

Childhood Relational Adversity and 'Maltreatment' as the Primary Cause of Mental Disorder and Distress rather than 'Endogenous' Genetic or Neuro-biological Factors

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Abstract: There continues to be considerable debate within the field of mental health regarding the roles played by genetic, neuro-biological, and psychosocial factors in the genesis of major or minor mental disorder and distress – often termed 'mental illness' by psychiatry.

The dominant approach within Western psychiatry and clinical psychology is an individualistic 'illness' model, espoused by biomedical and cognitive-behavioural approaches. These have been highly resistant – antagonistic – to any other conceptualisation for over half a century, despite a wealth of contrary evidence which overwhelmingly points to such approaches no longer being defensible.

In the UK, in recent years, the political classes and media have added their support to the model of 'mental illness' as an individual, endogenous problem, removed from the socio-political context with its inconvenient challenges. The psychotherapeutic treatment programme emerging from this (IAPT) has been based around the CBT model, increasingly offering very brief computer-based packages, to the exclusion of other more relationally-based or trauma-focussed approaches. The CBT approach was mis-sold to politicians as a method for reducing bills to the UK Treasury for disability and unemployment benefit. In numerous studies, CBT has been demonstrated to lack the long-term (2 year plus) efficacy or 'real world' clinical effectiveness it claims, even though it is touted as 'the' evidence-based intervention. CBT and genetically-orientated models, with concomitant research funding, reflect

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vested intellectual, career and financial interests more than the true balance of scientific evidence.

This situation prevails despite the very considerable research literature implicating developmental, relational and social factors in mental health, and despite the striking absence of evidence to support the individualizing focus of geneticism or of biomedical and cognitive-behavioural models. There is good evidence that developmental maltreatment is responsible for most of the neurobiological abnormalities subsequently seen in mental disorders, but which are commonly adduced as evidence of 'endogenous' neurobiological causation.

In this review, some of the key evidence is presented that childhood relational adversity and 'maltreatment', including overt psychological trauma, as well as broader social dysfunction, are the major causes of most mental disorder, along with the implications for relationally-based treatment approaches founded upon such understandings. Recognising and understanding the role of relational factors and childhood maltreatment is of huge importance for the prevention, early intervention, and treatment of 'major mental disorders', as well as 'sub-clinical' emotional and relational suffering and distress. Quite apart from the huge suffering, these constitute a costly epidemic in the Developed World (especially the US and UK), with largely preventable psychosocial causes. Unlike CBT, psychotherapies which explore early years, formative experience as a key component of the treatment are shown to have long-term efficacy.

Keywords: Childhood maltreatment, relational adversity, social dysfunction, psychological trauma, psychotherapy, CBT, psychiatric genetics, psychiatric models.

Introduction

ONE of the key differences between Relational Psychotherapies (including Cognitive Analytic Therapy (CAT) – Ryle and Kerr (2002)) and their Behavioural cousin (CBT) is the importance placed on formative childhood experience and maltreatment as the initial focus, and the use of that adversity as the prism through which the treatment is viewed. What is the evidence that the early years play a major role in causing individual psychological harm and distress? Equally, what is the evidence for biological causes?

The findings of the Human Genome Project (HGP) have raised a significant likelihood that genes explain little of the variance in

psychopathology between siblings or offspring (James, 2014, 2016). Thus far, only 1-5% of differences between samples with 'psychopathology' and healthy samples has been explicable by genetic material identified by the HGP. There is a significant likelihood that no further evidence will emerge that changes this picture and that the null hypothesis of the HGP will have to be accepted: that differences in genes play little or no role in explaining why one individual is likely to suffer 'psychopathology' more than another (James, 2014, 2016). Given this eventuality, the question arises 'If genes play little or no part in causing differences in 'psychopathology', what does?'

Ever since Sigmund Freud's writings became widely known, and despite some of the unfortunate theoretical detours taken by the psychoanalytic tradition, we have been aware that childhood relational adversity and maltreatment, including psychological trauma, could be a major contributor. 'Maltreatment' is generally defined as 'emotional abuse or neglect, sexual or physical violence, physical or emotional neglect, bullying and parental loss'. Studies arising from John Bowlby's Attachment Theory provide the largest and most robust body of empirical evidence that childhood maltreatment is a major cause of subsequent emotional distress (Cassidy et al, 2010). However, social factors have also been shown to be highly influential, with large variations between nations, and between social classes, genders and ethnic groups within nations (James, 2008).

If genes are increasingly unlikely to explain distress and early experience and psychosocial stressors explain a lot, there is also good reason to suppose that non-genetic, but biological, factors may play a significant part. There is a possibility that epigenetic mechanisms have an influence, in which environmental slights cause the suppression or expression of genes (Carey, 2011; Roth, 2014). There is also emerging evidence that antenatal factors may play a significant role, for example, in the genesis of autism (Dawson, 2008; Hadjikhani, 2010) as well as in life-long vulnerability to most forms of mental disorder (see Glover, 2011). Toxins in the environment are another possible contributor (Lundeberg, 1998) and it must be assumed that there are likely to be other directly physical causes which have yet to be discovered. Hence, physical but non-genetic factors are likely to play a significant role in causing individual difference. But in this paper, I focus on the scientific evidence that childhood relational adversity and maltreatment, as well as its socio-cultural context, is the major cause.

Evidence of The Childhood Causes of 'Psychopathology' from Prospective Studies Following Children into Adulthood

In prospective studies, the child is observed with its parents at various ages when young and then tested in later life to see whether it has developed 'mental illnesses'. If early maltreatment is commoner in the children who develop 'mental illness' that strongly suggests it is a cause.

A review of the 23 best such studies found increased likelihood of later 'mental illness' if there had been early maltreatment (Weich et al, 2009). One of the most comprehensive (Sroufe et al, 2005) identified 180 infants who were at high risk for maltreatment and followed them to age 18. All the mothers had low incomes and over half were unmarried at the birth of the child. Half had their first child whilst still a teenager. Followed up, 90% of the maltreated children had at least one 'mental illness' at age 18 (p 189, Sroufe et al, 2005).

Prospective studies have also demonstrated that the earlier that maltreatment occurs, the greater the damage. This applies to all kinds (Lansford et al, 2002; fn p156 on p 335, James, 2005; English et al, 2005 (a); English et al, 2005 (b); Kaplow et al, 2005; Sternberg et al, 2006; Kaplow et al, 2007; Lansford et al, 2007; Kim et al, 2009). For instance, in a study of 800 children, severe maltreatment before the age of 3 was more disturbing than aged 3 to 5, which was, in turn, more damaging than aged 5 to 9 (Manly et al, 2001).

There are also numerous studies showing that the more severe the maltreatment, the worse the subsequent outcome (English et al, 2005 (b); Kaplow et al, 2005; Sternberg et al, 2006; Kaplow et al, 2007). Severity refers to how frequently a child was maltreated and how extreme it was. In the case of sexual abuse, the more repetitive, the more penetrative, and the closer the blood relation of the abuser to the abused, the more damage.

