced traumatic medical procedures, multiple transitions, or abuse or neglect. The framework will serve as a foundation for the new Birth to Three Mental Health Clinical Program in Department of Pediatrics, University of Minnesota, and serve as a framework for other clinical populations of these age children.

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Identifying Risk and Promoting Resilience in Infants and Toddlers With Fetal Alcohol Spectrum Disorders

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ABSTRACT

Fetal alcohol spectrum disorders (FASDs) is an umbrella term that describes a variety of conditions characterized by a pattern of atypical facial features, growth restriction, structural physical abnormalities, and brain dysfunction resulting from prenatal alcohol exposure. Studies suggest that the prevalence of FASDs ranges between 2–5% (of the general population) to 16% (of the child welfare population), but FASDs are often underdiagnosed in infants and toddlers, resulting in missed opportunities for intervention and treatment. Early diagnosis of an FASD is dependent on the identification of the salient physical and behavioral features associated with a history of prenatal alcohol exposure, and optimal outcomes for children with FASDs can be fostered in the context of responsive, stable caregiving, with the provision of developmental and behavioral supports through the lifespan.

Misty's Story

Misty and her husband had been married for a few years, and were trying to get pregnant, but they had not been successful. Misty thought that she was unable to get pregnant and assumed that she and her husband could not have children. Although she had always wanted children, Misty and her husband accepted the possibility that they might not have children, and they "stopped trying," and embraced "living in the moment." They were both working as wait staff during the holiday season, where they would often gather with other waiters after their shift and socialize over drinks, often several times a week. After several months of weight gain (which Misty attributed to "holiday snacking,"), and persistent fatigue (which Misty attributed to long work nights), she went to a women's clinic for a pregnancy test. The first test was negative, but a repeat test was positive. A follow-up ultrasound revealed that she was pregnant…. with twins! She was 16 weeks pregnant when she learned of her pregnancy and 20 weeks pregnant when she began her prenatal care. When the twins were born, slightly preterm at 35 weeks, there were some problems noted. Gideon has multiple congenital abnormalities, and both Gideon and Scarlett were both low birth weight, weighting less than 4 pounds at birth. Both of them were also noted to have a small head circumference and some unusual facial features at birth, which prompted a referral to a genetics specialist. When the geneticist reviewed Misty's pregnancy history with her, Misty shared with the doctor that in the time before she knew she was pregnant, she had consumed alcohol throughout the first 20 weeks of pregnancy. A diagnosis of fetal alcohol syndrome was suspected, and the diagnosis was confirmed after a multidisciplinary assessment when the children were 21 months old.

Identification of Fetal Alcohol Spectrum Disorders in Infants and Toddlers

Prenatal exposure to alcohol can have numerous adverse effects on a developing fetus, including a spectrum of structural anomalies and neurocognitive and behavioral disabilities that have recently been termed fetal alcohol spectrum disorders (FASDs). First identified in the United States in 1973 (Jones, 1973; Jones & Smith, 1975), fetal alcohol syndrome (FAS) describes children at the most severe end of this spectrum who display the complete phenotype of characteristic facial anomalies, growth retardation, and developmental abnormalities of the central nervous system. Although FAS is the form of FASD most readily recognized by clinicians, other categories within the continuum of adverse effects due to prenatal alcohol exposure are becoming better defined, including partial fetal alcohol syndrome (p-FAS), alcohol-related birth defects (ARBD), and alcohol-related neurodevelopmental disorders (ARND; Hoyme et al., 2005; Manning & Hoyme, 2007). FASDs

are underdiagnosed in general treatment settings (Elgen, Bruaroy, & Laegreid, 2007; Gahagan et al., 2006; Rojmahamongkol, Cheema-Hasan, & Weitzman, 2015), and are especially underdiagnosed in at-risk populations, particularly children in foster care (Chasnoff, Wells, & King, 2015; Lange, Shield, Rehm, & Popova, 2013). Population-based prevalence studies have estimated that FASDs affect 2.4% to 4.8% of the general population (May et al., 2014), with prevalence estimates as high as 16.9% for children in the foster care system (Lange et al., 2013). Because FASDs represent a major public health concern, early recognition of at-risk children is important to initiate interventional strategies and to optimize outcomes for affected children. This article will review the diagnostic criteria for the categories of FASDs as set forth by the Revised Institute of Medicine Criteria (Hoyme et al., 2005), describe the clinical evaluation of children with suspected prenatal alcohol exposure and assessment of the facial features of FAS, highlight the heterogeneous behavioral symptoms seen in children with prenatal alcohol exposure, and present the challenges of diagnosis of FASDs in an infant–toddler population. Finally, recognizing that outcomes for infants with prenatal alcohol exposure are optimized by healthy, supportive, consistent caregiving environments, suggestions for ongoing surveillance, support, and intervention will be provided.

Diagnostic Criteria for FASD

The diagnostic evaluation of a child with a potential FASD requires the assessment of four categories: (a) prenatal alcohol exposure; (b) facial structure (looking for findings characteristic of FAS); (c) growth (prenatal and postnatal), and (d) neurodevelopmental status (seeking evidence of central nervous system impairment characterized by a small head circumference or a characteristic pattern of cognitive or neurobehavioral deficits). Although there are several classification systems used for FASD diagnosis, (Astley, 2013; Bertrand, 2005; Chudley et al., 2005; Hoyme et al., 2005), the Revised IOM Criteria developed by Hoyme et al. (2005) have been used successfully in community-based settings with non-medical workers screening for FASDs in an infant–toddler population (O'Connor et al., 2014).

