

Academic/Research Paper

Rising rates of psychopathology and the changing ecology of childhood

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The purpose of this article is to make the argument that rising rates of psychopathology in western societies (McGilChrist, 2021) are rooted in the changing ecology of childhood (Schore, 2012)

The early developmental environment has changed in recent decades potentially putting larger numbers of people at risk for disorders because it does not meet the emotional needs of infants and children. Traditional child-rearing practices like alloparenting (non-parents who provide parental care), co-sleeping and breast-feeding have declined, depriving infants of essential sources of nurture (Narvaez et al., 2013b). In addition, work practices, technology and other stresses are further reducing the relational connections required for healthy development (Sparrow, 2016; Perry, 2013b). It will be argued that

we must look to the environments in which humans evolved to understand what infants and children need for healthy development and how a failure to meet these needs can result in pathology. Finally, the article will conclude by arguing that the psychotherapy field has a key role to play in addressing this problem through early intervention and prevention.

Development and disorder

The developmental view of mental disturbance sees emotional problems as developmental outcomes that result from successive transactions between the child and the

environment (Sroufe et al., 2009). Disturbance arises from “patterns of maladaptation interacting with on-going challenging circumstances in the absence of adequate support” (Sroufe et al, 2009, p.239). The human brain and mind are a dual system with the unconscious located in the right hemisphere (Schore, 2019b). The attachment relationship structuralises the developing right-brain unconscious for better or worse through the “implicit intergenerational transmission of resilience against or vulnerability to, later psychiatric, personality and developmental disorders” (Schore, 2019, p.23). Inadequate early parenting creates a vulnerability that may become pathogenic and destructive of development if later experiences too are unfavourable (Schore, 2019).

Leckman and March (2011) write that “A scientific consensus is emerging that the origins of adult disease are often found among developmental and biological disruptions occurring during the early years of life” (p.341). Prenatal and postnatal environments play a critical role in shaping this trajectory (Schore, 2012). Dysregulated affect plays a primary role in not just psychopathogenesis, but all illness and disease. During early critical periods when the infant is dependent on external regulation, growth-inhibiting environments can create epigenetic changes in the developmental trajectory of those coping systems (Schore, 2012).

In development, states become traits (Perry, 1995) and so if children

have dominant experiences of separation, distress, fear and rage they will go down a pathogenic pathway (Schore, 2012). Chronic arousal of the FEAR (this term is capitalised to indicate it is a primary process affect) system in early development can promote the development of anxiety disorders and depression (Panksepp, 2012). Through frequent activation this circuit can become sensitised, primed for future activation. In early critical periods attachment histories are burnt in to the infant's right brain (Schore, 2012). Secure attachment equates with emotional health, while insecure attachment creates a predisposition to later forming psychiatric disorders – these dispositions are being set up in the first thousand days (Schore, 2017). Agreement has emerged that affect dysregulation is a basic mechanism of all psychiatric disorders and that right brain deficits are central to all personality disorders (Schore, 2019).

The changing ecology of childhood

The past sixty years has seen a gradual erosion of supports for families from the wider community (Lally, 2015). These informal supports were critical to everyday life. In the 1950's a struggling parent was part of the larger family's concern and solutions to problems were typically found through established relationships in extended family and community networks. Changes in family, work and women's roles has led to babies losing something essential: early nurturance provided by trusted caregivers. Few formal structures were developed to take the place of dissolving informal ones. Berry Brazelton points out that for decades we have known that the demands of the workplace on families and the loss of social supports are incompatible with what babies need to flourish and thrive (in Lally, 2015).

Early interactions build neural

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(Porges, 2019)

networks and establish biological set points that can endure for the lifespan (Cozolino, 2014). Reduced levels of nurturance and social interaction in infancy alters the developmental trajectory of the right brain producing deficits in affect regulation that are linked with developmental psychopathologies (Schore, 2012). Schore refers to a dogma within developmental circles that children can cope with deviations in the quality of early care without altering their resilience in the face of adversity ignores the continuing dramatic increases in childhood psychopathology including bipolar disorder, ADHD and autism, which all demonstrate deficits in right brain functioning. The high prevalence of mental disorders in youth is accompanied by a child obesity epidemic and researchers are now seeing insecure attachment as a risk factor for obesity (Schore, 2012). Psychologist Jean Twenge has studied rates of psychopathology in adolescents using the same assessment tool and stringent standards from the years 1938 to 2007 (McGilChrist, 2021). There are between five and eight times as many students who meet the cut-off for psychopathology in the latest group compared to the earliest – this may be an underestimate as many of the latest are on antidepressants that did not exist for the first group.