Studies of adoptees are particularly revealing of the long-term damage caused by early maltreatment of various kinds (pp 158-9, James, 2005; Esther et al, 2009; Rutter et al, 2010; McCall et al, 2011). Several international studies have observed large samples of children who were institutionalized as a result of being orphaned or maltreated and then subsequently adopted, followed into the teenage years. Common problems identified are aggression, indiscriminate friendliness (seeking affection or approval from strangers), insecurity in relationships and in a minority of cases, signs of autism. There is also reduced intelligence

and scholastic performance, although to a lesser extent. The long-term outcome is affected by the kind and amount of damage occurring before the child is taken away from the maltreating parents. The longer the child spends in an institution, the worse, likewise the kind of institution affects the outcome – less individual attention is damaging. The later the child is adopted and the worse the quality of care in the new home, the more harmful. By implication, these studies provide overwhelming evidence that responsive, loving early care is crucial for later mental health.

Similarly, it has been shown that if a mother gets depressed, the younger a child is when that happens, the greater the long-term damage (pp160-1, James, 2005).

Multiple combinations of maltreatment are more harmful than a single kind (Dong et al, 2004; English et al, 2005 (b); Clemmon et al, 2007; Finkelhor et al, 2007; Sullman et al, 2009; Kim et al, 2009.). Where one kind of maltreatment is found, there is liable to be others. If there is physical abuse it is very often combined with emotional abuse or neglect and other maltreatments, likewise sexual abuse.

Some links have been suggested between specific kinds of maltreatment and broad categories of 'mental illness'. A study of 34,000 Americans (Keyes et al, 2012) showed that, among men, physical abuse was related to 'externalizing' disorders, like aggression and violence. Emotional abuse related more to 'internalizing' disorders, like depression. Sexual abuse related to both internalizing and externalizing. For women, sexual and emotional abuse related to both internalizing and externalizing, physical abuse to only internalizing.

A significant body of evidence also links childhood maltreatment with adult patterns of attachment, insecure patterns being a predictor of 'mental illness'. Patterns of attachment take four forms: Avoidant (in which others are rejected); Ambivalent (where approach or avoidance to others happen in quick succession or simultaneously); Disorganized (where there is a confusing, often bizarre mixture of reactions to others); and Secure (where others are innocent until proved guilty) (Weinfield et al, 2010). Our childhood and adult patterns of attachment are influenced by the responsiveness and accessibility of carers, aged 6 months to 3 years of age (Van Ijzendoorn et al, 1999; Dozier et al, 2010; Grossman et al, 2010). People who have insecure patterns of attachment as adults are nearly twice as likely to be 'mentally ill' than people who are secure: three quarters of those being treated for a 'mental illness' are insecure

compared with 42% of the general population (Bakermans-Kranenburg et al, 2009; see also Van IJzendoorn et al, 2008). Adult attachment patterns play a big role in linking childhood maltreatment and adult mental illness (Bifulco et al, 2006; Booth-LaForce et al, 2014). Broadly speaking, adults with internalizing disorders (like depression) are more likely to be Clinging-Resistant in their pattern (or, 'preoccupied' as the adult version is called). Avoidant (or, 'dismissing') people are more prone to externalizing disorders (like aggression). The Disorganized (or, 'unresolved') are prone to both kinds of disorder.

Being institutionalized as a child – for example being taken into State care – also greatly increases the risk of insecure attachment. Disorganized attachment is particularly likely, with two-thirds to three-quarters of institutionalized children displaying it before adoption, compared with one quarter who grow up with their parents (Bakermans-Kranenburg et al, 2011). The earlier the child was adopted – and therefore removed from the maltreating neglect of most institutional care – the more likely they were to develop secure attachments to adoptive parents.

Childhood pattern of attachment has been shown to predict the specific kind of 'mental illness' which adults are prone to. In one study (Sroufe et al, 2009), children measured as Ambivalent were much more at risk of suffering anxiety at age 18. Their risk of externalizing was not increased at all. By contrast, Avoidant children were at greater risk of externalizing in later life and had no higher risk of anxiety. Both kinds of insecurity increased the risk of depression. Disorganized children were at greater risk of dissociation.

Each of these patterns of attachment is connected to specific kinds of parental care (see Ch. 4, James, 2005). The importance of the early years for later attachment pattern is sharply highlighted by a study which measured the degree of negativity mothers felt towards their babies during the first month (Broussard et al, 2010). Followed up forty years later, the babies whose mothers had felt negative were fully 18 times more likely to be insecurely attached adults (and therefore nearly twice as likely to be 'mentally ill') than babies whose mothers felt positive to them all those years ago.

Evidence from Retrospective Studies of The Impact of Childhood Maltreatment

Whilst prospective studies are the most reliable evidence, retrospective ones, in which adults are asked about their childhood, seem to have validity and support the results described so far. The most comprehensive is the Adverse Childhood Events (ACE) study of 17,000 middle-class Americans (Felitti et al, 2010). Adults are asked to score themselves on eight categories of childhood maltreatment (like sexual, physical and emotional abuse). An ACE score is the number of categories of maltreatment a person believes applied to them in their childhood.

One third of the sample scored 0 – recalled no events and therefore had no categories of maltreatment – one in six had more than 4 ACE. Nearly everyone who had one ACE had at least one more: more than one kind of maltreatment tended to occur if there was any, just as the prospective studies find.

The greater the number of ACE the greater the likelihood of all kinds of 'mental illness', just like the dose-dependent findings of prospective studies. For example, regarding depression, 15% of those with it had no ACE, rising to half of those with 4 or more. Over half of depression and suicide attempts in women are attributable to ACE. Hallucinations and dissociation are similarly shown to be related to number of ACE. Similar findings exist for damaging lifestyle behaviours, like smoking, drinking, obesity, drug use and sexual promiscuity.

The impact of ACE is not limited to 'mental illnesses', it also applies to physical ones. For example, increasing ACE scores raise the risk of suffering heart disease, liver disease and auto-immune deficiencies. Whilst this effect of ACE is partly through the greater likelihood of damaging lifestyle behaviours (like smoking or obesity) which increase the risk of physical illness, it has also been shown that there is a direct effect of the distress from the maltreatment: when lifestyle is taken out of the equation, the risk of the physical illnesses is still heightened by increased number of ACE alone. Not surprisingly, this means people with high numbers of ACE die earlier. At the extreme, those with 6 or more ACE die nearly twenty years younger than those with none.