The Revised IOM Criteria for FASD Diagnosis (2005) assess the patient for the four categories above (Hoyme et al., 2005; Manning & Hoyme, 2007). After data are collected, assignment of diagnoses follows the following algorithm:

FAS

- (+/-) Confirmed prenatal alcohol exposure
- Presence of two of the three cardinal facial features associated with prenatal alcohol exposure (short palpebral fissures [small eye openings]), smooth philtrum [the area between the nasal septum and upper lip], and thin upper lip)
- Growth restriction (height or weight ≤10th percentile at any point in time, prenatally or postnatally)
- Microcephaly (head circumference ≤10th percentile at any point in time)

P-FAS

- (+/-) Confirmed prenatal alcohol exposure
- Facial features as in FAS above
- One of the following:
  - Growth restriction (height or weight ≤10th percentile at any point in time, prenatally or postnatally), OR
  - Microcephaly (head circumference ≤10th percentile at any point in time), OR
  - Structural brain abnormalities, OR
  - Complex pattern of learning or behavior abnormalities

ARBD

- (+) Confirmed prenatal alcohol exposure
- Facial features as in FAS above
- Congenital structural defects characterized by major structural abnormalities in one of the following areas: heart, skeleton, kidneys, eyes, ears, or a pattern of minor abnormalities in the hands and ears

ARND

- (+) Confirmed prenatal alcohol exposure
- Absence of characteristic facial features
- Microcephaly (head circumference ≤10th percentile at any point in time), OR
- Complex pattern of learning or behavior abnormalities

Clinical Evaluation

Because FASDs can affect up to 4.8% of the general population (May et al., 2014), and up to 16.9% of children in the foster care system (Lange et al., 2013), accurate clinical diagnosis is essential to initiate appropriate services. The diagnosis of an FASD (FAS, p-FAS, ARBD, or ARND) reflects a constellation of symptoms and signs resulting from prenatal exposure to alcohol. The key elements of clinical evaluation include (a) obtaining an accurate history of prenatal alcohol exposure; (b) providing an accurate assessment of facial features; (c) verifying of growth restriction; and (d) identifying central nervous system (CNS) deficits.

HISTORY

In order for an infant to be diagnosed with an FASD, prenatal alcohol exposure needs to be confirmed (with the exception of FAS and p-FAS, which can be diagnosed on the basis of the characteristic clinical features even without confirmation of prenatal alcohol exposure). Accurate determination of prenatal alcohol exposure is often a difficult piece of information to verify. Due to the stigma associated with drinking during pregnancy (Makelarski et al., 2013), mothers may be reluctant to admit to alcohol use during pregnancy, or may underreport the amount of alcohol consumed during pregnancy, resulting in maternal self-report data regarding prenatal alcohol use that is often unreliable

(Czeizel, 2005; S. W. Jacobson, Chiodo, Sokol, & Jacobson, 2002; Lange, Shield, Koren, Rehm, & Popova, 2014). Although pre-pregnancy alcohol consumption is highly correlated with the presence of alcohol related diagnoses and neurobehavioral problems (Knudsen et al., 2014; May et al., 2013), mothers may not consider or report alcohol consumption prior to learning of their pregnancies. Questionnaires have been developed to screen for maternal alcohol use in pregnancy, with the T-ACE and the revision, TACER-3 (see Table 1) demonstrating good sensitivity and specificity (Chiodo et al., 2014). Alternatively, because late recognition of pregnancy and drinking in the 3 months prior to pregnancy have been associated with the presence of an alcohol-related disorder in the child (May et al., 2014), querying the mother regarding when she learned of her pregnancy may help to further identify a history of prenatal exposures (see box Sample Interview Questions to Query for Prenatal Alcohol Exposure). Many times children being assessed for an FASD are in foster care or have been adopted. Depending on the circumstances that led to a child no longer being in the care of the biological mother, medical and familial history may be limited. In these instances, obtaining an accurate history regarding prenatal alcohol exposure can be even more difficult. A child's caregivers may report that the biological mother drank during the pregnancy; however, it is important to determine the source of this information. As information is passed from one source to another, the facts may change and thus validity of the information diminishes. Obtaining a child's hospital birth records, medical passport, or court documents regarding termination of parental rights can provide additional information regarding potential prenatal alcohol exposure.

TABLE 1. **TACER-3 Risk Drinking Screen**

Factor	Cutpoint	Score	Question
T: Tolerance	≥ **2 drinks***	**2**	How many drinks does it take to make you feel high?
A: Annoy	**Yes/No**	**1**	Has anyone ever annoyed you by complaining about your drinking?
C: Cut Down	**Yes/No**	**1**	Have you ever felt you ought to cut down on your drinking?
E: Eye Opener	**Yes/No**	**1**	Have you ever needed a drink first thing in the morning to get going?

* "Drinks" were defined as standard U.S. drinks with the equivalent of 0.5 ounces of absolute alcohol (e.g., approximately 12 ounces of regular beer, 1.5 ounces of liquor/spirits, or 4 ounces of wine).

Total TACER-3 Cutpoint: 3

Reprinted/Adapted from "Increased Cut-Point of the TACER-3 Screen Reduces False Positives Without Losing Sensitivity in Predicting Risk Alcohol Drinking in Pregnancy." L. M. Chiodo, V. Delaney-Black, R. J. Sokol, J. Janisse, Y, Pardo, and J. H. Hannigan. (2014). *Alcoholism: Clinical and Experimental Research, 38*(5), 1401–1408.

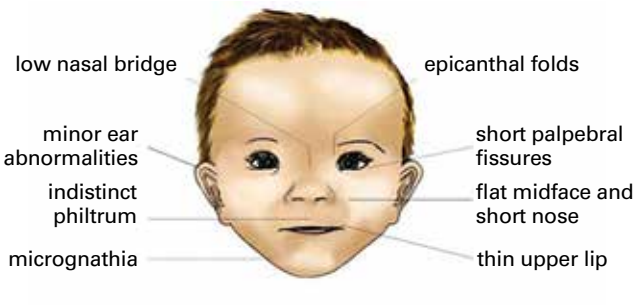
Sample Interview Questions to Query for Prenatal Alcohol Exposure

1. How many weeks pregnant were you when you learned of your pregnancy?
2. In the 3 months prior to pregnancy, how many drinks would you typically consume in a week? (*Prompt further, 10–15 drinks? 15–20 drinks …*)
3. Before you learned of your pregnancy, how many drinks did you drink in one sitting?… (*Prompt further, 5–10 drinks, 10–15 drinks? …*)

ASSESSMENT OF FACIAL FEATURES

Because three of the four categories of FASDs require the presence of FAS facial features (see Figure 1), accurate identification of facial dysmorphology is critical to making a diagnosis of an FASD. Accurate identification of FAS facial features is often performed by a physician with specialized training in FAS dysmorphology (e.g., clinical geneticist or developmental pediatrician); however, non-medical community professionals can also be trained to screen for some of the dysmorphic facial features associated with FAS facial features (O'Connor et al., 2014) and can therefore be instrumental in identifying children who should be referred for further subspecialty evaluation. The guidelines for diagnosis of FAS (Hoyme et al., 2005) require two of three characteristic facial features: (a) short palpebral fissure length (small eye openings), measured by a skilled examiner and compared with published norms; (b) presence of a smooth philtrum (flattened area between the nasal septum and the border of the upper lip); and (c) thin

