

# The Contexts of Time and System

inford Prese When therapists working from a systemic perspective meet with clients for the first time, they listen attentively to their presenting concerns and try to understand those concerns from a systemic perspective: Who are the important people in their lives? What are the patterns of interaction with these important people? And what relational changes are needed to help a family member move forward in a healthier way? Placing the client(s) and presenting problem in the context of time has also been part of a systemic approach: What pivotal events have taken place in the client's life, such as the transition to parenthood or the death of someone close? Changes in families are often the impetus for family members to seek therapy. Therapists help their clients face difficult changes and move confidently into the future. A developmental frame allows us to eschew pathology, open up avenues for exploration, and "become more sensitive to normal gains, necessary losses, and multiple disruptions across time" (Skerrett et al., 2022, p. 379).

As Doherty and Baird (1983) explain, at times of major change, it's not just the developmental event that matters, but how families adapt to changing circumstances:

The ability to adapt to change is the hallmark of healthy family functioning. Change is ever-present to families: change as individual family members get older; as the family adds and loses members; as the social, political, and geographic environment changes; as the health of members waxes and wanes. Family therapists stress the importance of the family's flexibility and adaptability in the face of such changes. (p. 31)

In addition to changing to meet new demands, families must also preserve continuity for stability. It's this dynamic process that enables families to overcome one hurdle after another, which is reflected in the family story depicted in the film *Riceboy Sleeps* (Shim, 2023).

So-Young, a single mother, leaves her Korean home and immigrates to Canada with her young son, Dong-Hyung, following the suicide of his father. In addition to adjusting to a new country and navigating two different cultures, they are forced to cope with financial hardship and racism. For example, when Dong-Hyung opens the Korean lunch his mom prepared for him, he is bullied by his elementary school classmates, and the school staff do nothing to protect him. As Dong-Hyung transitions to adolescence, a divide develops with his mother as he becomes more acculturated, and So-Young struggles to connect with him. So-Young resists telling Dong-Hyung the truth about his father's death, but when she receives the news that she has a terminal illness, she and her son travel to Korea to reconnect with the country and the people they left behind. The family exemplifies resilience and loyalty in the face of multiple losses (death, migration, illness), racism, isolation, and the inevitable stress brought on by developmental change.

When a client (a family, couple, or individual) begins therapy, the initial presenting problem may not include contextual details, such as the many transitions and experiences the Korean single mother and son endured. A hallmark of family therapy training is making connections between presenting problems and the contexts that surround those problems. One context is time, which is expressed in the family life cycle and other models of developmental change. Another context is system, which includes the family and many other systems (e.g., cultural group, social class, school system, biological system). In this chapter, we review these models, their history within family therapy, and their relevance for this book.

#### **Family Development**

The family life cycle concept dates back to the mid-20th century and describes the expansion and contraction of families over time.

Evelyn Duvall (1955) presented a widely adopted, nonclinical model that described a sequence of predictable stages that families go through, starting with marriage and leading to subsequent stages based on the age of the oldest child (e.g., infant to 30 months; 30 months to 6 years). Along the way, individuals and families have specific tasks to accomplish in each stage to successfully transition to the next stage. Duvall's model was adapted and revised by family scholars over the years, with differing numbers and names of stages, but they generally preserved Duvall's vision of sequence and tasks. More recently, the family life cycle concept has been more dramatically transformed based on a recognition that stages don't always occur as predicted, such as when an adolescent becomes a single parent, grandparents raise grandchildren, or a parent dies in their mid-30s. What started as a life cycle model that mostly described White middle-class families is gradually integrating the reality of socioeconomic status, race/ethnicity, and culture (McGoldrick et al., 2016).

Developmental theories remind us to think about the age of the patient and family when they share their presenting problem. A therapist can consider what should be happening at the patient's developmental stage to bring more precision to understanding the presenting problem. For example, I (JP) had a client family with a 17-year-old child who had cancer. Beth, the cancer patient, had to quit school and move to another city with her mother for specialized treatments. In many ways, Beth became increasingly dependent on her mother. Before the cancer, she had had a full life as captain of the basketball team and a trusting and fun relationship with her boyfriend. The cancer treatments led to Beth and her mother growing increasingly close and dependent on each other in a new city as they faced the possibility of Beth's death. Just at the stage when Beth would normally start differentiating from her family, she was thrown back into total dependence. In addition, the physical distance from home led to emotional distance between her mother and father. who already had been struggling in their marriage. If Beth had been 6 years old, the family would have been in a developmental stage that was already marked by greater dependence.