There have been hundreds of other retrospective studies demonstrating much greater likelihoods of 'mental illness' as a result of childhood maltreatment (Kessler et al, 2010; Varese et al, 2012; Matheson et al, 2012; Read et al, 2014). Many objections have been made to retrospection, such as that the 'mentally ill' could be a group of people

whose memories are impaired or who are looking for reasons to blame their parents. However, most research does not support these criticisms (Fisher et al, 2011). In the case of sexual abuse, for example, the pressure on the abused to remain silent and the distress that recall of the incidents entails, should lead to under-reporting rather than over-reporting, because such people have a strong incentive to do their best to forget unpleasant experiences. When the claims of the sexually abused have been investigated, looking for corroboration (such as records of events by social workers or other professionals), in two studies, respectively, in 74% (Herman et al, 1987) and 82% (Read et al, 2003) of cases, such corroboration did occur. The phantom of 'False Memory Syndrome' (people making up abuse or having the idea planted in their heads by therapists) has been shown to be exaggerated, although it is a real phenomenon (Dahlenberg et al, 2010). In the case of the ACE study, the investigators conducted a study testing out the method and found it to be valid (Edward, et al, 2001).

Taken overall, prospective and retrospective studies provide a formidable body of evidence that childhood maltreatment is a major cause of mental illness. Whilst the World Health Organization (Kessler, 2010) estimates that it explains 29% of all 'mental illness' and in the case of schizophrenia, the estimate is one third (Varese et al, 2012), these are almost certainly considerable underestimates. If the same amount of money as has been spent on the Human Genome Project was devoted to prospective studies which follow large samples, studying all the offspring from families for comparison of the care they receive from before birth into adulthood, measuring all the key variables, the figure would surely be far higher. This is suggested by the fact that 90% of the maltreated were found to have a psychiatric 'illness' at age 18 in what many regard as the only study to have observed the pattern of nurture in a sample of families in sufficient depth and frequency (Sroufe et al, 2009).

What is more, future studies will surely prove that maltreatment has its effect through changing the brain and body. There is already considerable evidence that this is so.

Impact of Maltreatment on the Body's Neuro-Endocrine 'Thermostat'

The best illustration of the impact of maltreatment on brain chemistry are studies of the fight-flight hormone, cortisol, which is secreted when a response is needed to threat. The Sympathetic Nervous System (SNS) stimulates 'fight or flight' when faced with perceived threats, preparing us for action, responses like diverting blood from the gut to the muscles, faster breathing and raised heartbeat. Conversely, the Parasympathetic Nervous System (PNS) prepares the body to 'rest and digest', with more blood for the guts, slower breathing.

In a review of the 30 best studies (Hunter et al, 2011), 27 reported a significant effect of childhood maltreatment on the cortisol response to stress (this can be a reduction in secretion, as well as an increase – some children become so used to threat they stop secreting because they feel at risk all the time). Thirteen studies found that maltreatment increased cortisol reactivity, two found a blunted reaction. Six of the studies demonstrated an effect of prenatal substance exposure (smoking or alcohol) on what the child was subsequently like. Three studies reported that cortisol reactivity could be rectified by intervention programmes which changed the way children were cared for.

The review does not cover several studies which suggest that maternal stress in the last three months of pregnancy seems to increase cortisol reactivity in infants: the cortisol of the mother is passed to the foetus through the placenta (Sarkar et al, 2008). This has been shown to have long-term effects into childhood, such as increased risk of aggression, conduct disorder and Attention Deficit Hyperactivity Disorder (ADHD) (Van Den Bergh, BRH et al, 2004; Glover et al, 2011; Korhonen et al, 2012; O'Connor et al, 2014). When siblings are compared, if the mother was stressed prenatally whilst bearing one foetus but not the other, stress increases the likelihood of ADHD in the ones whose mothers were prenatally stressed (Grizenko et al, 2012). This suggests both that prenatal stress is a cause and that genes are not. The impact of the cortisol reactivity resulting from prenatal stress is reduced if the baby has a secure attachment to the mother (as a result of responsive care) after it is born (Bergman et al, 2010).

Many aspects of postnatal maternal care have been shown to adversely affect the infant's cortisol reactivity, like lack of maternal responsiveness, abuse and neglect (Tarullo et al, 2006). For example, one study found that the speed with which a baby's cortisol levels settled down after

being bathed depended on how sensitively the mother responded during this mildly stressful, everyday experience (Albers et al, 2007). Cortisol levels of toddlers can be badly affected by being left with strangers in groups of other toddlers, such as in group daycare (see Review 3, James, 2010). In one study of 18 month-olds, levels doubled during their first week in group daycare, compared with levels at home before experiencing any daycare (Ahnert et al, 2004). This is one of ten studies which have found dysregulated cortisol in under-three year-olds in day care, compared with levels at home (Vermeer et al, 200; Bernard et al, 2015).

Children of disharmonious parents are more likely to display symptoms of what are known as 'externalizing' problems, like screaming and shouting, fighting, disobedience and delinquency. But not all children of rowing parents react like that. Children exposed to repeated parental conflict have been shown to react physically. Their heart rates, the sweatiness of their hands and their cortisol levels are all affected. One study explored whether different children react with Sympathetic (fight-flight – SNS) rather than Parasympathetic (rest and digest – PNS) systems (El-Sheikh et al, 2009).

It found that children developed externalizing behaviour in response to parental conflict if both PNS and SNS were simultaneously switched on. If the 'fight or flight' responses were going full blast with the 'rest and digest' doing the same, the child was liable to be reported as externalizing by both parents and teachers. The SNS system seems to override the PNS, the child becoming angry, even chaotically furious, and getting involved in fights with parents, who then start using extreme measures to control the child, up to and including hitting. The pattern now established, the child takes it to school, with teachers reporting them to be more liable to fight, disrupt classes and be prone to inattention.

Equally, if the child's response to parental conflict was for both systems to shut down, it was unable to produce adequate emotional responses, neither reacting actively, nor chilled. Instead it went into a state of passive vigilance, leaving it wide open to the nasty scenes of parental disharmony and unable to express its distress or anger. Such children were more prone to delinquency and inattention at home and school.

By contrast, when the children reacted through either one or other system going into action, they were much less likely to externalize or internalize. They seemed to be protected by active coping responses,

like becoming healthily distressed or keeping a safe distance but trying to calm everyone down.

Given the considerable evidence showing that these neuro-chemical systems are heavily influenced by nurture, from before birth onwards, prior experiences (and not genes) would seem to establish the basic pattern with which they respond to later exposure to parental conflict: if you row a lot with your partner in front of the children, how they differentially react will depend on their earlier experiences.

Another factor is the contemporary pattern of parenting a child is experiencing day-to-day. A large cross-national study (Bradford et al, 2004) showed that the way that parents care for the children also predicts how they react to parental disharmony.

There is little doubt that there are long-term effects into adulthood of cortisol reactivity caused by childhood maltreatment, complex though the relationship may be (Alink et al, 2008; Bremner et al, 2010; Read et al, 2014). There is a strong likelihood that having high levels of cortisol during the early years, or blunted levels (where the system has shut down), establishes destructive patterns of brain waves and interferes with the full growth of crucial parts of the brain, to which we now turn.