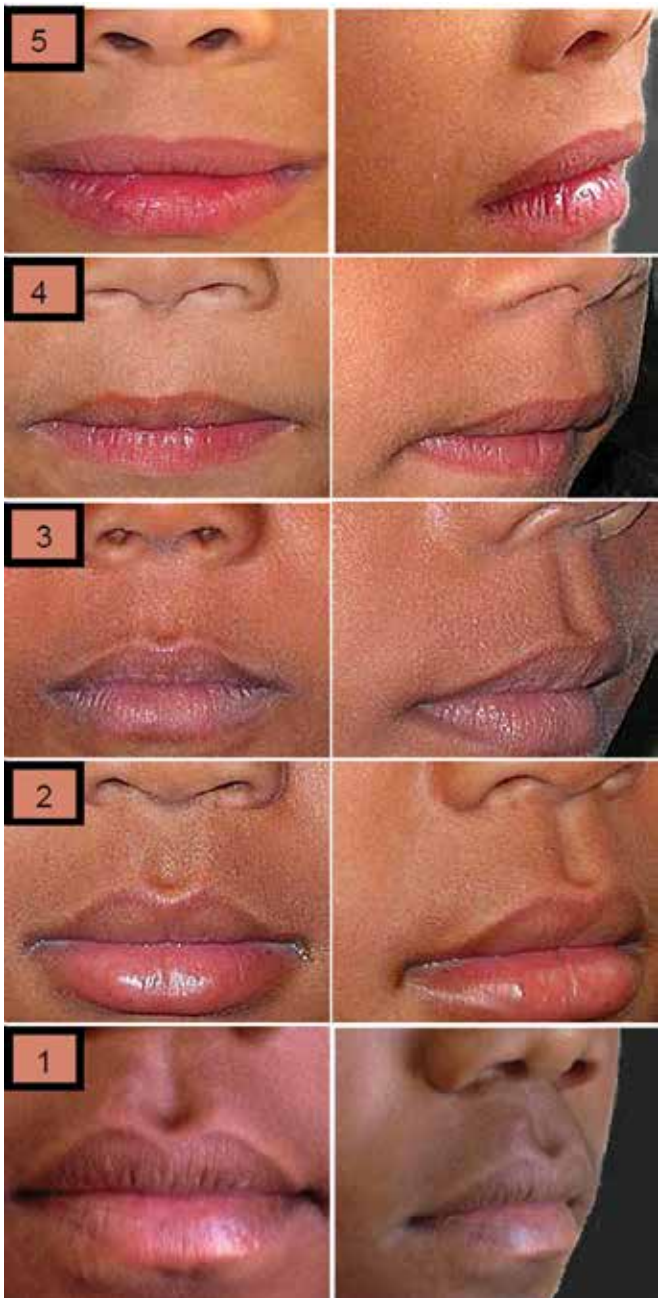
FIGURE 1. **Facial Characteristics Associated With Prenatal Alcohol Exposure**



Alcohol Alert Number 82: "Fetal Alcohol Spectrum Disorders: Understanding the Effects of Prenatal Alcohol Exposure," downloaded from http://pubs.niaaa.nih.gov/publications/AA82/AA82.htm accessed 9/25/2015

vermilion border of the upper lip (characterized by flattening of the cupid's bow and decreased total area of the upper lip). Lip and philtrum morphology are assessed independently and are scored on a 5-point scale of a racially-normed lip-philtrum guide, with scores of 4 or 5 considered dysmorphic (Hoyme et al., 2005; Manning & Hoyme, 2007). (See Figure 2.) Examples of non-FAS and FAS facial features are depicted in Figure 3.

FIGURE 2. **Lip/Philtrum Morphology**



Reprinted with permission from Hoyme, H. E., Hoyme, D. B., Elliott, A. J., Blankenship, J., Kalberg, W. O., Buckley, D., ...May, P. A. (2015). A South African specific mixed race lip/philtrum guide for diagnosis of fetal alcohol spectrum disorders. *American Journal of Medical Genetics Part A, 167*(4), 752–755.

FIGURE 3. **Assessing FAS Facial Features**

NON-FAS Facies

Lip:

- Well formed cupid's bow
- Clearly visualized vermillion

Philtrum:

- Prominent philtral columns
- Central "dimple" well visualized

FAS Facies

Lip:

- Flattened cupids bow
- Loss of vermillion landmarks

Philtrum:

- Flattened philtral columns
- Philtral dimple not visualized

Photo: Tedi Milgrom, MPH

Minor Features

Although not part of the core diagnostic criteria, children with prenatal alcohol exposure have been shown to manifest a pattern of minor structural defects, including midface hypoplasia (underdevelopment), epicanthal folds, hypoplastic fingernails, short fifth digits, clinodactyly (curvature) of fifth fingers, pectus carinatum/excavatum (breast bone abnormalities), camptodactyly (inability to completely extend the fingers), "hockey stick" palmar creases, other palmar crease abnormalities, ptosis ("droopy" eye lids), heart murmur, decreased elbow movement, hypertelorism (widely spaced eyes), hypotelorism (narrowly spaced eyes), long upper lip, and "railroad track" ears (Hoyme et al., 2005; Jones et al., 2010). The presence of these physical abnormalities can prompt a provider to consider additional evaluation for an alcohol-related diagnosis. Examples of these minor anomalies are shown in Figure 4.

GROWTH RESTRICTION

Growth restriction is characterized by height or weight less than the 10th percentile at any point in time (prenatally or postnatally) as plotted on age- and gender-specific growth charts (Hoyme et al., 2005; Manning & Hoyme, 2007).

CNS ABNORMALITIES

CNS abnormalities are a manifestation of the presence of structural or functional brain abnormalities and can present as microcephaly (head circumference ≤10th percentile at any point in time measured on gender-specific head-circumference charts), or as structural abnormalities of the brain identified on an MRI scan, or as a characteristic pattern of cognitive and behavioral abnormalities (Hoyme et al., 2005; Manning & Hoyme, 2007).