Another benefit of using a developmental lens is to identify what an adult patient might have missed in earlier years. Elizabeth, a 20-year-old client, started using drugs when she was 13. Her life centered on obtaining her next dose of heroin. What it didn't center on is school, friends, sports, and other normative activities of adolescence. By the time she was 20 and trying to stop using, she felt that she had no skills or knowledge about "typical" adolescent life. She did not know how to apply for a job, plan a career, develop healthy friendships, or find a boyfriend. Part of the therapy involved working on basic social skills that she would normally have naturally developed during her adolescence.

If normative developmental milestones do not happen "on schedule," it is usually not too late for a person to learn the lessons offered by such milestones. Part of being an effective therapist is to provide hope and look for alternative ways for a client to achieve developmental goals. For example, therapists who are working with children with disabilities that affect growth and development are often experts in helping families find alternative strategies to achieve goals. Parents who have a child with significant learning challenges recognized that the child was suffering in their local public school. The parents ended up changing schools and also getting their child involved in horseback riding. The child made a group of lasting friends who also had some learning challenges, and they became an expert equestrian. Their developmental milestones—needing some autonomy from their family, finding their own strengths, and developing new relationships that involved social risk-were achieved by changing their environment and creating a context for developmental success.

Sometimes patients and their families come to therapy when they are in transition from one life cycle stage to the next, such as transitioning from being childless to becoming parents or the beginning of the empty nest for couples whose last child leaves home. These stages are normative. Of course, families can also experience unexpected transitions, such as when a parent is struggling with a life-threatening illness or with substance abuse. Families can be caught between their old way of living and not yet understanding the changes that must be made to live in the new way. Anthropologists and psychologists use the term *liminality* to describe the in-between stages in which families feel disoriented and unsure. Bruce Feiler (2020) noted that change is inevitable and that significant time is spent in the in-between stages during one's life. The work on liminality, which we return to in Chapter 5, reminds us that developmental stages are a guide, not rigid patterns.

In addition, therapists might recognize when their clients are in the in-between stage. A mother wrote about the in-between stage when her daughter was dying of cancer (Wildman, 2023):

Through it all, my partner and I have attempted to meet both our children at the point between frankness and oversharing, optimism and reality. There is a weirdly direct line between despair and joy, between clarity and too much information. It is not the first time we have been in what rabbis call the *meitzar*, the biblical narrow place—a place of compression. The *meitzar* is an expression of all the things that can make life impossibly hard. . . . We do not know if we are now stable, or, if we are, how long that will last.

Therapists, at times, have the privilege of being with patients as they traverse the narrow place, the in-between stages of life when the past is over but the future is unsure. Experienced, wise therapists can provide guidance and reassurance during these difficult days of transition. If therapists can't provide guidance, they can at least "sit with" their patients during the difficult periods.

Individual developmental theory often deals with closeness and distance in relationships, beginning with the infant learning that they can trust their parents to care for them and provide safety. The family life cycle model is slightly different. This model focuses on independence, interdependence, and dependence. For example, infants and elderly family members can be totally dependent on other family members for survival. Of course, cultural norms affect these family norms. Western cultures have been criticized for the indifference some families show to their elderly members' needs. Eastern and Western cultures often differ in the degree of deference young adults are expected to show to their parents' wishes as they make decisions about careers, life partners, and other life choices. In Western cultures, young adulthood is a time of growing autonomy and separation from family.

Thus, therapists want to consider issues of dependence/interdependence/independence and how the family's culture might affect their choices. Should the elderly mother be placed in a nursing home, or should the wife quit her job so she can care for her, who will move into the family's home? Can the 18-year-old move across the country for a job, or is it her responsibility to stay nearby? Who should change their schedule and career goals to care for the new baby? These are all issues that arise when one family member's needs for care influence the entire family structure.