Childhood Maltreatment Damages Brain Development

Dozens of studies have shown that infants and toddlers of depressed mothers have different patterns of brainwaves from those of non-depressed mothers (Diego et al, 2010). This is hardly surprising, since one might expect that, for example, if your parent is consistently irritable and unresponsive, as many depressed ones are, it would be mirrored by consistent brain patterns in their offspring. The impact of maltreatment on brainwaves endures into adulthood. For example, adults who were traumatized as children have decreased activity in the parts of the brain which are believed to enable thought and the capacity to take action (Lanius et al, 2007; Hopper et al, 2007). Trauma makes the child freeze, becoming a frozen adult. This is but one of many findings which suggest that patterns of maltreatment cause the brain to adapt to it.

Multiple studies have identified reductions in the size of key parts of the brain in the abused and neglected (Teicher et al, 2002; Teicher et al, 2006; Teicher et al, 2010). Compared with non-maltreated people, the maltreated have 5-16% less volume in affect-related areas, like the

hippocampus and amygdala. It seems that cortisol reactivity is a major reason why. Stress chemicals can cause the loss of neurones, or lack of growth of them (De Bellis, 2001; De Bellis, 2010) .

The traumagenic model of 'mental illness', with its important implications for treatment, proposes that excess stress chemicals caused by early maltreatment creates a heightened sensitivity to threat (Read et al, 2014). The child's brain becomes adapted to expect adversity and distressing experience. It takes less subsequent adversity for the adult to be tipped into 'mental illness', including psychosis.

The Myth of Inherent Resilience

Not all maltreated children go on to become distressed children or adults. Many studies have seemed to show this (Widom, 1999). For example, one large study of abused or neglected children found that one fifth of them seemed unharmed by the experience in adulthood (Mchloin et al, 2001). It is often maintained that such resilience in the face of adversity is caused by a genetically inherited capacity to cope (Rutter, 2003). This role of genes is now highly questionable, given the findings of the Human Genome Project (James, 2014, 2016).

There is abundant evidence that, insofar as resilience does exist, it is caused by benign people and events in the person's early and later environment. Amongst other things, in childhood a loving adult, like a relative or a teacher, have been shown to help (Haskett et al, 2006), so has living in a supportive community (DuMont et al, 2007).

However, there are good reasons to suspect that many studies which purport to have identified resilience in the face of adversity have failed to adequately measure either the outcome or the level of adversity. The very few studies which have frequently assessed children from birth onwards into adulthood, carefully measuring as many as possible of the adversities which might have occurred and their damaging consequences, find very little resilience. For example, the definitive study of 180 high risk children (Sroufe et al, 2009) found that in childhood all the maltreated ones, without exception, had higher levels of anger, frustration and non-compliance than the adequately cared for children. Followed up at age 18, 90% qualified for a diagnosis of a psychiatric disorder.

The mothers in that study who had been abused but managed to provide adequate care for their own children were found to have been

protected by any or all of three experiences: having had a supportive, loving adult other than their parents when they were small; at least six months of therapy; and a partner in their life who was supportive and provided a satisfying relationship.

The results were very similar in another study (Massie et al, 2008), one that followed the children from birth to age 30. In childhood, all the maltreated ones showed serious signs of distress, compared to the non-maltreated. The authors provided examples to show that much of what is regarded as resilience is simply a failure on the part of researchers to look closely enough at how people have turned out. What can pass for normal or outwardly fine, like having a job and a marriage, do not mean a person's inner life is calm or sane. One woman in their study had achieved a successful career in her profession and a happy marriage but was still haunted by the ghosts from her parents' supposedly amicable divorce. Another such woman had witnessed terrible scenes between her parents which had led her to decide never to marry.

The authors go on to question the shallowness of most concepts of normality, offering the concept of 'emotional health' as a more fruitful alternative (see James, 2013). They point out that whilst some maltreated children may not display signs of full-scale 'mental illness', when studied more closely, they turn out to be suffering, emotionally. Deciding to avoid relationships altogether, as in the case of the woman who never married, can result in loneliness and despair which may not show up in conventional psychiatric interviews. It is claimed that the resilient have particularly strong egos, or that their brains are born with a particularly good capacity to regulate cortisol reactivity. Rather, the authors suggest that many, or the vast majority, of maltreated children turn into people who are just surviving or keeping a stiff upper lip, but who are suffering considerably, even if this is not expressed in symptoms of 'mental illness' as measured by psychiatrists.

The key point is that a child should not need to be resilient, one made by my father in 1960 (James, 1960). He suggested that if the needs of babies are not met, they engage in 'premature ego development'. Unable to rely on the parent, they have to develop a false self long before they know what their 'real' one is.

Cross-National, Cross-Cultural and Social Causes of 'Mental Illness' (see also James, 2008, Chapter 1)

The above review provides strong support for the theory that childhood maltreatment and relational distress are major causes of adult distress, although no studies find that these factors explain it all. The conventional response is to turn to genes or other biological alternatives. Much more significant may be societal forces.

The greatest social causes of 'psychopathology' are industrialization and urbanization. Whilst these bring many advantages – are the foundations for advanced medicine, sophisticated technology, scholarship and sundry other desirable boons – they also lead to a substantial increase in 'mental illness'. People living in pre-industrial societies who do not have settled agriculture, living in the African Savannah (as did all humans for our first three million years) or in jungles, have far lower rates of schizophrenia. There are no characters like the depressed and anxious Bridget Jones – depicted in the eponymous Hollywood film – in such communities. Nor are there aimless, jobless young men on street corners, because there are no jobs or street corners. They die much younger, on average, than people in developed nations, but they are much more mentally healthy.

Once villages and settled agriculture arrive, broadly speaking, the more developed a nation becomes, the greater its rate of 'mental illness'. Although people in rural communities in contemporary developing nations have vastly lower average incomes than developed ones, they have startlingly lower rates of schizophrenia (WHO, 1973). Industrialization creates factories and service industries, bureaucracies and patterns of living which create huge pressures. This coincides with living in towns and cities, which fragments families, increases crime and melts social cohesion. As consumerism grows, so does dissatisfaction. Whole industries, like advertising and marketing, are devoted to increasing it and exploiting it. The explicit goal of advertising and marketing is to create displeasure with your existing possessions or services, even with your very self ('because you're worth it'), so that you will seek new ones.

There are large differences in the prevalence of 'mental illness' around the world. America tops the league table, with 26% of its population having suffered in the last twelve months. The average income of an American is about 40,000 times higher than that of the average Nigerian, yet Nigerians are six times *less* likely to suffer a 'mental illness'. It has been estimated that three quarters of all the 'mental illnesses' listed in

the Diagnostic and Statistical Manual, are found only in Americans or in the Americanized ruling elites around the world (the rulers of China, Russia and so on, many of whom have attended American or British universities).

Citizens of developed nations suffer from a sense of relative deprivation: there is no such thing as enough. As expectations grow, so does the sense of entitlement. Televisions, fridges, screen devices and cars become a bare minimum, it seems so unfair not to have the latest gizmos. In a developing nation you are delighted just to have electricity in your home. Survival materialism, where the possessions sought are food and shelter rather than ipads and *Netflix*, leaves much less room for such disgruntlement, people are more grateful for what they get.

