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The Importance of A Biopsychosocial Approach to Interventions for SEBD

Paul Cooper, Kathy Bilton and Michalis Kakos

Overview

This chapter charts the evolution of a biopsychosocial approach to SEBD and emphasizes the synthesizing nature of this approach in relation to earlier models for understanding and dealing with SEBD.

Introduction

The term 'biopsychosocial' is often considered to have originated in the later 1970's in work of Engel (1977; 1980) who argued for a 'new paradigm' in medicine that went beyond a purely biomedical approach to take account of the role of psychological and social factors in physical health. The approach has been developed to apply to a wide range of issues. For example, it has been used to develop understanding interactions between psychological stress and physiological factors in the causes and management of physical illness, such as cancer, AIDS, and general pain management (Gatchel 2006). The biopsychosocial approach has also been applied to psychological therapies (Stern, 2002) and social work approaches (Corcoran and Walsh, 2009; Wong 2006) in relation to mental health. It has also played a significant role in furthering understandings of the aging process (Whitbourne, 2005). In the broad area of SEBD among children and young people the biopsychosocial approach can be seen at work as a underpinning to multi-systemic therapy (MST) (Henggeler, et al, 1996; 1997), which has been found to be a highly effective multi agency

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and multi modal intervention for problems such as Conduct Disorder in older adolescents (Kazdin, 2002).

Defining the Biopsychosocial Approach

A 'bio-psycho-social' perspective (Engel, 1977, Norwich, 1990; Cooper, 1997; Bronfenbrenner, 2005, Hernandez and Blazer, 2006) posits that nature (genetic inheritance) and nurture (environmental influences) are best understood as being in constant fluid and dynamic interaction (see Plomin, 1990; Frith, 1992). This approach derives directly from systems theory (e.g. Bronfenbrenner, 1979), which, in turn, evolved from general systems theory in the physical sciences (von Bertalanffy, 1968). The distinctive feature of the biopsychosocial approach is to focus on the ways in which the psycho-social systems and internal and external biological systems interact with and influence one another. Just as the systemic approach has the effect of synthesizing other, often individualized approaches to SEBD, whilst drawing attention to social environment influences, so the bio-psycho-social approach takes this synthesis a stage further, by integrating fully the internal and external biological and intra-psycho dimensions with the interpersonal and social dimensions. Thus the approach can be seen as being essentially ecological in nature, this making it truly holistic and, therefore, capable of capturing the complexities of SEBD and its concomitant interventions.

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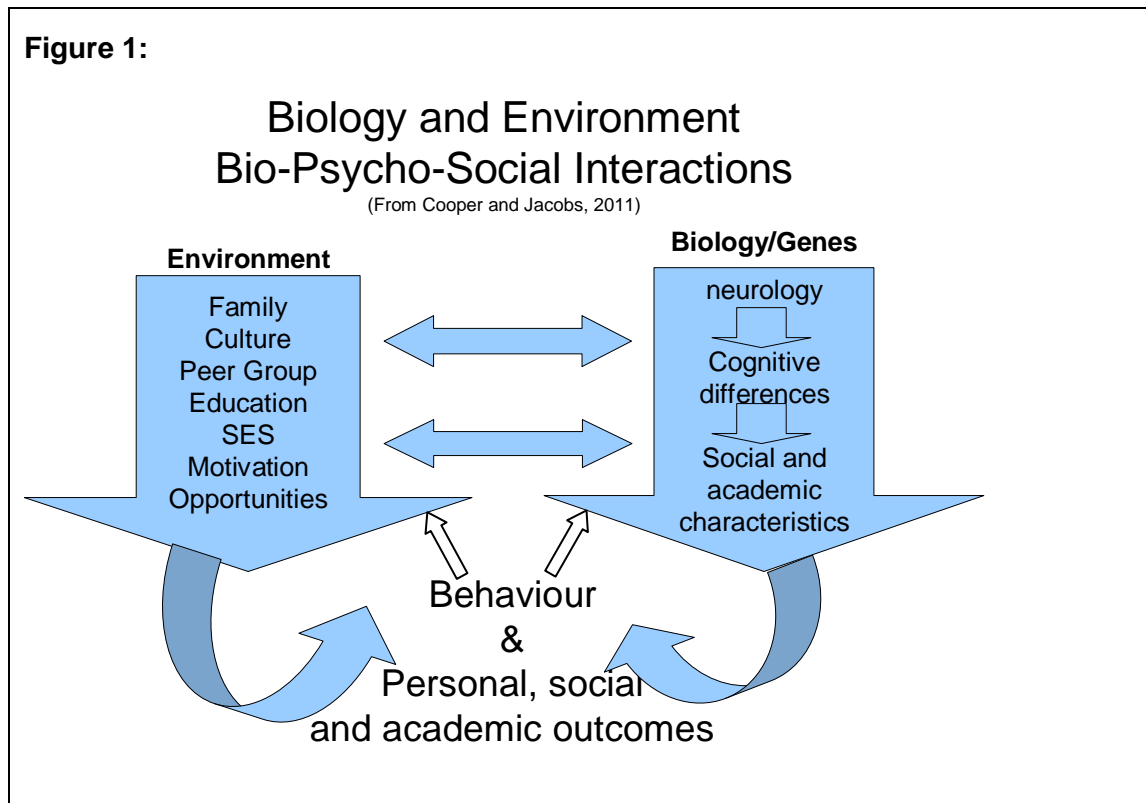