#### Developmental Theories and Family Therapy

Developmental theories and models have informed the work of family therapists from several theoretical orientations (Nichols & Pace-Nichols, 2000). Many of the foundational family therapy theorists gave special attention to developmental issues, particularly around the time when children become adults and transition out of the family home. At the heart of Murray Bowen's (1978) work is the concept of differentiation of self, which he described as being emotionally close to others without losing one's individual identity. How a person differentiates—the degrees to which they are connected to and separate from their family of originplays a large part in their ability to form healthy intimate relationships and adequately manage the anxiety that accompanies change. A lack of balance in either direction (fusion or cutoff) has been considered a cause for concern that could result in transitional stress. Similarly, Jay Haley (1977, 1980) was concerned with family members getting stuck in transitions, particularly during young adulthood when, in Western cultures, they are likely to be forming intimate relationships outside of the family and becoming self-supporting.

Minuchin's (1974) focus was broader than the focus on single young adults. He emphasized the need for newly married couples to negotiate a different relationship with their families of origin, in which loyalties shift to the new spouse. The couple also needs to build a predictable structure:

The spouses must develop a mutual accommodation in a large number of small routines. For example, they must develop routines for going to bed and getting up approximately the same time. There must be a routine for having meals together, and for setting and clearing the table. There must be a routine for being naked and for having sex, for sharing the bathroom and the Sunday paper, for watching television and selecting programs, and for going out together to places that both of them enjoy. (p. 17)

When children arrive, the structure must adapt again to accommodate the child and the new demands on the time and energy of a couple.

The family therapists most historically linked to family development are Betty Carter and Monica McGoldrick. They brought an adapted version of Duvall's family life cycle model into family therapy in the late 1980s (Carter & McGoldrick, 1989). They identified tasks for families in each developmental stage and hypothesized that stress is often greatest at transition points from one stage to another, which is similar to the concept of liminality discussed earlier. Carter and McGoldrick (1989) encouraged clinicians to consider the link between presenting problems and the stress associated with life cycle transitions, partly because clients may not identify the link in their initial presentation. The model enabled therapists to make some hypotheses about the presenting problem. A classic example is the transition to adolescence, when children begin to desire more autonomy and an adjustment of parenting skills is required to adapt to this growing independence.

Combrinck-Graham's (1985) *family life spiral* takes a process approach to our understanding of how families change and adapt over time. She states that families naturally oscillate through times of greater closeness (centripetal periods), such as the birth of a new baby, and times of greater distance (centrifugal periods), such as a divorce or a child leaving home following adolescence. Centripetal periods are characterized by a greater family cohesion and focus on internal family life. Centrifugal periods display an opening of external family boundaries, allowing individual family members to pursue goals and interactions with the extrafamilial environment. A crisis in the family, such as the onset of physical illness, generally has a centripetal period to a centrifugal period (e.g., the launching of children), it may prolong the centripetal period (e.g., keeping the launching child at home longer and changing plans for college and/or career).

## Criticisms of the Family Life Cycle

The family life cycle concept has been criticized for its exclusiveness, assumption of universality, and tendency to obscure complexity (Laszloffy, 2002). How many families follow a traditional life cycle? And more generally, what is a family? Many could look at the family life cycle and not see themselves in traditional definitions of family—individuals who don't partner, couples that don't have children, families that divorce, young adults who live with their parents, and so on. Some individuals might define their close friends as family, especially LGBTQ+ (lesbian, gay, bisexual, transgender, queer/questioning) people who have been rejected or misunderstood by their families of origin. Where do these relationships fit?

Individuals and relationships are frequently cycling through multiple challenges. For example, a family with four children—ages 22, 18, 12, and 5—would technically be considered to be in the "launching stage," based on the ages of their oldest children. But they are also in other developmental stages that reflect the unique needs of their other children and their need to manage other unexpected changes: The 5-year-old has a recent diagnosis of autism that impacts her entry into school; the noncustodial father has recently been diagnosed with Stage 4 pancreatic cancer, forcing him to leave his job and delaying the 18-year-old's transition to college. Families are rarely coping with just one transition and life stage.