Within developed nations, it is true that people on low incomes are about twice as likely to suffer as the wealthy. The struggle for survival is real, but beyond the USA, it is rarely a matter of life and death: the deprivation is relative. Not only is it hard to pay the electricity bill, the internet and mobile phone bills, it can seem intolerable not to be able to afford a new car.

In the individualistic system of developed nations, it is your fault that you are a 'loser'. Big differences open up in the proneness to different kinds of mental illness for men and women. Women are twice as likely to be depressed and four times as likely to attempt suicide. Men are twice as likely to abuse substances and five times more likely to kill themselves. This is heightened by some kinds of gender role difference: American 'Men In Skirts' feminism is much more harmful than the 'men must pull their weight' mainland European version.

Comparing between developed nations, the English-speaking ones have twice as much 'mental illness', a remarkable difference (23% vs 11.5% for mainland western Europe, averages). Particularly in America and England, there is a hunger for money, possessions, good appearances (keeping up with the Joneses, as well as physical) and fame. Powered by deregulated corporations and banks, huge personal debts are racked up, not just the massive mortgages to pay for rising housing costs, but credit card debt too (credit cards are much less used in Germany, for example; home ownership is far less in mainland Europe). A person with six or more debts is six times more likely to suffer mental illness than one with none.

Partly, the reason is that the deregulated financial services in the 'Neoliberal', Free Market Economies of the English-speaking nations –

which nearly caused the global economy to crash in the credit crunch of 2008 – also ramp up individualism at the expense of collectivism. The ‘me-me-me’ of popular culture and the pressure to put Number One first atomizes us, fosters loneliness and emptiness, converting ordinary citizens into Marketing Characters. This makes for impulsive, aggressive personalities, ones which are much commoner in America than in more collectivist societies. Compared with America, Impulsive-Aggressive personalities are 53 times less common in Japan, 18 times less in Germany (Table 26.1, Chapter 26, Kessler et al, 2008).

Whilst these large historical and cross-national trends profoundly affect which populations suffer most and in what ways, childhood experience undoubtedly partly explains why some individuals are more vulnerable than others, within any given society. It is a complicated relationship: the way some societies are configured leads to greater childhood maltreatment, resulting in higher levels of mental illness. For example, there are four times as many people on low incomes in America and England, compared with Denmark. For a variety of reasons (such as lack of education and working long hours for low pay) low income parents in developed nations often struggle to meet the needs of their children, so having a higher proportion of families with low incomes is likely to result in greater maltreatment. Practical support for parenting in Denmark is far greater.

In America, about 40% of people have suffered at least one traumatic event (witnessing or being the object of sexual or physical abuse) by age 13 (Koenen et al, 2010). If infantile and subsequent emotional deprivation of love and responsiveness were added to these surveys, the figure would be far higher – abuse is only one of many forms of maltreatment.

However, there is no simple relationship between childhood maltreatment and subsequent suffering, albeit that the one greatly increases the risk of the other. It is believed that there is a greater likelihood of maltreatment in developing nations (Belsky, 1993; Koenen et al, 2010), although in pre-industrial, traditional societies that may not be the case as much. In hunter-gatherer communities with few possessions and much less pressure to consume or work (to pay for the (often unnecessary) possessions we take for granted in modern life), parents may not feel so much need to control children (Sahlins, 2003), reducing the need for discipline (Konner, 2005). But in modern developing nations (as opposed to pre-industrial, hunter-gatherer ones), where food and water may be scarce, and where much of the population may be living in huge urban conurbations, like Cairo or Lagos, abuse is

likely to be commoner (although open affection may be commoner too).

Overall, the World Health Organization estimates that 29% of ‘mental illness’, worldwide, is attributable to childhood maltreatment (Kessler et al, 2010). This is very likely to be much less than the true proportion because the measures of maltreatment in the survey on which this statistic is based are crude. This gross figure is also based on surveys of 15 very different nations. The normal and healthy in some societies counts as maltreatment in others.

Physical punishment, for example, is extremely common in poor societies, or in poor classes in rich ones. It has different meanings, depending on context, to some degree. If you live in a slum in Lagos and your father whacks you when he catches you doing something wrong, it may be less humiliating and damaging to your self-esteem than a blow delivered with exactly the same force in a middle-class household where it is rare, done behind closed doors and for not getting top marks in an exam or as an expression of parental irritability or depression. Given that violence is common in slums, learning to fight or evade blows could even be seen as a useful skill (Belsky, 1993). By contrast, at elite private schools in the developed world it would be regarded as an appalling failure of *Savoir Faire* to hit someone – if violence is an expected and necessary part of daily life, it has a different meaning. Hence, the far higher levels of abuse in poor nations may be experienced quite differently than in wealthy ones, because they seem normalized outside, as well as within the family, and may not be experienced as so rejecting, as a sign of parental hostility or lack of love.

An illustration of the cross-cultural power of love is found in a recent paper demonstrating the moderating effect of parental warmth, when accompanied by intrusive, overcontrolling parenting (Raudino et al, 2013). Samples of British and Italian families were compared. Whilst the Italian mothers were significantly more overcontrolling, they were also warmer. This compensated for the overcontrol, making their children no more at risk of suffering anxiety disorders.

A study of the impact of maltreatment in Nigeria also illustrates the power of cultural differences (Oladeji et al, 2010). Bearing in mind that there is six times less mental illness in Nigeria than in America, it is interesting that the study found a similar amount of child maltreatment in the two nations. There may be no simple ‘early maltreatment always causes ‘mental illness’ equation’: if Americans and Nigerians experience similar levels of maltreatment, there should be similar amounts of mental

illness, rather than six times more in America. The authors pointed to some big differences in the two societies which could explain this.

The amount of divorce and separation is far less in Nigeria. There is powerful evidence that maltreatment has far worse effects when combined with family disruption. For example, in one large American study (Afifi et al, 2009), abused children who also had divorced parents were 10 times more likely to become 'mentally ill' as adults than children who had suffered neither. Abuse alone only doubled the risk, compared with no abuse. Interestingly, in the Nigerian study, even where there was divorce it did not increase the risk of 'mental illness'. This could be explained by the fact that there are extended families which reduces the disruption to care of the child. Where maltreatment does occur, the fact that there are numerous carers provides the maltreated child with much more opportunity to seek solace from alternative sources of nurture if they are feeling neglected, unloved or abused, support from older siblings (usually the families are large), aunts and grandparents. In the atomized nuclear families of the developed world, the absence of daily contact with the extended family means that there may be no alternatives available for solace if maltreating parents are present.

Having said all this, despite its over-simplified measures, the WHO worldwide study (Kessler et al, 2010) found that child maltreatment predicted 'mental illness' in all societies. This was also true in Oladeji et al's (2010) Nigerian study: maltreatment did lead to more 'mental illness', overall. The conclusion seems to be that everywhere, the more childhood adversities a person has suffered, the greater the likelihood of 'mental illness'.