FIGURE 4. **Minor Features**

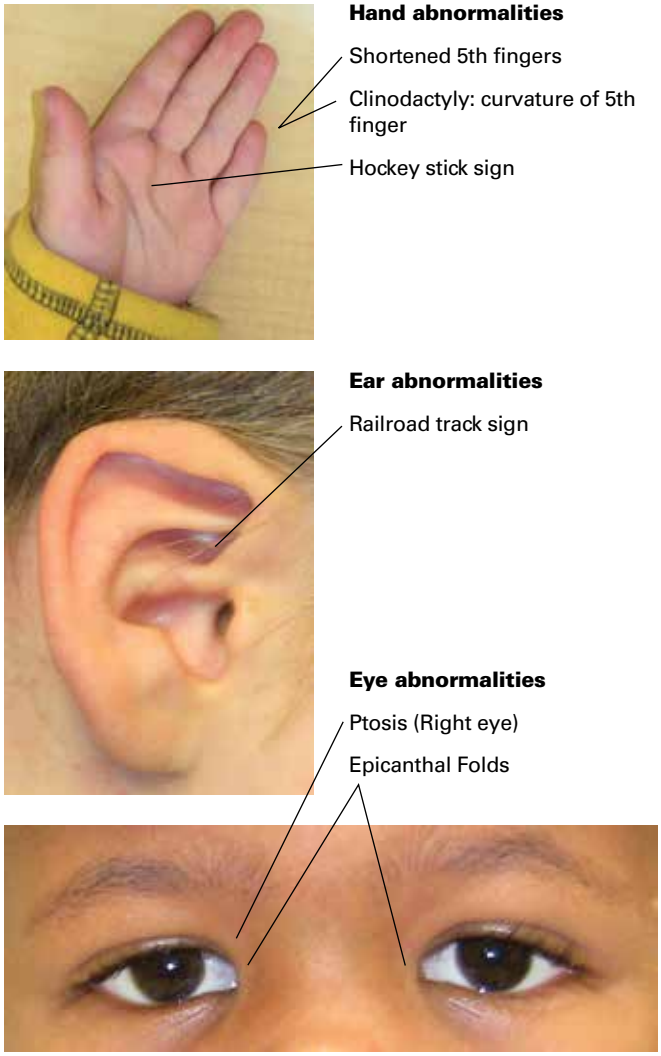


Photo: Tedi Milgrom, MPH

Neurobehavioral Profile of Children With FASDs: Infant–Toddler Considerations

The cognitive and behavioral deficits associated with prenatal alcohol exposure are heterogeneous and can be fairly nonspecific in infancy (Molteno, Jacobson, Carter, & Jacobson, 2010). The neurobehavioral profile of children with prenatal alcohol exposure has been best characterized in children with a history of heavy prenatal alcohol exposure who meet criteria for full FAS. Neurobehavioral deficits in infancy have been related to deficits in cognitive and motor development and deficits in emotional and state regulation. Infants with heavy prenatal alcohol exposure have demonstrated lower cognitive development compared to nonexposed infants, with a dose-dependent response manifested as lower mental development index scores on the Bayley Scales of Infant Development, with increased maternal alcohol consumption.(J. L. Jacobson et al., 1993). Other infant characteristics associated with heavy prenatal alcohol exposure include delayed motor development and reaction time (S. W. Jacobson, Jacobson, & Sokol, 1994); poorer language and behavioral regulation (Coles, Kable, Drews-Botsch, & Falek, 2000); less complex play (Molteno et al., 2010); poorer feeding; tremulousness with increased jitteriness; and evidence of a persistent startle and deficits in state regulation, manifested as lower levels of arousal, difficulty self-soothing, and increased emotional withdrawal (Molteno, Jacobson, Carter, Dodge, & Jacobson, 2014; Streissguth, Sampson, & Barr, 1989). These early emotional deficits appear to persist into the preschool and early school-age years, with associated deficits in attention regulation and increased emotional and conduct problems (Alvik, Aalen, & Lindemann, 2013).

Diagnostic Considerations in Infants and Toddlers

Because the facial features of FAS may be difficult to identify in infants, and the cognitive and behavioral deficits associated with prenatal alcohol exposure are nonspecific in infancy (Molteno et al., 2010), it is important to maintain a heightened index of suspicion for prenatal alcohol exposure and the possibility of an alcohol-related diagnosis in infants and toddlers at risk. One of the greatest risk factors associated with a history of prenatal alcohol exposure is involvement in the foster care system (Kvigne et al., 2004). Placement in the child welfare system is often associated with a history of detrimental caregiving experiences, including child abuse, neglect, abandonment, parental substance abuse, and caregiving inconsistency (Chernoff, Combs-Orme, Risley-Curtiss, & Heisler, 1994; English, Thompson, & White, 2015; Pelton, 2015). These risk factors are also associated with a high likelihood of prenatal alcohol exposure (Burd, Cohen, Shah, & Norris, 2011; Herrick, Hudson, & Burd, 2011). As such, professionals who work with children and families in the child welfare system should have a heightened index of suspicion for the possibility of intrauterine exposure to alcohol (Popova, Lange, Burd, & Rehm, 2014) and encourage families to consider further diagnostic evaluation if atypical facial features, growth abnormalities, or cognitive or behavioral concerns are identified in infancy or early childhood. Furthermore, if full diagnostic criteria are not met (e.g., due to sub-threshold facial, cognitive, or behavioral deficits), children should still be provided interventions to address areas of need and should receive ongoing close surveillance and follow-up to monitor for the emergence of neurobehavioral deficits that can appear later in life.

Supporting Families of Children With Prenatal Alcohol Exposure

Early diagnosis and intervention remain the best approaches to help optimize outcomes for children with prenatal alcohol exposure (Abrams, 2010). Prevention of FASDs in future pregnancies and the ongoing support of children and families affected with FASDs requires multilevel, multisystem intervention strategies to support both the child and caregiver (Clarke-McMullen, 2010; May, 1995; Paley, O'Connor, Frankel, & Marquardt, 2006). A multidimensional intervention approach

Because FASDs represent a major public health concern, early recognition of at-risk children is important to initiate interventional strategies and to optimize outcomes for affected children

should include community education, interventions with caregiver if there is a history of ongoing alcohol abuse, and a focus on parenting (Smith, 1991). There is evidence to suggest that children with a history of prenatal alcohol exposure benefit from interventions to promote optimal caregiving (Molteno et al., 2010) and that long-term outcomes of children with FASDs are related to the quality and stability of the caregiving environment and level of family functioning (Olson, Oti, Gelo, & Beck, 2009).