Even the assumption of "change over time," which is the basic foundation of developmental psychology, focuses on the passage of time since birth (Carstensen, 2006, 2021). As Carstensen (2006) states, this concept may be quite useful during child development but loses its precision as we age:

A substantial literature shows that chronological age is an excellent (albeit imperfect) predictor of cognitive abilities, language, and sensorimotor coordination. At increasingly older ages, however, chronological age is a poorer predictor. Instead, increased heterogeneity or differentiation within samples is considered to be a cardinal feature of life-span development. Presumably, this is due primarily to differences in experiences and opportunities that individuals encounter over time. Chronic stress, level of education, close relationships, and social status all place individuals on very different developmental trajectories that affect not only day-to-day functioning but also health and longevity. Late in life, chronological age continues to provide a rough marker of accumulated life experience, but it loses the precision it holds in youth. (p. 1913)

Does Cartensen's argument mean that the family life cycle concept and developmental theory as a whole are irrelevant? We don't think so. But it forces us to reconsider our assumptions about how individuals and families change over time. In bringing a life cycle perspective to understanding families, we're not prescribing a rigid sequence or sharply defined tasks associated with outdated notions of how families should move through time. Rather, we assume change is constantly occurring, sometimes related to aging and maturation and sometimes related to specific events or experiences, such as the death of a family member. At times, stages associated with the traditional family life cycle will be highly relevant to our clients as they cope with themes shared by others, which enables them to feel less alone in their struggles.

We use the family life cycle model to specify changes related to the arrival, aging, and departure of family members. We use the term *family development* to capture all other changes. Falicov (1988) addressed the tendency to use the concepts interchangeably:

Although the two terms are not synonymous, family therapists often use them interchangeably. . . . The "family life cycle" refers to those nodal events that are tied to the comings and goings of family members, such as the birth and raising of children, the departure of children from the household, retirement, and death. . . . "Family development" is an overarching concept, referring to all transactional coevolutionary processes connected with the growth of a family. These include processes of continuity and change connected with work or occupational development, relocation, migration and acculturation, acute or chronic illness, or any set of events that significantly alters the texture of family life. . . . Life cycle and developmental processes overlap and interact, sometimes synchronically, other times asynchronically. (p. 13)

All families have to adapt to predictable (e.g., adolescence) and unpredictable (e.g., unemployment) changes. We also consistently remind ourselves that families don't adapt to these changes in a vacuum; they are adapting in a context of multiple, nested systems.

## The Nesting of Systems

Family therapists have historically embraced the idea that all systems are both self-contained and are a part of other systems. One cannot fully understand a system (or part of a system) without understanding its relevant context. When we talk about systems, we're referring to more than the family system. Individuals and families are linked to multiple systems (Shafran et al., 2017). Bronfenbrenner's (1977) ecological systems model illustrates that many systems are in constant interaction over time. Every part of a system—the individual, couple, and family—lives

within "a nested arrangement of structures, each contained with the next" (p. 514). These systems include (1) the multigenerational family, including legacies and the multigenerational transmission of patterns (Boszormenyi-Nagy & Spark, 1973; Brown & Errington, 2024; Kerr & Bowen, 1988), and related systems, such as school settings and faith communities (microsystem); (2) socioeconomic status and government agencies (exosystem); (3) cultural ideologies (macrosystem) (Paat, 2013); and, as we've been exploring in this first chapter, (4) developmental changes that impact individuals and families over the life course, which is a process of continuity and change (chronosystem).

Thomas Insel (2008), the retired director of the National Institute of Mental Health, made observations about the layering of systems when he talked about the etiology and treatment of mental disorders encompassing "neurons to neighborhoods." Over the past 30 years, many family therapists, particularly medical family therapists (McDaniel et al., 2014; Patterson et al., 2021), recognized the importance of biological forces and embraced the biopsychosocial model (Engel, 1977, 1980, 1997). Engel (1977) proposed the biopsychosocial model for training physicians in response to what he perceived as a biomedical fixation in medicine:

[The biomedical model] assumes disease to be fully accounted for by deviations from the norm of measurable biological (somatic) variables. It leaves no room within its framework for the social, psychological, and behavioral dimensions of illness. The biomedical model not only requires that disease be dealt with as an entity independent of social behavior, it also demands that behavioral aberrations be explained on the basis of disordered somatic (biochemical or neurophysiological) processes. Thus, the biomedical model embraces reductionism, the philosophical view that complex phenomena are ultimately derived from a single primary principle, and mind-body dualism, the doctrine that separates the mental from the somatic. (p. 130)

Engel's writings suggest that he was worried that medicine was marginalizing the patient's experience of pain and suffering as well as the factors that impact illness, such as family and community relationships. What does this discussion have to do with family therapy? McDaniel and colleagues (1992) worried about a different fixation of family therapists: Family therapists have not practiced within a biopsychosocial model but have tended to operate within their field of comfortthe family system-and to pay only minor attention to the individual biological or physical dimensions. By neglecting the other levels of organization, they are at risk for "psychosocial fixation." (p. 14)