Implications of the current evidence for future research and forms of treatment.

It may be seen from this brief review that there is considerable reason to suppose that childhood relational adversity and maltreatment is a major cause of psychopathology. But is it the major cause?

Alas, we are not yet in a position to answer that question in its full complexity although its importance is abundantly clear. Whilst the HGP has proved extremely helpful in establishing the minimal role of genes, there is still a need for much more fine-grained longitudinal and cross-cultural studies in order for the question to be resolved. The role of non-genetic biological factors also remains to be seen.

Until recently, the vast majority of psychiatric and academic psychological research has been starting from the premise that genes are the major factor. Many studies exploring the role of nurture have not paid attention to the early years, starting the investigation when children are as old as 5.

The time has finally come when there can be no excuse for research bodies around the world not to unite in contributing to large-scale, intensive, prospective studies of whole families, including all the siblings for purposes of comparison, starting during each pregnancy. Particular attention would need to be paid to the early years, to ensure that they were given the attention that the evidence now demands that they should. Decades of resistance to the role of the early years has been perpetuated by key influential figures, like Professor Sir Michael Rutter, whose own study of adoptees has finally forced him to acknowledge their crucial importance for emotional development, after his tenacious opposition to John Bowlby's theories (Rutter, 1972).

On a wider plain, the new studies would need to be cross-cultural and will, correspondingly, require treatment models that are cross-culturally flexible and sensitive, unlike programmes to roll out CBT in places as far-flung as sub-Saharan Africa. Psychosocial factors, like low income, gender roles and inequality (Wilkinson and Pickett, (2009) are clearly major factors in vulnerability to mental disorder in most societies.

If the relevant research governing bodies of the developed world were led by psychodynamically and psychosocially trained professionals, rather than by medically trained ones or those from the academic psychology, neuro-science and psycho-pharmacology establishment, as is largely the case today, carefully planned international research projects could construct long-term research programmes which would tease out the relative role of these factors.

As regards treatments for those who experience often highly disabling psychological damage and distress, the already existing evidence clearly supports those broadly relational and psychodynamic approaches to understanding the origins and nature of so-called 'psychopathology' and to its treatment, including formal trauma-processing approaches. Ideally service provision based on such understandings should also include early and/or 'preventive' interventions (see e.g. Mrazek and Haggerty (1994), or more recently, e.g. Chanen et al. (2017)).

Rather than approaches which explicitly reject exploration of the early years and see 'psychopathology' as a technological problem

occurring inside people's heads – such as offered by CBT or biomedical models – we need every distressed person in this country and around the world to have access to culturally-appropriate therapies. They can help to understand how the past is affecting the present, and enable beneficial psychological change, notwithstanding the challenging societal circumstances in which clients might live.

These are the therapies that turn the lead of childhood relational adversity and maltreatment into the gold of emotional health. □

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REFERENCES

- Afifi, T.O. et al, 2009, 'The relationship between child abuse, parental divorce and lifetime mental disorders and suicidality in a nationally representative adult sample', *Child Abuse and Neglect*, 33, 139-47.
- Ahnert L. et al, 2004, 'Transition to child care: Association with infant-mother attachment, infant negative emotion and cortisol elevations', *Child Development*, 75, 639-50.
- Albers, E.M. et al, 2007, 'Maternal behavior predicts infant cortisol recovery from a mild everyday stressor', *J of Child Psychology and Psychiatry*, 49, 97-103.
- Alink, L.R.A. et al, 2008, 'Cortisol and externalizing behavior in children and adolescents: mixed meta-analytic evidence for the inverse relation of basal cortisol and cortisol reactivity with externalizing behavior', *Developmental Psychobiology*, 50, 427-50.
- Bakermans-Kranenburg, M.J. et al, 2009, 'The first 10,000 adult attachment interviews: distribution of adult attachment representations in clinical and non-clinical groups', *Attachment and Human Development*, 11, 223-63.
- Bakermans-Kranenburg, M.J. et al, 2011, 'Attachment and emotional development in institutional care: characteristics and catch-up', Chapter III in McCall, RB et al, *Children Without Permanent Parents: Research, Practice and Policy (Monographs of the Society for Research in Child Development)*, 301, 76, 4, Oxford: Wiley Blackwell.
- Belsky, J. 1993, 'Etiology of child maltreatment: developmental-ecological analysis', *Psychological Bulletin*, 114, 412-34.
- Bergman, K. et al, 2010, 'Maternal prenatal cortisol and infant cognitive development: moderation by infant-mother attachment', *Biological Psychiatry*, 67, 1026-32.
- Bernard, K., et al., 2015, 'Examining change in cortisol patterns during the 10-week transition to a new child-care setting', *Child Development*, 86, 456–71.
- Bifulco, A et al, 2006, 'Adult attachment style as mediator between childhood neglect/abuse and adult depression and anxiety', *Social Psychiatry and Psychiatric Epidemiology*, 41, 796-805.
- Booth-LaForce, C et al, 2014, 'The adult attachment interview: psychometrics, stability and change from infancy, and developmental origins', *Monographs of the Society for Research in Child Development*, 314, Vol 19, No 3,
- Bradford, K et al, 2004, 'A multi-national study of interparental conflict, parenting and adolescent functioning', *Marriage and Family Review*, 35, 107-37.
- Bremner, JD et al, 2010, 'Long-lasting effects of childhood abuse on neurobiology', in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.
- Carey, N, 2011, *The Epigenetics Revolution*, London: Icon Books.
- Cassidy, J et al, 2010, *Handbook of Attachment (2nd Ed)*, New York: Guilford.
- Chanen, A., Sharp, C. and Hoffman, P. (2017). Prevention and early intervention for borderline personality disorder: a novel public health priority. *World Psychiatry*, 16, 215-216.
- Clemmons, JC et al, 2007, 'Unique and combined contributions of multiple child abuse types and abuse severity to adult trauma symptomatology', *Child Maltreatment*, 12, 172-81.
- Dalenberg, CJ et al, 2010, Chapter 3, 'Historical themes in the study in the study of recovered and false memories of trauma', in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.