For infants and toddlers who are not in the care of their biological parents (e.g., children in the child welfare system, or children who have been adopted), interventions should include developmental services (to address areas of developmental vulnerability) and behavioral or trauma-focused therapies, or both (to address behavioral symptoms that may be associated with experiences of early pathological care). Because of the challenges associated with raising a child with a history of prenatal alcohol exposure, attention should be paid to ensure that caregivers have access to social and respite supports. Children with prenatal alcohol exposure often have deficits in their cognitive, behavioral, and emotional functioning, which can make them more challenging to parent (Paley & O'Connor, 2009). As such, caregivers should be educated about the neurological differences of children with prenatal alcohol exposure and the deficits that they may manifest in the areas of learning, working memory, executive functioning, processing speed, and learning from consequences, which can contribute to maladaptive parent–child interactions and can lead to compromised parent–child relationships (O'Connor, Sigman, & Kasari, 1992). Caregivers should also be counseled about the importance of providing responsive, nurturing, and contingent interactions with their children with a history of prenatal alcohol exposure and the potential benefits of behaviorally oriented and relationship-focused interventions (Paley & O'Connor, 2009).

For children with FASDs who remain in the care of their biological parent(s), additional factors should be considered. It is not uncommon for biological mothers with a child exposed to alcohol in utero to report a lack of knowledge about FASDs and to report consumption of alcohol before they knew they were pregnant (Salmon, 2008). Birth mothers also acknowledge feelings of guilt and culpability regarding having "caused" their child's disability, report feeling judged and abandoned by medical and health professionals, and describe feeling alone as they navigate through the educational system to advocate for their child's needs (Olson et al., 2009; Salmon, 2008). Interventions with children and their biological caregivers should include a sensitivity to the parent's resolution of grief related to the child's diagnosis of an alcohol-related disorder and should consider opportunities to foster the biological parent's sense of competence and efficacy regarding their role in optimizing their child's future outcomes, despite the history of prenatal alcohol exposure.

Misty's Story: The Journey After the Diagnosis

Scarlett and Gideon are now almost 4 years old. Gideon continues to have multiple medical problems, and feeding issues, and is almost exclusively g-tube fed. Both receive multiple developmental services, but Misty reports feeling optimistic by the progress she sees them making every day. She says that her journey has been aided by health care professionals, therapists, and early childhood professionals who have encouraged her and "who never judged her." Although she admits to continued feelings of guilt related to her history of prenatal alcohol consumption, she reports having good family, social, and extended support and reports that she is committed to doing all that she can to help Scarlett and Gideon live the fullest lives possible. She credits the early childhood professionals who have worked with her over the years as being instrumental in providing support, encouragement, and guidance to her, helping her meet Gideon and Scarlett's ongoing needs.

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Toddlers and Child Care: A Time for Discussion, Dialogue, and Change

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ABSTRACT

Research indicates that many toddlers experience low to mediocre quality child care settings with limited interactions and learning opportunities available. This article uses the context of brain and development research to describe toddlers' experiences in child care. Reporting on the established connections between toddlers' experiences and later outcomes and the quality of child care environments, the authors conclude with a call to the field for, (a) the designation of toddlerhood as a unique developmental period, (b) increased resources to expand research on toddlers' experiences in child care, and (c) continued focus in the area of higher education and professional development for the development of high-quality effective toddler teachers.

It is becoming more and more common for the importance of early experiences on children's development to come to the forefront of discussion in early childhood care and education. Several large-scale studies in social policy, biology, and human development have confirmed the links between children's early experiences and later outcomes, including health, development, and behavior (Felitti & Anda, 2010; National Institute of Child Health and Human Development, Early Child Care Research Network [NICHD ECCRN], 2002; Sroufe, Egeland, Carlson, & Collins, 2005). The roles of adult caregivers or teachers on young children have been underscored in these studies. Although decades of research in the area of parenting and parent–child relationships have provided evidence of the powerful influence of caregivers on children's development, changing economics and demographics have contributed to large numbers of children spending extended periods of time in settings other than the home (i.e., child care; NICHD, ECCRN, 1997). Specifically, the number of toddler-age children enrolling in child care is increasing, and they are spending longer hours in this environment each day (Children's Defense Fund, 2005). Despite existing evidence of the connection between early experiences and child outcomes, there is a dearth of research that focuses specifically on toddlers' everyday experiences in child care.

Child care provides an important context for studying young children's development, yet relatively few details are known about toddlers' experiences in these settings. Concurrent with accountability concerns, there has been a plethora of research on preschool children's experience in child care, quality of care, teacher characteristics, and implications for children's development (Howes et al., 2008; Mashburn et al., 2008). However, the limited attention to toddlers, specifically in the context of child care, suggests the need for discussion and empirical studies centered on the experiences of children during this developmental period. Research on toddlers in child care has the potential to inform social policy, address emerging questions in the field, and, more specifically, contribute to the preparation and implementation of effective classroom and teacher practices. This article begins by examining evidence from brain development and the biological sciences on the importance of the early years, generally and specifically for toddlers, then discusses toddler development in the context of child care, and finally reports findings of research on the quality of toddler classrooms and the role of the teacher in providing a quality environment. The conclusion is a call to the field for new and important perspectives on toddlers and development and for increased funding of research on toddlers' daily experiences in child care, and it discusses implications for professional development of toddler teachers in early care and education programs.

The Importance of the Early Years

Years of research in child development have highlighted the importance of the early years and the need to focus national

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Child care provides an important context for studying young children's development, yet relatively few details are known about toddlers' experiences in these settings.

attention on early stages of growth and development. New research from the biological and neurological sciences have added an urgency to what early childhood research has been consistently reporting, that early experiences matter and that important early biological and neurological development is taking place that sets the stage for all future growth and development (National Research Council & Institute of Medicine, 2000; National Scientific Council on the Developing Child, 2004). The Center on the Developing Child at Harvard University (2010) reported that later growth and development builds on the skills and abilities of early development that are constructed during the first few years of a child's life and that the basic structure of the brain is built over time through interactions and relationships.

A longitudinal study by Sroufe, Egeland, Carlson, and Collins (2005) outlined how both child strengths and vulnerabilities are influenced by early experiences and the environments in which children spend their days. This ongoing study not only offers insight into the interaction between children and their physical and social environments but also describes how early experiences begin a sequence of events that change the child for better or worse and how that change impacts later development both directly and indirectly.