Figure 1 offers a diagrammatic representation of the pattern of bio-psycho-social interaction. A central feature of the model is recognition of the fact that biological systems, such as neurology, are strongly influenced by genetic inheritance. However, from the earliest stages of life, the development of biological systems are affected by environmental factors, such as nutrition, and experiential factors, including parenting styles, peer influences and the kinds of stimuli to which the developing individual is exposed. For example, most relevant to the sphere of SEBD is the fact that it has been shown that the neurological development of children can be adversely affected by prolonged exposure to abuse, neglect or lack of stimulation, leading to cognitive and social impairments. Conversely, adjustments to the environment may, in certain circumstances help to reverse these effects. Furthermore, the 'plasticity' of the brain sometimes enables the brains of individuals who have experienced

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serious neurological insult, perhaps through injury or stroke, with concomitant loss of cognitive functioning (for example loss of language functions) to compensate for the loss of functioning in one area of the brain by transferring the functions to other brain areas leading to the restoration of cognitive functioning (Geake, 2009). In addition, a growing list of so-called 'smart drugs', many of which are psycho-stimulants of one kind and another [e.g. methylphenidate: 'Ritalin'] and amphetamines, are prescribed by physicians to augment, temporarily, neurological dysfunctions that are associated with specific cognitive deficits (Sahakian, 2005).

Other, perhaps more powerful forms of compensation and augmentation are of a social and/or educational nature. These include the provision of compensatory skills for individuals, in the form of behavioural training, through the application of rewards and sanctions and the manipulation of behavioural antecedents; cognitive strategies (e.g. anger management training; mnemonic strategies) and various therapeutic interventions (e.g. counselling). Within the educational arena psycho-educational interventions, including specific pedagogical strategies (Purdie, 2002), emotional literacy strategies (Mosely, 1993), and specific intervention packages such as Nurture Groups (Cooper and Whitebread, 2007), are claimed to make an important contribution to enabling the educational engagement of students with a wide range of social and psychological difficulties, some of which have a biological basis. Other educational interventions that have an augmenting/compensatory effect are of an institutional nature, and include 'school effectiveness' (e.g. Rutter et al, 1979) and 'school improvement' (e.g., Fullan, 1992) interventions. More socially-focused interventions include systemic and multi-systemic interventions, as well as restorative justice and peer mediation strategies. It follows from a bio-psycho-social approach that the search for effective interventions should range widely across disciplines as diverse as education, psychology,

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sociology, medicine and psychiatry. For this reason multi-disciplinary and trans-disciplinary approaches are a focus of major interest in the SEBD area.

Applying a Biopsychosocial Approach to SEBD

The adoption of a biopsychosocial approach to an understanding of Social, Emotional and Behavioural Difficulties (SEBD) highlights the we are forced to avoid the crude linearity that is sometimes a feature of the field. For example, non lineal systemic thinking leads us to question the use of term SEBD as a label to be applied to individuals who are perceived to be difficult to manage or engage with. They may be seen as disruptive or threatening, emotionally vulnerable or socially inept. The key systemic point here is that we must try to understand the perceived problem within its ecological context, an important part of which is the ascription process. This means that the apparent 'problem' may not be understood or experienced in the same way by the different actors in the situation. For example, 'problematic' behaviour is sometimes a legitimate response to intolerable circumstances (Cooper et al, 1994). On the other hand a person may be socialised into ways of behaving that the wider culture construes as deviant, such as using a coercive social style in order meet personal needs (Patterson et al, 1992). In these circumstances the individual is, effectively, trained in deviant ways of behaving, however unwitting their trainers may be in reproducing the child rearing techniques to which they were exposed as children. Furthermore young people may apply a non deviant, socialised cognitive and or behavioural approach to what might be termed a deviant situation (for example, to use physical force in resistance to some form of physical abuse), which may be misconstrued as a deviant response, because the trigger for their response is not visible to the observer. In other circumstances individuals who have been exposed to deviant environments might respond in

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non deviant environments in deviant ways, because they misread the situation on the basis of prior experience. For example, a child who has a history of having been physically abused may recoil from, or respond aggressively to innocent physical contact initiated by a peer or adult.