- Dawson, G, 2008, 'Early behavioral intervention, brain plasticity and the prevention of autism spectrum disorder', *Development and Psychopathology*, 20, 775-803.
- De Bellis, MD, 2001, 'Developmental traumatology', *Development and Psychopathology*, 13, 537-61.
- De Bellis, M.D. 2010, 'The neurobiology of child neglect', in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.
- Diego, M.A. et al, 2010, 'EEG in 1-week, 1-month and 3-month old infants of depressed and non-depressed mothers', *Biological Psychiatry*, 83, 7-14.
- Dong, M. et al, 2004, 'The interrelatedness of multiple forms of childhood abuse, neglect and household dysfunction', *Child Abuse and Neglect*, 28, 771-8.
- DuMont, K.A. et al, 2007, 'Predictors of resilience in abused and neglected children grown-up: the role of individual and neighbourhood characteristics', *Child Abuse and Neglect*, 31, 255-74.
- Edward, V.J. et al, 2001, 'Bias assessment for child abuse survey: factors affecting probability of response to a survey about child abuse', *Child Abuse and Neglect*, 25, 307-12.
- El-Sheikh, M. et al, 2009, *Monographs of the Society for Research in Child Development*, 74, 1, Serial No 292, Cambridge: CUP.
- English, D.J. et al, 2005 (a), 'Defining maltreatment chronicity: Are there differences in child outcomes?' *Child Abuse and Neglect*, 29, 575-595.
- English, D.J. et al, 2005 (b), 'Maltreatment's wake: the relationship of maltreatment dimensions to child outcomes', *Child Abuse and Neglect*, 29, 597-619.
- Esther, J.M. et al, 2009, 'Impact of early childhood adversities on adult psychiatric disorders', *Social Psychiatry and Psychiatric Epidemiology*, 44, 724-31.
- Felitti, V.J. et al, 2010, 'The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behaviour: implications for healthcare', in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.
- Finkelhor, D. et al, 2007, 'Poly-victimization: a neglected component of child victimization', *Child Abuse and Neglect*, 31, 7-26.
- Gilbert, R. et al, 2009, 'Burden and consequences of child maltreatment in high-income countries', *The Lancet*, 9657, 3-9 January, 68-81.
- Glover, V. (2011). Prenatal stress and the origins of psychopathology: an evolutionary perspective. *J Child Psychology and Psychiatry*, 52, 356-367
- Glover, V. et al, 2011, 'Prenatal stress and the programming of the HPA axis', *Neuroscience and Biobehavioral Reviews*, 35, 17-22.
- Grizenko, N. et al, 2012, 'maternal stress during pregnancy, ADHD symptomatology in children and genotype: gene-environment interaction', *J of the Canadian Academy of Child and Adolescent Psychiatry*, 21, 9-15.
- Grossman K. et al, 2010, 'A wider view of attachment and exploration' in Cassidy, J et al, *Handbook of Attachment (2nd Ed)*, New York: Guilford.
- Hadjikhani, N. 2010, 'Serotonin, pregnancy and increased autism prevalence: is there a link?', *Medical Hypotheses*, 74, 880-3.
- Haskett, M.E. et al, 2006, 'Diversity in adjustment of maltreated children: factors associated with resilient functioning', *Clinical Psychology Review*, 26, 796-812.
- Herman, J. et al, 1987, 'Recovery and verification of childhood sexual trauma', *Psychoanalytic Psychology*, 4, 1-14.
- Hopper, J.H. et al, 2007, 'Neural correlates of reexperiencing avoidance and dissociation in PTSD: symptom dimensions and emotion dysregulation in responses to script-driven trauma imagery', *J of Traumatic Stress*, 20, 713-25.
- Hunter, A.L. et al, 2011, 'Altered stress responses in children exposed to early adversity: A systematic review of salivary cortisol studies', *Stress*, 14, 614-26.
- James, H.M. 1960, 'Premature ego development: some observations on disturbances during the first three months of life', *International J of Psychoanalysis*, 41, 288-94.
- James, O.W. 2005, *They F*** You Up*, London: Bloomsbury.

- James, O.W. 2008, *The Selfish Capitalist – Origins of Affluenza*, London: Vermilion.
- James, O.W. 2010, *How Not To F*** Them Up*, London: Vermilion.
- James, O.W., 2013, *How To Develop Emotional Health*, London: Pan-Macmillan/School of Life.
- James, O.W. 2014, 'Not in your genes: Time To Accept The Null Hypothesis Of The Human Genome Project?', *Attachment: New Directions in Psychotherapy and Relational Psychoanalysis*, 8.3, 281-296.
- James, O.W. 2016, *Not In Your Genes – The Real Reasons Children Are Like Their Parents*, London: Vermilion.
- Joseph, J. 2012, 'The 'missing Heritability of psychiatric disorders: elusive genes or non-existent genes?', *Applied Developmental Science*, 16, 65-83.
- Kaplow, J.B. et al, 2005, 'Pathways to PTSD. Part II: Sexually abused children', *American Journal of Psychiatry*, 162, 1305–1310.
- Kaplow, J.B. et al, 2007, 'Age of onset of child maltreatment predicts long-term mental health outcomes', *J of Abnormal Psychology*, 116, 176-87.
- Kessler, R.C. and Ustun, T.B. eds., 2008, *The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders*, Cambridge; New York: Cambridge University Press; Geneva: Published in collaboration with the World Health Organization.
- Kessler et al, 2010, 'Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys', *British J of Psychiatry*, 197, 378-85.
- Kessler, R.C. et al, 2008, 'Prevalence and severity of mental disorders in the world mental health survey initiative', in Kessler, RC et al, *The World Mental Health Surveys*, Cambridge: Cambridge Medicine.
- Keyes, K.M. et al, 2012, 'Childhood maltreatment and the structure of common psychiatric disorders', *British J of Psychiatry*, 200, 107-15.
- Kim, J. et al, 2009, 'Child maltreatment and trajectories of personality and behavioural functioning: implications for the development of personality disorder', *Development and Psychopathology*, 21, 889-912.
- Koenen, K.C. et al, 2010, 'The epidemiology of early childhood trauma', in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.
- Konner, M. 2005, 'Hunter-gatherer infancy and childhood', in Hewlett, B.S. et al, *Hunter-Gatherer Childhoods*, Piscataway, NJ: Transaction Publishers
- Korhonen, M. et al, 2012, "A longitudinal study of maternal prenatal, postnatal and concurrent depressive symptoms and adolescent well-being", *J of Affective Disorders*, 136, 680-92.
- Lanius, R.A. et al, 2007, 'Neural correlates of traumatic memories in posttraumatic stress disorder: a functional MRI investigation', *American J of Psychiatry*, 158, 1920-2.
- Lanius, R.A. et al, 2010, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP.
- Lansford, J.E. et al, 2002, 'A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral and academic problems in adolescence', *Archives of Pediatric Medicine*, 156, 824-30.
- Lansford, J.E. et al, 2007, 'Early physical abuse and later violent delinquency: a prospective longitudinal study', *Child Maltreatment*, 12, 233-45.
- Lundberg, A. 1998, *The Environment and Mental Health*, Guilford: Routledge.
- Manly, J.T. et al, 2001, 'Dimensions of child maltreatment and children's adjustment: contributions of developmental timing and subtype', *Development and Psychopathology*, 13, 759-82.
- Massie, H. et al, 2008, *Lives Across Time*, London: Karnac.
- Matheson, S.L. et al, 2012, 'Childhood adversity in schizophrenia: a systematic meta-analysis', *Psychological Medicine*, 43, 225-35
- McCall, R.B. et al, 2011, *Children Without Permanent Parents: Research, Practice and Policy (Monographs of the Society for Research in Child Development)*, 301, 76, 4, Oxford: Wiley Blackwell.

