

An Evolutionary Approach to Child Maltreatment

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Abstract

Sloman & Taylor (2016) described the impact of child maltreatment on the attachment and social rank systems, with one aim being to demonstrate the value of evolutionary theory. There is a general lack of interest in the relevance of evolutionary theory to this population and a consequent lack of clarity about how Sloman and Taylor's article could be described as evolutionary. The present article shows how evolutionary explanations contribute to an understanding of etiology of the negative consequences of child maltreatment by demonstrating the adaptive function of the mechanisms involved. It differentiates evolutionary explanations from proximate explanations and describes the role of psychobiological mechanisms in attachment and social rank systems, and the therapeutic relevance of these mechanisms.

Keywords:

Evolutionary theory; Etiology; Psychiatric; Depression; Anxiety; Abuse

Introduction

In their article on the impact of child maltreatment, Sloman & Taylor [1] by reviewing the literature, described how child maltreatment may disrupt the child's ability to form trusting and reassuring relationships and creates a power imbalance where the child felt powerless and ashamed, and analysed the impact of child maltreatment on the attachment and social rank systems. Their aim was to show how evolutionary theory could throw light on children's reactions to maltreatment as well as providing guidelines for therapeutic intervention. However, though "evolution is critical for understanding any condition's etiology" [2], many researchers and clinicians have not been trained in evolutionary theory and cannot, therefore, see its clinical relevance. Hence, they wonder why Sloman & Taylor's approach is evolutionary [1]. I will address these issues by discussing some fundamental evolutionary principals and demonstrating their relevance to child abuse. My hope is that a broader approach to child maltreatment will provide a rationale for more practical and meaningful therapeutic interventions.

An Evolutionary Approach

When exploring the causes of psychiatric illness, one can distinguish between proximate and evolutionary causes. "Proximate explanations answer 'what' and 'how' questions about structure and mechanism; evolutionary explanations answer 'why' questions about origins and functions" [3]. One of the hallmarks of an evolutionary approach to cognition, emotion and behaviour is the overarching aim to identify the mechanisms that solve problems of survival and reproduction. We are accustomed to ask proximate questions and there is generally little recognition that an evolutionary approach could have much to offer in the area of child maltreatment. Many would therefore be surprised to hear it said that an evolutionary approach can promote understanding of the functions of the mechanisms triggered by child maltreatment, and that this evolutionary perspective could be helpful therapeutically. I will illustrate what I mean. When Price [4] proposed that "states of depression, anxiety and irritability were the emotional concomitants of behaviour patterns that are necessary for the maintenance of dominance hierarchies in social groups" he predicted that "factors which increase or reduce dominance behaviour will have beneficial, or malignant effects on mental illness" (p.243). Price's initial observations [4], which were the basis of social rank theory, were further developed by Price et al. [5]. Although there has been extensive follow up of these ideas [6-8], this literature has had limited impact on clinical practice and the main focus has been on mood disorders.

Attachment and Social Rank Systems

Child maltreatment is, regrettably, extremely common and can have serious long-term ill effects, and these ill effects are generally associated with dysfunction of the attachment and social rank systems, which is why "a consideration of the impact of child maltreatment on the attachment and social rank systems and the interaction between these two systems and the HPA axis enables us to account for the impaired emotion regulation, emergence of shame, overly submissive and dominant behaviours, variety of syndromes such as affective disorder, PTSD, suicidality, risky behaviour, and various physical health problems associated with maltreatment" [1]. By showing how the diverse forms of child maltreatment affected the attachment and social rank systems Sloman & Taylor demonstrated why different forms of child

maltreatment had similar long-term ill effects [1]. There is also recognition that the initial focus on the link between agonistic loss and depression was too narrow and needed to be broadened to include a range of conditions.

Adaptive Function of Negative Reactions to Defeat

Price's idea of negative reactions to agonistic defeat having a positive adaptive function was ground breaking. The child's reactions to defeat in child abuse may initially have a protective function by causing the child to avoid challenging the victimizer in situations where there is a major power imbalance. However, the child's efforts to end the conflict may encourage the abuser to continue the abuse and, even when the child's submission brings an end to conflict, the child maltreatment is likely to have a negative long-term effect. Child abuse involves an imbalance of power so that, when the abuser uses power to hurt or take advantage of the victim, the victim is helpless to defend him or herself. The child's defeat reaction is triggered, but may not bring the agonistic encounter to an end so that the abuse continues.

Child maltreatment is often associated with fear and anxiety so that there is a high likelihood of the attachment system being triggered. The function of the attachment system is to soothe and reassure. However, in child maltreatment there may be no attachment figure available and the intensity of the child's reactions makes it harder to reassure the child. The evolutionary function of the attachment system is often overlooked. However, Byng-Hall J [9], the founder of attachment theory, highlighted the adaptive function of attachment mechanisms and observed how they operate in other species.

Therapeutic Implications

Because child maltreatment can render both the attachment and social rank systems dysfunctional, therapeutic efforts should be directed towards making these systems more functional. One can enable the attachment system to function more efficiently by developing the patient's ability to trust and this initially involves helping the patient to develop trust in the therapist. In the case of the social rank system, one can achieve this goal by strategies of empowerment and better communication between family members. This type of intervention may be appropriate in a wide range of cases. There is already literature on how to direct interventions towards the attachment system [9]. Although family therapists focus a lot on social hierarchy [10], they generally overlook the evolutionary underpinnings. One can address the social rank system in many ways. One is to promote the acceptance of defeat, which allows the individual to move on to face new challenges. Another approach is to encourage success by promoting more realistic goals. Maynard Smith (1982) distinguished between hawk (escalating) strategies and dove (de-escalating) strategies. Individuals that have been programmed to be overly challenging, or overly submissive, may make decisions that are not in their best interests. By

enabling these individuals to make more appropriate decisions as to when to challenge and when to submit, the therapist can aid the client to minimize losses and maximize success. An evolutionary approach focuses on the adaptive function of specific psychobiological mechanisms and enables one to determine whether the mechanism is operating effectively, or whether it has become dysfunctional. The use of an evolutionary approach enables one to operate within the context of a broad integrative framework. The evolutionary approach does not restrict one to a particular therapeutic modality as a variety of therapies can be reformulated within an evolutionary paradigm. For example, cognitive therapy has proven to be effective in treating certain forms of anxiety and depression, but some writers have bemoaned the absence of a unifying theoretical framework to integrate neurophysiological and psychosocial perspectives [11]. Evolutionary theory is one such integrative framework [12].

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