From a biopsychosocial perspective it is particularly important to understand that what might be at first construed as a problem emanating from within an individual, may turn out to be the symptom of a problem in some area of the individual's environment. For example, a student may become morose, oppositional and disruptive in class in response to an emotional trauma in the family situation, or as a consequence of bullying in the school setting. In any event, our assessment of the situation should direct us towards the most promising focus for intervention.

So far we have focused on the ways in which social environments can influence emotions, behaviour and social functioning, as well as the ways in which these are construed. In this sense, the approach is consistent the social constructivist position which emphasizes, for example, the importance of adult perceptions in the construction of children's deviant identities (e.g. Hargreaves, et al, 1975), and in the positive reshaping of these identities (Cooper, 1993) . We would argue, however, that there are limitations to a solely social perspective such as this, valuable though it is. In this way we concur with the medical sociologists Schostak and Freese (2010:418) when they point out there is a need to move beyond the sometimes:

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... perceived threat that biological accounts of the production of human difference pose a threat to sociology's defining focus on social and environmental causes of human health and social outcomes.

Far from providing a threat, we argue that the combining of psycho-social and biological insights provides a more sophisticated paradigm for understanding (in our case) SEBD than either a psycho-social perspective on its own, or a bio-medical perspective alone. We argue that once these perspectives are combined they create a tool that is far more powerful than the sum of its parts because of the ways in which these perspectives are capable of *interacting* with one another.

The central insight from the biopsychosocial approach for SEBD is that where biological and or intra psychic factors are at work in relation to a manifestation of SEBD they almost always have implications that must be addressed on the social-environmental level. The key point, however, is that an understanding of biological and or intra-psychic factors can sometimes help us to target social-environmental interventions with greater accuracy than if we neglect the possibility that such factors *might* be at work.

For example, repeated patterns of behaviour which are deemed problematic across a wide range of different settings, by different people and over an extended time frame, may suggest something more deep seated in the form of a persistent social and/or cognitive problems which may, in turn, be rooted in the individual's social experience, or even in a combination of their social experience and a biological predisposition. In any event, where problems are deep seated and pervasive there is likely to be a need for the individual to be helped to learn new ways of thinking and behaving. This will often involve making adjustments to the environment as well as supporting the individual directly and individually.

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By way of illustration it is useful to consider the value of being able to distinguish between cognitive distortions and cognitive deficits (Braswell, 1995). Cognitive Distortions are defined as 'faulty problem solving processes, skewed perceptual processes, information processing errors, and/or irrational beliefs or expectations'. Cognitive deficits, on the other hand reflect 'cognitive absences or under- functioning in key cognitive processes'. In terms of surface behaviour cognitive deficits and distortions may be indistinguishable. For example, they may manifest themselves in a failure to pay or sustain attention in classroom situations. Clearly, in seeking a systemic solution to the problem our first port of call would be to consider what it is that the young person is being expected to attend to, and to make judgements about the appropriateness of this stimulus and to explore ways of making the stimulus more accessible. However, in some cases this does not result in a solution, rather there seems to be a persistent pattern of disengagement/distractibility that seems impervious to the adjustment that the teacher routinely makes and that usually work. In these circumstances it may become appropriate to investigate more closely the characteristics and dispositions of the individual.

If we find through consultation with the young person a primarily attitudinal objection to the content that s/he is expected to attend to that can be traced to an apparently dysfunctional way of thinking about participation in learning ('e.g. I don't want people to think that I am a swot'), then we might be wise to focus our attention on trying to change this perception through a range of interventions, which might include exploration of the possibility of bullying and/or helping the young person to become more positively motivated through some kind of cognitive behavioural intervention. In this sense we would be treating the inattentiveness as a cognitive distortion. If, however, we find, as a result of investigation, that the young person

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has a persistent difficulty in maintaining attention in lessons without indications of the presence of significant cognitive distortions then it might appropriate to invite the student to undergo a standardized test of vigilance which would enable us to establish the possibility of a cognitive deficit in this area, that may have a neurological basis. If a cognitive deficit is identified then this will have to be accommodated within the pedagogical approaches that are taken with this young person, and remedial and/or compensatory strategies will need to be developed which will diminish the negative impact of the deficit on the young person's social-emotional and educational engagement. In the real world it will sometimes be the case that cognitive deficits and distortions are both present, and that both types of intervention will be necessary.