Researchers have studied the ways children's brains respond to experiences in an inadequate environment. Factors that can increase children's risk and vulnerability include caregivers who are emotionally unavailable; caregiving that is inconsistent or harsh; or an environment that lacks the necessary social, emotional, or sensory input. Any of these factors can permanently alter brain structure and circuitry, undermining healthy development (Knudsen, 2004; Perry, Pollard, Blakley, Baker & Vigilante, 1995; Rice & Barone, 2000; Shonkoff, 2008).

The Center on the Developing Child has reported to the early childhood community on the dangers of what is called toxic stress and its detrimental effects on the developing brain. Researchers studying the stress response systems of children (Gunnar, Brodersen, Nachmias, Buss, & Rigatuso, 1996; Gunnar, Kryzer, VanRyzin, & Phillips, 2010; Vermeer & van IJzendoorn, 2006; Watamura, Donzella, Alwin, & Gunnar, 2003) have confirmed that many young children in child care have an excess of cortisol (a stress hormone) in their systems during the day. Cortisol is helpful when released to resolve a stressful event, but when the body's stress system is activated repeatedly and excessively, cortisol continually overrides the normal stress response system and this hypersensitive response then becomes the child's routine or habitual pattern of coping with stressful events. The result of this pattern is called *toxic stress*, a hypersensitive or abnormal response with repeated release of cortisol which, over time, actually weakens brain structure and causes problems with memory and self-regulation (Gunnar & Cheatham, 2003). Findings from studies of children in child care demonstrate that "younger children and those with immature social skills may frequently experience elevations in cortisol as the day progresses in group care contexts" (Dettling, Gunnar, & Donzella, 1999, p. 519). A study by Watamura et al., (2003) showed that rising cortisol levels appeared to be related to age with "the largest increases observed among toddlers" (p. 1018). These studies provide important information about the possibility of toddlers being at high risk for developmental challenges due to excessive stress that child care may present for some children. It is important to note that research has also demonstrated the opposite—that when children are in high-quality care with teachers offering responsive and respectful care, these environments act to buffer children from excess stress and elevated cortisol levels (Gunnar, 1998; Gunnar, Bruce, & Hickman, 2001; Lisonbee, Mize, Payne, & Granger, 2008; Palmer, 2009). This research underscores the crucial need for positive, growth-promoting environments for young children.

Additional evidence from the biological sciences of the profound effects of stress on early developing systems and later adult health and functioning comes from the Adverse Childhood Experiences Study (Felitti & Anda, 2010). This longitudinal research provides evidence that adverse experiences in childhood result in later adult disease, disorders, and challenging behaviors. Although not only focused on toddlers, but on childhood broadly, this study is important because it combines both biological and behavioral evidence demonstrating the primary importance of early experiences.

From the social policy area, the Rand Corporation, (Kilburn & Karoly, 2008) wrote about the science and economics of early childhood and noted the increasing number of children in the U.S. who may be at-risk for poor outcomes. They likewise reported on the growing concern of the larger community as more corporate CEOs, economists, and business leaders answer the call for increased attention to and "investments" in early childhood. Responding to the reported information from biology, neurology, and psychology regarding early childhood as a vital time of development, there is increased understanding that investing early acts to prevent problems from occurring and acts to promote physical, cognitive, and social–emotional health and development. More evidence demonstrating the importance of

prevention comes from Raver, Jones, Li-Grining, Zhai, Metzger, and Solomon, (2009) in their study of the Chicago School Readiness Project in which they noted evidence of behavioral problems starting as early as toddlerhood and that the early childhood years present a critical time to address children's risk for social–emotional and behavioral challenges.

Taken together, these studies and social policy reports provide the foundation for understanding the critical importance of the early years for children's development and make the case that putting in time, effort, energy, and money to invest in understanding toddlers' experiences in child care is important in the short and long terms. It is now becoming apparent that the quality of care the youngest children receive impacts not only their short-term physical and emotional health and well-being but that of the community at large to have healthy, well-functioning adults, later on (Center on the Developing Child at Harvard University, 2010; Kilburn & Karoly, 2008; Shonkoff, 2008).

Toddlers and Child Care

To assist in understanding the implications of these research studies focused on early brain development and stress, who toddlers are and their development in the context of child care needs to be understood. Often times toddlers are included with or described as infants, and traditionally toddlers and infants have been are grouped together (i.e., infants/toddlers). However, toddlerhood and infancy are two very distinct developmental periods and need to be considered separately in terms of children's experiences and outcomes in child care. Infancy is marked by rapid physical growth, in that infants generally double their birth weight by 6 months old and triple it by 1 year old. Growth occurs in other developmental domains as well as the infant moves from a primarily reflexive state to displaying emerging cognitive skills as early as 2 months old. During toddlerhood, children are growing physically at a very fast pace, less rapid than early infancy but faster yet than preschool. Toddlers are growing taller and gaining gross motor skills such as walking with ease, running, climbing, and refining early abilities. Toddlerhood is also marked by children's increased self-awareness, learning of self-help skills, increased self-regulation, along with learning to successfully interact with and relate to others. The self-help skills that toddlers are learning show their innate desire to grow and develop skills necessary to be autonomous. They are moving into what Mahler, Pine, and Bergman (1967) called the second birth of the baby, the psychological birth of the baby, where they recognize they are a separate human being with goals and desires of their own, separate from caregivers. The development of autonomy can be a very exciting time for toddlers and yet challenging to address in child care environments, as evidenced by toddlers one minute saying "me do it myself" and the next minute wanting to be held, (National Association for the Education of Young Children, 2009). Sroufe (1996) described these types of behaviors as toddlers seeking "autonomy with connectedness" (p. 206). This tremendous social–emotional development and learning is increasingly taking place in the context of early relationships in child care classrooms.

Photo: Kiwi Street Studios

Years of research in child development have highlighted the importance of the early years and the need to focus national attention on early stages of growth and development.

Within these contexts, it is expected that toddlers will gain physical, self-help, and increasingly complex social–emotional skills such as perspective taking, understanding, expressing and regulating emotions, and learning about first friendships. Understanding toddler child care environments and the kinds of early relationships toddlers are experiencing are critical to building knowledge of how children are learning and developing and what change is needed to better serve this group of children more effectively.

The Quality of Toddler Classrooms

Child care classrooms, as an important context for toddlers experiences, require that professionals and researchers pay attention to the quality of the experiences toddlers have in these settings. Almost one third of children will attend child care in a center-based program by the time they are 3 years old (Mulligan, Brimhall, & West, 2005). And concern is growing related to the numbers of children being enrolled in child care at earlier ages and staying for longer periods of time each day (Children's Defense Fund 2005; Ehrle, Adams, & Tout, 2001; Oser & Cohen, 2003).