Evolutionary history

The infant's emotions and motives are adapted for a "rich evolving experience within a happy family supported by an intimate caring

community of friends and neighbours who have a secure and creative traditional way of life" (Trevarthen, 2019, p.38). If disturbance weakens these impulses during the formation of body and brain, or if the environment does not support normal expectations for which the organism is adapted, chronic stress and psychopathology can result. The infant's psychic powers are regulated in relationships and destructive events in these relationships create trauma and disorder. The fate of the infant depends on how the society of adults manage work and life in the whole community with its technology, stresses, conventions and social conduct.

Decades of research shows that ancient societies knew how to facilitate optimal development in children (Porges, 2019). Tronick states:

The most widely accepted model of the caretaking environment of the human infant at birth and into the second year of life is that it should provide... almost constant contact between the infant and mother, with frequent nursing bouts of short duration (2007, p.102).

Bowlby (1969) claimed that a biological structure takes the form that is determined by the environment in which the system has been functioning throughout its evolution. He calls this the environment of evolutionary adaptedness (EEA). It is only within this environment that the system can be expected to operate efficiently. Bowlby warned against modern child-rearing practices that deviated dramatically from the EEA (Hewlett and Lamb, 2005). Anthropology gives a unique perspective on human nature by applying "phylogenetic depth and cross-cultural breadth" which exposes tensions between modern infant care and the evolved biology of mothers and

infants (Ball and Russel, 2013). Ethnographers have described a set of generalisations called the hunter-gatherer childhood model (Konner, 2005). These descriptions suggest that modern-day childcare practices are discordant with those in the EEA – something which has developmental implications.

In hunter-gatherer groups and traditional human societies, infants are raised within a small group of collaborative caregivers who share the role of attachment figure (Siegel, 2012). This enables the child to develop a wide range of survival strategies. Humans need the support of a network of caregivers to provide collaborative nurturance. The integration model holds that in a network of multiple attachment relationships, secure attachments can compensate for insecure ones (Mesman et al., 2016). Cross-cultural studies show that secure attachment relationships routinely exist outside the mother-infant dyad (Gottlieb, 2004; Howes and Spieker, 2008; Lamb and Lewis, 2010; Morelli and Rothbaum, 2007).

Bowlby argued that infants are born with the 'set goal' of remaining in contact with the mother (Hrdy, 2005). Physical proximity symbolises the comforting availability of the caregiver (Wallin, 2007). Babies are subject to feelings of distress that they cannot manage alone. Availability is about accessibility but also, crucially, emotional responsiveness. The goal of the attachment system is the felt sense of security. Babies shape their caregivers to be responsive to their needs; for this to occur, caregiver's need to be present, available emotionally, and protected from too many demands (Brazelton, 2015).

Modern caregiving

In modern caregiving systems children are often cared for by non-kin who are likely to be less attuned to the child than a family

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member would be (Narvaez et al., 2013). Nonmaternal and nonparental care in the first year is a risk for insecure attachment and insecure-avoidant infants who have received such care express more negative affect and upon reunion and engage less in object play with the mother (Schore, 2012). Even infants who use in home baby-sitters for more than twenty hours per week show more avoidance upon reunion and are more likely to be classified as displaying insecure attachment. There has also been a link reported between early day care and aggression and noncompliance. Elevated insecure patterns are consistently found in child-care children. Care initiated early in life and experienced for many hours, in particular in child care centres, is linked with higher levels of externalising behaviour problems which is not simply the result of low-quality care. There has also been shown to be a link between day care and elevated cortisol levels. Schore (2012) argues that the stressful environment of day care is known to jeopardise children's development.