A way of thinking that integrates all of the active systems in a person and family's life is now a basic requirement for all family therapists. Pres

## The "Bio" in Biopsychosocial

Genetics and neuroscience have transformed our understanding of biological and social inheritance (Wampler & Patterson, 2020). The work on toxic stress, which we discuss in Chapter 5, illustrates how the environment can influence brain development. Especially in the critical preschool years, attachment behaviors and parental attunement can provide critical sources of environmental inputs that can buffer the effects of toxic stress.

Besides understanding the impact of attachment behaviors on the developing brain, therapists must be knowledgeable about developmental neuroscience. For example, therapists often encounter families who have a child or even a parent with attention-deficit/hyperactivity disorder (ADHD). A therapist who is familiar with the basic information about the development of the prefrontal cortex can help parents understand that their child is not purposefully disrupting their class and home. Rather, they have a developing brain that matures over time. While this child might be a bit slower than their classmates in their regulation of emotions, their neural brain circuits are nevertheless maturing, and the hyperactivity will naturally dissipate in adolescence. Until then, the child's brain needs their parents to provide structuring and emotional regulation skills as guardrails until the child can perform these skills on their own.

In addition, therapists regularly encounter families in which one family member is taking psychotropic medication, such as the child with ADHD who is taking a psychostimulant medication. Psychotropic medications target different circuits of the brain. As we discussed in our earlier book, The Therapist's Guide to Psychopharmacology, "In order to understand how medications work, it is important to have a basic understanding of the nervous system as well as an understanding of how it normally operates so a person can flourish" (Patterson et al., 2021, p. 3).

Ebigenetics, ebigenetics inheritance, and genetic nurture were originally terms developed in genetic research to describe biological processes and possibilities (Martínez-González et al., 2023; Patterson & Vakili, 2014; Yehuda, 2022). In essence, epigenetics suggests that our genetics are not destiny. Instead, our genes offer possibilities: They confer a risk for mental disorders. But it is our environment that "turns on" some genes' "instruction manuals"; otherwise, genetic traits may remain dormant during an individual's life. Billions of dollars have been spent trying to identify "candidate genes" and specific alleles for mental illnesses such as schizophrenia. To date, genetic research has shown that there are myriad pathways to an illness with both biological and environmental (e.g., toxins, food, parenting) forces at work. Research has also demonstrated that some mental illnesses such as autism, schizophrenia, bipolar disorder, depression, and alcoholism have shared genetic pathways, specificity, and convergence, but that the environment can influence "gene expression" for these illnesses (Gandal et al., 2018).

In addition, genetic research has shown that mental disorders are developmental disorders. Although a young adult may have their first manic episode at 20, the genetic and epigenetic foundations of bipolar disorder began at birth or even earlier. In fact, recent research suggests that the etiology of some illnesses, such as autism and schizophrenia, can begin in utero and that the stress level of the mother and her exposure to toxins and illness can have lasting effects on her fetus (Sapolsky, 2018; Weir, 2012). During early childhood, adversity, such as the effects of trauma and poverty, has been linked with adult immune dysfunction, insulin resistance, and brain changes (Brent & Silverstein, 2013). These brain changes can lead to high-risk behaviors, emotional dysregulation, and chronic mental health problems. However, the presence of a nurturing adult, who is attuned to their child's emotions, can offset the effects of chronic stress on the child's body and brain (Shonkoff et al., 2012).

Another term from genetics that can inform family therapy practice is *epigenetic inheritance* (Jirtle & Skinner, 2007; Shonkoff et al., 2012; Weaver et al., 2004; Yehuda, 2022). In essence, epigenetic inheritance suggests that the cumulative life choices and experiences of parents can leave biological traces in their children (Wampler & Patterson, 2020). The children can pass these traces, which may become biological characteristics after one generation, to their own children (Martínez-González et al., 2023; Patterson & Vakili, 2014; Yehuda, 2022). In addition, new research suggests that the paternal epigenome also contributes to a healthy newborn. Indeed, "there is a growing belief among scientists that a man's behaviors and environmental exposures may also shape his descendants' development and future health before sperm meets eggs . . . sperm contains a memory of a male's life experiences" (Abbasi, 2017, p. 2049). A father's age, diet, stress, and alcohol consumption can contribute to health outcomes for his child, including the risk of obesity, diabetes, heart disease, and cancer, even if the father is not present. These changes in the child's health can potentially be passed down for several generations. If this is potentially "bad news," then the good news is that motivating a client to work in therapy to adopt a healthier physical lifestyle, to provide securely attached relationships for one's children, and to practice hope and gratitude may reset the biological factors that subsequently reverberate across future generations.