The Biopsychosocial Approach and the 'Looking Glass Effect'

Of course, cognitive distortions and deficits are by no means exhaustive categories in relation to SEBD, they are, however, valuable and important constructs for teachers and students. In stating this, we are aware that the use of the terms 'distortion' and 'deficit' may offend readers who associate such words with an outmoded and long discredited 'medical model'. We have a straightforward response to this challenge which is as follows: human diversity is so rich and complex that one of the ways in which human society has chosen to deal with this is through the concept of 'normality'. The problem with this construct is that it has, for many people, lost its true statistical meaning and taken on layers of cultural interpretation which leave us with the simplistic equation that 'normal' equates with 'good' and 'abnormal' equates with bad'. It remains the case that the persecution of minorities (i.e. the statistically 'abnormal') is one of the most vile crimes of our age. However, it would be a deep mistake to shoot the statistical messenger.

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One of the major possibilities created by the biopsychosocial approach is the 'looking glass effect', by which human differences are highlighted with precision. What follows depends on the way we respond to the image of our reality which is reflected back to us through this process. For example, there is strong evidence to suggest that ADHD is best understood as biopsychosocial phenomenon, in which certain biologically based differences render certain individuals at significant disadvantage in conventional schools and classrooms (see the chapter by Bilton and Cooper in this volume). It follows that there is a glaring mismatch between the cognitive and behavioural characteristics associated with ADHD (APA, 1994) and taken for granted aspects of many schools and mainstream classrooms throughout the world (Cooper and Bilton, 1999). One response to this challenge might be to use prescription medication and other interventions to enable those diagnosed with ADHD to adapt to these classrooms that are so clearly inappropriate to their learning needs. A different educational response would be to ask questions about the possible implications of an ADHD friendly pedagogy for all students. In short, this would involve the creation of learning environments which were sensitive to the needs that children have for a variety of modes of educational engagement and which enabled to students with ADHD to participate in ways which prevented their tendencies towards distractibility and or impulsiveness and hyperactivity from being a hindrance to educational engagement (Cooper and Bilton, 1999). In any event the image of the student in the classroom that is presented by the ADHD, biopsychosocial mirror is consistent and informative. The decisions that are made about intervention, however, are subject to political and ideological interpretation.

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Conclusion

The biopsychosocial approach emerges out of the view that human beings are best understood in the various contexts of their biological, psychological and social functioning (Bronfenbrenner, 1979, 2005; Jahoda, 2002), and that these contexts interact in complex and sometimes surprising ways. This means that the biopsychosocial approach enables us to capture, in our approach to understanding and dealing with SEBD, the widest range of influences and targets for intervention that are, at the present time, possible.

This is not to say that every problem that we are confronted with must be analyzed exhaustively for its biological, psychological and social factors. On the contrary, we argue for the principle of 'progressive focusing' (see Cooper, 2006) whereby the most efficient approach to SEBD type problems is to adopt a systemic approach which analyzes the problem in relation to the immediate environment, in order to answer the question: what adjustment(s) to the environment need(s) to be made to diminish or prevent the recurrence of the problem. A systemic approach always considers the possibility that the environmental adjustment may be in the form of changing the way in which we understand the problem and then behaving in accordance with the new understanding (Cooper and Upton, 1990). The individual only becomes the focus of analysis and intervention as a means to obtaining greater insight into what adjustments need to be made to the environment. Where individual factors are implicated, of a social, psychological or biological nature, questions need to be asked about the implications of these factors for the ways in which the individual is best supported so that these factors do not contribute to SEBD. In this way the biopsychosocial approach mirrors the multi-dimensional nature of SEBD, and as such can act as an umbrella under which other

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approaches (such as psychodynamic, behavioural, cognitive behavioral and humanistic - see Cooper and Jacobs, 2011) can be comfortably located.

Finally, it is important stress the value of the biopsychosocial approach in understanding and promoting social-emotional resilience. The burgeoning literature on this topic (e.g. Bernard, 1991; Cefai, 2008;) presents a clear consensus that the promotion of well being, in the widest sense of the term, is a multifactorial issue, involving social, economic, psychological and physiological factors. This demands multi-disciplinary and multi-professional efforts (Hernandez and Blazer, 2006) which a biopsychosocial approach encapsulates, arguably, more comprehensively than any other existing approach.

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