One study demonstrating the effects of stress in the perinatal period shows that brief daily separations induced high stress for prolonged periods in the infant (Wei et al., 2010). This stress was linked with anxiety in adulthood despite the fact that the infants received increased maternal care afterwards. The authors conclude that exposure to stress in the postnatal period overrides the capacity of maternal

care, programming anxiety behaviour through the inhibition of the normal growth spurt at this time (Schore, 2012). Research shows that maternal employment in the first year after birth is linked with developmental risks like insecure attachment (Belsky, 2001) and negatively impacting the cognitive abilities of children (Hill et al, 2005). The long-term impact of this is an increase in the number of people with a neurobiological predisposition for psychiatric disorders (Schore, 2012).

Separation and disconnection

A lot of disturbance in development is caused by caregivers' failure to respond to young children's healthy needs for closeness and fears of separation (Sroufe et al., 2009). Ethnographic data from societies around the world demonstrate that mothers in traditional societies are in almost constant contact with their infants, carrying them on their bodies, breastfeeding at will and sleeping beside them (Ball and Russell, 2013). Euro-American mothers and infants have experiences that differ significantly with the close and prolonged contact between mothers and infants in anthropoid primates and amongst human societies worldwide. Harry Harlow's research showed the need for 24-hour contact between infants and mothers – infants will seek this even with a cloth-covered inanimate substitute (cited in Ball and Russell, 2013). All of the data confirm that children experience extreme distress when separated from their primary caregiver (Bloom, 2013). Normal infant care in western societies is a very recent development (Ball and Russel, 2013). For the majority of the world's cultures separation of the infant from its mother for sleep is viewed as neglectful or abusive. Even in the West this practice is recent - less than two centuries ago mother-baby sleep contact was the cultural norm.

Donald Winnicott argued that an infant does not exist in isolation but within the context of the child-caregiver relationship (cited in Hart, 2010). Most mammalian offspring find it distressing when they lose contact with their caregiver (Narvaez et al., 2013). In infant rats, even short separations from the mother can cause lifelong changes in stress responsivity. Even in less social species than humans, physical separation creates painful emotions. Work on rats has shown that multiple systems are regulated by the presence of the mother and these become dysregulated in her absence. Monkeys separated from adults when young produce less serotonin which is linked with impulsive violence and antisocial behaviour in mammals (Narvaez et al., 2013). Excessive separation distress in early development makes the brain vulnerable to depressive disorders later in life. Rats with less touch had higher anxiety and lifelong heightened response to stress. These effects echoed down the generations as low-nurturing mothers bred low-nurturing daughters compounding the effects of poor care over generations.

Young mammals have a powerful emotional system to indicate that they are in need of care – the panic/grief/ separation distress system (Panksepp, 2013). This becomes activated when they are lost or left alone and alerts caregivers to seek out and attend to the needs of the child. If a baby is left to cry for a long time a number of detrimental outcomes occur (Noble et al., 2018). The brain is flooded with stress hormones that destroy neuronal connections. Pain circuits become activated and opioids, which produce feelings of well-being, are diminished. With nonresponsive care the baby may shut down emotions, appearing fine, when in reality his cortisol readings are very high. Animal studies show on-going experiences

From the point of view of attachment theory, the night might be a very stressful time, when infants need protective caregiving the most

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of grief set up mood disorders (Watt and Panksepp, 2009). Unrelieved stress in early life leads to anxiety and depression later in life as well as using alcohol for relief. Stress response systems can become permanently wired to oversensitivity from early stress leading to all sorts of negative health outcomes including accelerated aging and mortality.

From the point of view of attachment theory, the night might be a very stressful time, when infants need protective caregiving the most (Mesman et al., 2016). In Israeli Kibbutz, where infants sleep away from their mothers who then are largely unavailable, there are higher rates of attachment insecurity (Mesman et al., 2016). These infants are cared for by their mothers during the day but a stranger at night. Higher levels of resistant attachment have been recorded in these contexts, probably due to inconsistent responsiveness. Disorganised attachment is also high in another Kibbutz sample, possibly due to the unpredictable circumstances.