Although several large scale studies of child care provide some general overview of the quality of child care for toddlers, overall there is limited detailed data or information available specifically about the experiences of toddlers in child care (e.g., Helburn, 1995; NICHD ECCRN 1997, 2000; Whitebook, Howes, & Phillips, 1989). Two early studies, conducted more than 15 years ago, brought to light the overall poor quality of care for very young children. The Cost Quality and Child Outcomes Study (CQCOS Team, 1995) and the National Child Care Staffing Study (NCCSS; Whitebook et al., 1989) were large studies, with more than 200 centers included in the CQCOS and more than 400 centers in the NCCSS. These studies, although potentially groundbreaking in terms of including infants and toddlers in their sample, suffered from often aggregating results across infants and toddlers. However, both studies indicated that the quality

Photo: Stephen Bobb

Toddlerhood is also marked by children's increased self-awareness, learning of self-help skills, increased self-regulation, along with learning to successfully interact and relate to others.

of child care for both groups of children is poor. The CQCOS presented results showing that 42% of classrooms for very young children (infants and toddlers) were not only rated as low quality using the Infant Toddler Environment Rating Scale, (Harms, Cryer, & Clifford, 1990) but in fact were dangerous to children's health and safety (Helburn, 1995). Only a very small percent of classrooms (10%) included in this study were considered to be developmentally appropriate. The NCCSS presented similarly discouraging data, noting the quality of care very young children (infants and toddlers) were receiving was minimal or "barely adequate." In another large scale study of early child care, NICHD ECCRN (2002) examined child care experiences of more than 1,000 children, at 15, 24, and 54 months old, using the Observational Record of the Caregiving Environment (NICHD ECCRN, 1996), an observational scale of the caregiving being provided to children rated on a 1 to 4 scale. Although this study included multiple arrangements of care for young children (e.g., child care home, in-home, grandfather, or father), the overwhelming finding supported the previous studies of the poor quality of care young children were receiving.

What seems to be the consistent finding among the studies which have included toddlers is that the quality of children's experiences in these settings is of poor to mediocre quality (Helburn, 1995; Thomason & La Paro, 2009; Whitebook et al., 1989). Of particular note, Honig and Wittmer (1982) examined teacher–child interactions with toddlers and reported that teachers ignored or negatively responded to children's bids for attention almost one third of the time. In studies of social problem solving with toddlers, Gloeckler and colleagues (Gloeckler & Cassell, 2012; Gloeckler, Cassell, & Malkus, 2013) reported that teachers used mostly directives and commands when talking with toddlers and little responsive language. Also alarming are the findings from a study of individual toddlers' experiences in child care in which minimal talking or responding to children occurred and the interactions observed between children and teachers were so minimal that the authors could not discern any pattern of differentiation (Hallam, Fouts, Bargreen, & Caudle, 2009). Clearly these settings, and the interactions occurring between teachers and young children in these settings, warrant careful attention to the role of teachers in the development of very young children. Relatively little is known about teacher practices specifically in toddler classrooms and how teachers may or may not be facilitating children's learning and development.

The Role of Teachers in Toddler Child Care

Children's early experiences within both physical and social environments influence and act to literally shape and mold the architecture of the brain. Researchers now know that in order for children to become emotionally healthy functioning adults they need close relationships with significant others as young children. They need responsive, respectful, reliable, and trusted adults to interact with reciprocally and repeatedly over time to actually form healthy brain circuitry (Center on the Developing Child at Harvard University, 2010). Fox, Levitt, and Nelson (2010) and Shonkoff (2008) reported on early meaningful, nurturing, caregiving experiences and how they critically influence brain growth and development and social–emotional development and learning as well. Teachers and caregivers of young children are known to be instrumental in setting the emotional tone and climate of the classroom while at the same time they are responsible for providing both support for child self-regulation and developmentally appropriate learning opportunities (Hamre & Pianta 2007; White & Howe, 1998). Therefore, teacher–child interactions are considered an important pathway to children's development within the classroom context.

Teachers help children regulate their emotions and behaviors, help them learn through daily routines, and provide learning opportunities for both cognitive and social–emotional skill development. As such, the role of the teacher becomes critical in the support and facilitation of learning. One challenge in the development of these relationships is the staff turnover rate in child care which is reported to be on average 30% each year (Whitebook & Bellm, 1999). The National Association for the Education of Young Children (2009) noted how crucial it is to children's development to have stable, emotionally positive teachers. Yet this high teacher turnover rate results in fewer opportunities for toddlers to form secure relationships (Mims, Scott-Little, Lower, Cassidy, & Hestenes, 2008). In addition, facilitating interactions and developing supportive relationships with toddlers may be a tall order for some teachers, given that many toddler teachers have little training specific to toddler

development. Specifically, the current workforce of toddler teachers includes many reassigned preschool teachers who were educated and trained to be teachers of 3- to 5-year-old children and have neither formal training nor experience with toddlers (Norris, 2010; Norris, Dunn, & Eckert, 2003). This situation highlights the need for attention to teacher preparation programs and further professional development opportunities for toddler teachers and the recognition of their professional status and potential.

Toddler Teacher Preparation and Professional Development

The National Council for Accreditation of Teacher Education has suggested the need to turn professional development of teachers "upside down" to achieve desired results and improve outcomes for children (Benner & Hatch 2011, p. 103), and the Center for Child and Family Studies called for "training, compensation and professional stature for infant and toddler teachers at the same level as K-12 teachers" (WestEd, 2012, p. 1). Overall, the educational requirements for early care and education teachers vary widely across and within states (Early & Winton, 2001). Although many preschool and pre-k programs require a 4-year degree, this requirement is not typical for teachers in toddler classrooms (Norris, 2010; Norris et al., 2003). Furthermore, higher education/teacher preparation programs tend to focus coursework and classroom experiences on children 3 to 8 years old. Often what students are learning specific to toddlers is theoretical, academic, and somewhat superficial. Currently, less than half (49%) of higher education programs that offer a degree in early care and education for children 4 years and younger require even one course specifically focused on infants and toddlers (Maxwell, Lim, & Early, 2006). At the same time, there is evidence that teachers with a degree or some education in the field of early childhood have higher quality classrooms and more positive teacher–child interactions and child outcomes (Pianta et al., 2005). In addition, studies have provided support for the association between education and observed positive interactions in the classrooms (Arnett, 1989; Berk, 1985; NICHD ECCRN, 1996, 1997). The limitations in education in the toddler workforce may contribute to the low quality ratings for toddler classrooms, putting toddlers at risk for challenges not only now, but long term as well.