Environmental trauma that mothers experience can increase the risk of serious mental disorders in their children (Betancourt et al., 2018). Researchers studied Finnish children who were evacuated to Sweden during World War II (Santavirta et al., 2018). They tracked their offspring who were born between 1950 and 2010. Female children of evacuated mothers were twice as likely to be hospitalized for a psychiatric illness as their female cousins who had not been evacuated. They were also much more likely to have depression and bipolar disorder. The researchers suggest that childhood trauma can be passed on to offspring.

Another powerful example of genetic inheritance comes from the suffering caused by the Dutch Hunger Winter that took place in 1944 when the Germans blocked food supplies headed toward the Netherlands. Women who were pregnant during this horrific period had children who were at an increased risk for obesity, diabetes, schizophrenia, and an early death. Scientists who have studied the Dutch Hunger Winter cohort found that certain genes were silenced in utero and never expressed during the person's life (Tobi et al., 2018). Eventually, findings from studies like this cohort might lead to specific information on how stress can reprogram an individual's health even before birth.

A final term from genetics that may inform family therapy is *genetic nurture* (Koellinger & Harden, 2018). This term suggests that a child's genotype is mediated by the parental genotype and the inherited family environment that the parents create. Thus, a parent's genotype could influence their child's behavior, such as educational success and attainment. These genes were not inherited by the child, but they influenced the child's environment by influencing a potent environmental force for them—their parents. For example, gene variants in the parents might influence parental planning or nurturing, which leads to stronger educational attainment. This new research is further evidence that family therapists cannot separate nature from nurture because both are entangled in human development.

Hartman and Belsky (2016) suggest an evolutionary perspective of human development. Children have "differential susceptibility" to environmental influences. Some children are more affected by negative and positive events than others. Thus, a child's or an adult's responses to therapy may differ depending on their genetics, their previous environmental exposures, and their age, which combine to form their overall risk to good or destructive effects. An awareness that there is a biological substrate for differential susceptibility can be important for a therapist helping a parent to attune to the emotional experience of their child.

## Research on Gene-Family Environment Interaction

Family scholars may wonder what "biological" components of the biopsychosocial model might be relevant for helping families. As mentioned earlier in this chapter, knowledge about human development can help parents understand what their children are experiencing at each stage of life and how they can help navigate the challenges their children face. For example, a therapist working with a teenager and their family might talk about identity development. The therapist might explain the teen's sudden change in appearance and behavior as both biologically and socially normative.

Psychosocial researchers and biological researchers understand that human growth and development, including brain development, are a mix of psychosocial and biological forces. The National Institute of Mental Health (NIMH) sponsors research to better understand how multiple forces influence each other. The NIMH Genes to Mental Health (2023) initiative aims to delineate the behavioral and cognitive symptoms in individuals with rare genetic variants that confer risk for neurodevelopmental psychiatric disorders. For example, researchers recognize that when a small part of chromosome 22 is missing, an individual is more susceptible to mental illnesses such as depression, anxiety, ADHD, and Asperger syndrome (Gur, 2023).

Genetic research has demonstrated that there are multiple pathways to mental illness, but there are also multiple pathways to prevention. For most mental illnesses, one gene is not matched with a specific mental illness. Also, variations in one gene might confer risk for different mental illnesses. A genogram might illustrate how one gene led to different phenotypes (observable characteristics in family members) and different mental illnesses—all occurring in one family. Scholars seek to under stand both risk and protective factors, especially during the early years of development, which are critical periods when the brain and body are most malleable. Families can influence some protective factors, such as parents who demonstrate emotional warmth and safety. They may have less control of other protective characteristics such as some of the social determinants of health, such as racial and linguistic disparities in health care and education and work- or poverty-related stressors.