Touch and co-sleeping positively impact regulatory processes probably through effecting the vagal system and reducing stress hormones (Narvaez and Gleason, 2014). Co-sleeping is “a context of care, a foundation for socialisation, and an aspect of our developmental niche” (Middlemiss, 2014, p.164). Anthropologists and others have drawn attention to the fact that infant co-sleeping is nearly cross-

culturally universal and is practiced by all old-world monkeys and apes (Hewlett and Roulette, 2014). Hidden regulators have been documented during infant-mother co-sleeping which includes regular feeding (Narvaez et al., 2013). The take home message from Harlow’s work on monkeys seemed to be never to leave nonhuman primates alone (cited in McKenna, 2014). However, it is ironic that among the least mature primates of all – human infants – in western cultures the “critical importance and advantages of sustained contact, day and night, comes to be considered problematic” (McKenna, 2014, p.59). Prescott (2013) argues that bottle-feeding has deprived the infant of essential sensory-motor nutrients like touch, movement, smell and the taste of the mother. Prescott’s research shows that in 82% of cultures where weaning age is 2.5 or greater there are absent or low suicide rates. We now live in an environment, concludes Prescott, of ‘sensory-emotional deprivation’.

Relational trauma is imprinted through right-brain to right-brain interactions in which the child resonates with the rhythm of the mother’s dysregulated state (Schore, 2019, p.238). Trauma can be understood as the sudden rupture of attachment bonds (De Zulueta, 2006); or, according to Bowlby, events that significantly threaten the attachment relationship (Szjanberg et al., 2010). Infants are adapted to rely on the availability of responsive parental care for protection and for regulation of emotions and biology (Bureau et al., 2010). In infancy a hidden trauma can occur from the unavailability of a responsive attachment figure to comfort and regulate the stress and fear that are part of the infant’s daily experience. The fundamental need of the infant is for psychological connection; therefore, repeated

and brief separations that leave a child alone in extreme stress can create traumatic reactions (Allen, 2013). Indeed, aloneness in the face of overwhelming affective experience is the root of psychopathology (Fosha, 2021). Schore (2019) agrees that parental affective unresponsiveness is a hidden trauma specific to infancy which can hyperactivate the infant's stress response over time. Longitudinal evidence suggests that this trauma may have an equal or greater impact on development than maltreatment which is more easily observed (Bureau et al., 2010).

Intervention and prevention

There is a need to focus psychotherapeutically on the

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precursors to disorders in childhood not just their manifestations in adulthood (Schore, 2012). Peter Fonagy argues that prevention and early intervention should be the core of mental health (in Emde, 2019). Models of effective early intervention during the period of the brain growth spurt in the first two years of life are equated with prevention (Schore, 2012). Integrated and multidisciplinary

services are needed to implement the range of interventions required to improve long-term outcomes (Colizzi et al, 2020). Mental health professionals have responsibility for giving direction to social, political and other healthcare groups involved in meeting the mental health needs of children. Policy statements on parenting should be formulated (Narvaez et al, 2013). Current child-rearing practices are being seen as 'risky' based on the fact that they depart from tried and tested traditions from our evolutionary history. In particular, practices like formula feeding, sleeping in isolation, institutional day-care, 'crying it out' practices, lack of skin-to-skin contact and isolated parenting fall into this risky

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category. 'Best parental practice' education should be provided for all, to increase understanding of children's basic needs. When the developmental needs of children are recognised, plans to fulfil these requirements can more easily be designed and evaluated (Greenspan and Brazelton, 2009).

Conclusion

Throughout this article the argument has been made that rising rates of psychopathology are linked with the changing ecology of childhood. The basic needs of infants and children are based on the environments in which humans evolved and the large deviations from this environment that we are witnessing in the modern world puts greater numbers

of people at risk for disorders. In particular, a lack of nurturing touch, separation (disconnection) from caregivers and the absence of an extended community to provide care and support can have detrimental effects on development. There are opportunities to make a difference in this area through investment in prevention programmes and promoting policies that support practices that meet developmental needs. The psychotherapy field can play a key role in these efforts. ☺

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extensive experience working with children, parents, and families. Evan's educational work ranges from primary teaching to the design and delivery of adult education courses in subjects such as developmental psychology and sociology. During his career, Evan has published numerous articles in several fields, including mental health. He has recently completed a Masters of Psychotherapy at DBS. This article is an extract of a larger research project exploring approaches to prevention through the optimisation of early developmental environments.

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