Summary

Research on brain development demonstrates:

- how the brain is constructed early in life with daily interactions influencing the actual wiring of the brain;
- how children need interactions and relationships with others that are responsive, respectful, and repetitive in order to "grow" a healthy brain; and
- toddlers in child care have the highest rises in cortisol over the day, leading to increased stress and challenges to healthy development.

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Relatively little is known about teacher practices specifically in toddler classrooms and how teachers may or may not be facilitating children's learning and development.

In addition, the quality of early care and education available for many toddlers is poor, or minimal, and the teacher turn-over rate 25-40%. There is a great need for toddler teacher preparation programs, which is demonstrated by the studies of teacher–child interactions showing toddlers ignored, given directives and commands, or not spoken to at all. And finally, there is also recognition by others outside the early childhood field of the need to pay attention to and invest in early childhood for the health and well-being of the future of the entire society. Taken together, this information leads to questions and challenges specific to early care and education for toddlers. Next are critical areas of focus for addressing these challenges and needs:

FOCUS AREAS FOR IMPROVING CHILD CARE FOR TODDLERS

Recognition of the importance of toddlerhood as a unique developmental period

As previously stated, toddlerhood is a unique developmental period, separate from infancy and separate from preschool. Although not clearly defined by age alone, toddlers need consistent and nurturing support and guidance for emerging physical and social emotional skills. One simple recommendation is to consistently delineate the developmental periods in early childhood as infants, toddlers, preschoolers, and kindergarten. Teachers of toddlers need a deep understanding of child development, and better understanding of the needs of the particular toddlers in their classroom, so they can plan appropriate activities, support children's emerging emotional and behavioral regulation, and guide children's development and learning.

Focused and expanded research efforts in the areas of toddler development and learning in the context of child care

Given the large research base focused on preschool children's experiences in child care, similar studies need to be carried out

Longitudinal research provides evidence that adverse experiences in childhood result in later adult disease, disorders, and challenging behaviors.

to explore and examine toddlers' daily experiences in child care and interactions with the adults who care for them. Early brain development coupled with new information on toxic stress demands that adults pay close attention to the youngest children and their daily experiences. As the Rand Corporation (Kilburn & Karoly, 2008) so eloquently reported, investment of money and time early in very young children is reported to have huge benefits for children, families, communities, and the nation.

Support for the current and future toddler child care workforce: Provide additional opportunities and choices for toddler teacher pre-service professional preparation at institutions of higher education as well as on-going in-service opportunities that are focused on toddler development and learning in early care and education. Teaching toddlers requires complex skills. Given the developmental needs of toddlers, those currently working in toddler classrooms need state professional development systems to specifically require a balance between the number of continuing education units or contact hours required for CPR, first aid, or safety and continuing education units or contact hours required for learning child development, self-regulation, and behavioral guidance. Course content in higher education programs needs to be specific to interactions, relationships, sensitivity, and stimulation with toddlers. The sense of "autonomy with connectedness" needs to be recognized and addressed in courses for teachers to emphasize the push and pull that toddlers are likely to experience as they move through this critical developmental period and the teacher's role in simultaneously supporting children while fostering independence.

Learn More

Secure Relationships: Nurturing Infant/Toddler Attachment in Early Care Settings
A. S. Honig (2001)
www.naeyc.org/store/node/221

Extending the Dance in Infant and Toddler Caregiving: Enhancing Attachment and Relationships
H. H. Raikes & C. P. Edwards
www.naeyc.org/store/node/17090

Caring for Infants and Toddlers in Groups: Developmentally Appropriate Practice (2nd ed.)
ZERO TO THREE (2008)
www.naeyc.org/store/node/447

Laughing, Learning, Loving: Toddler Brain Development (DVD)
www.naeyc.org/store/node/468

Conclusion

This article calls for a recognition of toddlerhood as a unique developmental period within early childhood education, an increased understanding that early experiences matter greatly and provide the foundation for healthy development and later child outcomes, and an appreciation of the challenges to development of toddlers who are currently in child care centers of poor to mediocre quality. Recognizing the abundance of empirical research on preschoolers in early care and education programs and the scarcity of research on toddlers in similar settings, there is a need for a systematic and focused increased attention to and funding for research on toddlers in early care and education programs. When conceptualizing school readiness and school success broadly, each step in development lays the foundation for the next developmental period. Warm, sensitive caregiving in infancy lays the foundation for developmental tasks in toddlerhood, support and facilitation of learning and development in toddlerhood lays the foundation for preschool challenges and learning, and this process continues throughout childhood. The experiences of toddlers in child care is a relatively unexplored area of the field and thus has huge potential for research, dialogue, and change. Professionals need to act now to make changes that will support toddler development and, therefore, the future of the entire society. And finally, there is an opportunity to influence higher education programs to ensure that teacher preparation programs will positively approach the care and education of toddlers and identify more clearly the role and responsibilities of teachers of toddlers.

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Karen M. La Paro, PhD, completed her doctorate in early childhood special education at the University of New Orleans. She is currently an associate professor in the Department of Human Development and Family Studies at the University of North Carolina at Greensboro. She teaches early childhood education undergraduate and graduate courses. Graduate courses include theory and research in early childhood education and effective teaching in inclusive infant and toddler classrooms; undergraduate courses include an introduction to early childhood education and seminars for practicum courses focused on professional development and teacher–child interactions. Currently she is a co-principal investigator on a Race to the Top, Early Learning Challenge grant in North Carolina

focused on measure development for state Quality Rating Improvement Systems and a co-principal investigator on a federal Office of Special Education Programs early intervention personnel preparation grant. She has co-authored an observational measure of classroom quality related to teacher-child interactions, the *Classroom Assessment Scoring System* (CLASS, Pre-K, K, and Toddler) and conducts observation, reliability, and professional development trainings related to the CLASS across the country. She has published numerous journal articles and presented papers at national conferences focused on teacher preparation in early childhood education and quality in toddler child care classrooms. Her current research and publications focus on developing effective teachers and classroom-based experiences for both cooperating teachers and pre-service students.

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