- Mchloin, J.M. et al, 2001, 'Resilience among abused and neglected children grown up', *Development and Psychopathology*, 4, 1021-38.
- Mrazek, P. and Haggerty, R. (1994). *Reducing risks for mental disorder: frontiers for preventive intervention research*. National Academic Press, Washington
- O'Connor, T.G. et al, 2014, 'Practitioner Review: maternal mood in pregnancy and child development', *J of Child Psychology and Psychiatry*, 55, 99-111.
- Oladeji, B.D. et al, 2010, 'Family-related adverse childhood experiences as risk factors for psychiatric disorders in Nigeria', *British J of Psychiatry*, 196, 186-91.
- Raudino, A. et al, 2013, 'Child anxiety and parenting in England and Italy: the moderating role of maternal warmth', *J of Child Psychology and Psychiatry*, 54, 1318-26.
- Ryle, A. and Kerr, I.B. (2002). *Introducing Cognitive Analytic Therapy: Principles and Practice*. Chichester, Wiley and Sons.
- Sahlins, M. 2003, *Stone Age Economics*, London: Routledge.
- Sternberg, K.J. et al, 2006, 'Type of violence, age and gender differences in the effects of family violence on children's behaviour problems: a mega-analysis', *Developmental Review*, 26, 89-112.
- Read, J. et al, 2003, 'sexual and physical abuse during childhood and adulthood as predictors of hallucinations, delusions and thought disorder', *Psychology and Psychotherapy*, 76, 1-22.
- Read et al, 2014, 'The traumagenic neurodevelopmental model of psychosis revisited', *Neuropsychiatry*, 4, 65-79.
- Rutter, M. 1972, *Maternal Deprivation Reassessed*, London: Penguin.
- Rutter, M, 2003, 'Genetic Influences on risk and protection: Implications for understanding resilience', in Rutter, M et al, *Resilience and vulnerability: Adaptation in the context of childhood adversities*, Cambridge: CUP.
- Rutter, M. et al, 2010, *Deprivation-Specific Psychological Patterns: Effects of Institutional Deprivation: 300, 75-1 (Monographs of the Society for Research in Child Development)*, Oxford: Wiley Blackwell.
- Sarkar, P. et al, 2008, 'Maternal antenatal anxiety and amniotic fluid cortisol and testosterone: possible implications for foetal programming', *J of Neuroendocrinology*, 20, 489-96.
- Sonuga-Burke, E.J. 2010, 'Editorial: 'It's the environment stupid!' On epigenetics, programming and plasticity in child mental health', *J of Child Psychology and Psychiatry*, 51, 113-5.
- Sroufe, L.A. et al, 2009, *The Development of the Person: the Minnesota Study of Risk and adaptation from birth to adulthood*, New York: Guilford Press
- Sternberg et al, 2006, 'Type of violence, age and gender differences in the effects of family violence on children's behavior problems: a mega-analysis', *Development Review*, 26, 89-112
- Sullman, S. et al, 2009, 'Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety and depression in adolescents', *Comprehensive Psychiatry*, 50, 121-7.
- Tarullo, A.R. et al, 2006, 'Child maltreatment and the developing HPA axis', *Hormones and Behavior*, 50, 632-9.
- Teicher, M.H. et al, 2002, 'Scars that won't heal: the neurobiology of child abuse', *Scientific American*, March, 54-61.
- Teicher, MH et al, 2006, 'Sticks, stones and hurtful words: relative effects of various forms of childhood maltreatment', *American J of Psychiatry*, 163, 993-1000.
- Teicher, M.H. et al, 2010, 'Neurobiology of childhood trauma and adversity', Chapter 11, in Lanius, RA et al, *The Impact of Early Life Trauma on Health and Disease*, Cambridge: CUP; Bremner et al, 2010.
- Van Den Bergh, B.R.H. et al, 2004, 'High antenatal anxiety is related to ADHD symptoms, externalizing problems and anxiety in 8- and 9-year-olds', *Child Development*, 2004, 75, 1085-97.
- Van Ijzendoorn, M. et al, 1999, 'Disorganized attachment in early childhood: meta-analysis of precursors, concomitants and sequelae', *Development and Psychopathology*, 11, 225-49.
- Van IJzendoorn, M.H. et al, 2008, 'The distribution of adult attachment representations in clinical groups: A meta-analytic search for patterns of attachment in 105 AAI studies' in H. Steele & M. Steele

(Eds.), *Clinical applications of the Adult Attachment Interview* (pp. 69–96). New York: Guilford.

Varese, F. et al, 2012, 'Childhood adversities increase the risk of psychosis: a meta-analysis of partient-control, prospective and cross-sectional cohort studies', *Schizophrenia Bulletin*, 36, 661-71.

Vermeer, H.J. et al., 2006, 'Children's elevated cortisol levels at day-care: a review and meta-analysis', *Early Childhood Research Quarterly*, 21, 390–41.

Weich, S. et al, 2009, 'Family relationships in childhood and common psychiatric disorders in later life: a systematic review of prospective studies', *British J of Psychiatry*, 194, 392-8.

Weinfeld, N.S. et al, 2010, 'Individual differences in Infant-caregiver attachment: conceptual and empirical aspects of security' in Cassidy, J et al, *Handbook of Attachment (2nd Ed)*, New York: Guilford.

Widom, C.S. 1999, 'Postraumatic stress disorder in abused and neglected children grown up', *American J of Psychiatry*, 156, 1223-9.

Wilkinson, R. G. and Pickett, K. (2009). *The Spirit Level*, London, Allen Lane.

World Health Organization, 1973, *International Pilot Study of Schizophrenia*, Geneva: WHO.

'What role am I playing?': Inpatient Staff Experiences of an Introductory Training in Cognitive Analytic Therapy (CAT) Informed Care

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Abstract: The current paper aimed to ascertain multi-disciplinary team (MDT) staff's experiences of a two-day introductory training to Cognitive Analytic Therapy (CAT). This training was specifically designed for MDT staff working in inpatient services for women with a diagnosis of personality disorder. 45 MDT staff completed the training. Following this, each participant completed a feedback questionnaire. Responses were examined using thematic analysis. The results indicated the training had been positively received by staff and was anticipated to have a range of benefits across their work in inpatient services. This paper particularly focuses on one of the main themes: the practical applications of the CAT model to everyday clinical practice. The results are discussed in relation to previous research in this area, focusing on the unique impact within this training of the use of sequential diagrammatic reformulations (SDRs). The conclusion emphasises the need for relationally based training to be available for staff working in inpatient services to meet the complex and changing needs of the client group. Furthermore, it is argued that CAT meets such a demand by providing a comprehensive and unified model of working which can offer a helpful and containing way of reformulating clients, while allowing staff to understand their own responses to the work. Limitations and areas for further work are also discussed.

Keywords: multidisciplinary team work, staff, inpatient services, training, cognitive analytic therapy, personality disorder, thematic analysis

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