How does the environment influence gene expression? Specifically, how does family functioning influence gene expression, specific phenotypes, and/or the emergence of mental illnesses like bipolar disorder or psychosis? Also, how could family functioning help prevent mental illness when there is a genetic risk factor such as the occurrence of mental illness in earlier generations? Biopsychosocial researchers are exploring these questions. For example, researchers examining the biological etiologies of mental illness are also examining family environment and family interaction. Using assessment instruments such as the Family Environment Scale and the Iowa Family Interaction Scale, scholars have come to understand that qualities such as closeness and expressiveness and family conflict can influence the emergence of mental illness (Melby et al., 1998; Moos & Moos, 2009). How families communicate with each other, set rules and allocate responsibilities, and solve problems can influence gene expression (NIMH, 2023). In general, parental warmth and the ability to solve problems even when there is conflict promote healthy biological and psychosocial development.

#### **Risk Factors Are Not Necessarily Predictive Factors**

It would be a dismal outlook if the biology of genetic inheritance and early life adversities were the sole determinants for our destinies. In fact, both biological and psychosocial protective factors exist that can mitigate risks for poor mental health. British psychiatrist Michael Rutter (1987) studied children of drug-addicted mothers and expected global impairments from their emotional impoverishment. However, he was startled to find that at least one-fourth of the children seemed healthy and capable. When colleagues reported similar findings (Garmezy, 1985), Rutter shifted his research program from the study of psychopathology in children to the study of resilience.

In South Chicago, community psychiatrist Carl Bell directed the world's largest community mental health center, working with youth whose exposure to violence was ubiquitous. When the social fabric of families and neighborhoods stayed intact, the youth emerged intact into productive lives. Bell's message was that "[r]isk factors are not predictive factors because of protective factors" (MEE Productions, 2007, p. 6).

Psychiatric illnesses, such as schizophrenia or bipolar disorder, have been shown to be genetically determined brain diseases. Abnormal functioning of the brain's prefrontal and temporal cortices and limbic system largely account for symptoms, such as hallucinations, delusional thinking, cognitive impairment, and flattening of emotions. While genes account for most of the risk, they may not be directly causing the symptoms of mental illness. Rather, genes may create vulnerabilities for effects of environmental factors that are potentially modifiable. As a possible analogy, phenylketonuria (PKU) is a genetic defect that can result in severe intellectual impairment. However, the PKU gene does no harm unless a child's developing brain is exposed to phenylalanine in the diet. Likewise, genes posing risks for schizophrenia or bipolar disorder may operate by rendering the developing nervous system vulnerable to environmental factors that ordinarily would have been of trivial importance.

Although schizophrenia is a biological illness, it is exquisitely sensitive to emotional intensity and communications. Since 1970, there have been no new medication treatments for schizophrenia that have been game changing. However, new psychosocial therapies for schizophrenia that lower cognitive workloads, decrease emotional intensity in home environments (e.g., lower expressed emotion), and provide cognitivebehavioral social skills have dramatically improved the social functioning and employability of young persons diagnosed with schizophrenia, while reducing illness relapses and hospitalizations.

A mission for family therapy is to learn how family interventions can direct these biological pathways that genetics put into play toward health. Therapists can then know that when they deliver effective treatments, they are not just influencing the family's interaction. Family therapy can activate biological protective factors for the clients in the room that then cascade across future generations. If therapists are working with families with young children, the therapists can know that they are setting the children's biological trajectory on a path to growth and health.

### Conclusion

A biopsychosocial, time-sensitive approach integrates the contexts of time and system into our understanding of a client's presenting concerns, which may help answer the "Why now?" question (Stanton, 1992), or what is bringing the client to therapy in this moment. According to Nichols and Everett, "some families may present themselves for therapy at the onset of the [developmental] disruption, others may not feel that there is a problem until disruptive events have accumulated and . . . resulted in severe symptomatology" (1986, p. 186). The question of "Why now?" may be answered by the client ("We feel stuck") and the therapist through hypotheses about the presenting problem that are informed by developmental theory and research.

When therapists are knowledgeable about common life cycle stages and other developmental disruptions, such as divorce and death, they are able to link here-and-now problems with individual and family development. New demands and shifting relationships can lead to increased stress and crisis. A couple or family's ability to adapt to change can minimize or exacerbate stress. Next, we turn our attention to a specific system: the family system.