

## 1

## Emotion, Cognition and Motivation

### An Enactive Perspective

Tony Ward

A striking feature about emotions in correctional psychology is that they are primarily viewed as problems to be managed. Difficulties with emotional regulation have been identified as a dynamic risk factor in the sexual offending domain, and as a consequence of this are considered to be a critical treatment target (Hanson & Harris, 2000; Thornton, 2013). In the general offending area, impulsive behaviour leading to crime is frequently linked to emotional dyscontrol (Andrews & Bonta, 2010). Theories of sexual offending typically include aetiological pathways or causes that are characterized by emotional instability. For example, in Hall and Hirschman's (1992) Quadripartite Model of child molestation (see Bartels, Chapter 2 in this volume), one group of individuals is defined by their susceptibility to negative affective states and tendency to behave in an impulsive and unplanned manner. Treatment for this group centres on learning how to control and regulate negative emotions. Similarly, according to Ward and Hudson's (1998) self-regulation model, negative emotional states such as anger or anxiety may function as disinhibitors and precipitate reoffending. Finally, a core component of Ross and Fabiano's (1985) influential cognitive skills treatment programme is devoted to preventing emotional arousal from impairing functioning and leading to further offending. One of the core assumptions of cognitive skills programmes is that there are causal relationships between cognition, emotion and motivation. The picture of emotion emerging from these models and theories is a negative one: emotions overwhelm individuals and if unchecked result in antisocial and destructive behaviour. They are problematic, destructive and need to be controlled.

The conceptualization of emotions within correctional psychology as behavioural disrupters, contrasts starkly with the richer and more nuanced characterization evident in contemporary psychological and philosophical theorizing and research (Colombetti, 2009, 2014; Lewis, Haviland-Jones & Barrett, 2008; Solomon, 2007). In this latter body of work, emotions are described as biologically adaptive, essential for sound decision-making, critical elements of interpersonal relationships and conduits to a meaningful engagement with life (Christensen, 2012; Helm, 2002; Maiese, 2011; Sterelny, 2012; Thompson,

*Sexual Offending: Cognition, Emotion and Motivation*, First Edition.

Edited by Theresa A. Gannon and Tony Ward.

© 2017 John Wiley & Sons Ltd. Published 2017 by John Wiley & Sons Ltd.

2007). Furthermore, a number of emotional phenomena have been identified; ranging from specific emotional states to more enduring moods or personality-based dispositions. Emotions can enhance personal functioning, may be positive or negatively valenced, motivate individuals to pursue goals and function as interpersonal and intrapersonal signals of progress to goal achievement. The distinction between emotion and cognition has been effectively collapsed, and they are no longer considered to be polar opposites (Colombetti, 2014; Pessoa, 2013). Therapy has reflected this renewed interest in emotions as facilitators of behavioural change and specific emotion focused interventions are now routinely part of the repertoire of contemporary clinical practitioners (Greenberg, 2002; Leahy, 2015). For example, learning to focus on the somatic aspects of emotion in order to activate its phenomenological and behavioural components (Greenberg, 2002).

This change in understanding of emotional phenomena and its subsequent enriched role in therapeutic practice has not occurred in correctional psychology. Rather, a more limited understanding of emotions, motivation and cognition and their function in the process of behavioural change is typically the case. Why is this so? I think there are three major reasons for this neglect of emotional theorizing and research by correctional practitioners. First, a preoccupation with risk prediction and management in forensic and correctional practice has resulted in a neglect of desistance processes and emphasis on agency. What I mean by this is that attention to individuals' personal goals and aspirations for living fulfilling and better lives has not occurred (Ward & Maruna, 2007). The process of constructing intervention plans that reflect what is meaningful to individuals necessarily involves consideration of positively valenced emotions – and more generally – well-being related concerns. Second, the fragmentation of treatment programmes into discrete modules, such as emotional regulation, interpersonal functioning, cognitive restructuring and so on, has meant that it is tempting to focus on problem areas rather than processes for facilitating meaningful change. Engaging individuals fully in treatment requires attention to broader values and goals, and a coherent, positive plan for living rather than a disconnected strategy of tackling specific risk factors, or problems. Third, because correctional practice has been driven by pragmatic concerns, there has been a focus only on treatment theories and techniques that have been tested in risk–need–responsivity type studies (Andrews & Bonta, 2010; Marshall, Marshall, Serran & Fernandez, 2006). This is a severe limitation. The desire to effect change in certain problem areas has concentrated efforts on developing specific treatment approaches and, as a result, there has been a lack of awareness of current affective science and its implications for therapy.

In correctional psychology, an artificial distinction between emotion and cognition has been uncritically accepted, and cognition has been favoured as the primary causal process. As we will see later, this has been undermined by theory and research in affective science. In this chapter, I present a view of the interrelationship between cognition, emotion and motivation which challenges the current theoretical status quo in sexual offence treatment and has serious implications for how therapists view and treat the components of emotion, cognition, and motivation. First, I will consider definitional and conceptual issues that are

currently under the spotlight of affective science. I will then spend the rest of the chapter detailing the enactive approach to human functioning in general, and emotions, in particular. The enactive view of the mind is that it emerges from the biological process of autopoiesis, or rather, the dynamic processes by which dynamic systems protect, repair and organize their components and actively control their relationship to the environment (Hutto & Myin, 2013; Stewart, Gapenne, & Di Paolo, 2010; Thompson, 2007). It is a relational, dynamic conceptualization of organisms in which affective structures and processes play a significant role in framing salient features of the environment that represent potential benefits or possible threats. In this theory, emotions are at the centre of adaptive functioning and actively support cognition and behaviour. Following a description of enactivism and its general assumptions, I will discuss its implications for correctional practice. My review of these implications will be brief as my major aim is to present a way of thinking about emotional phenomena that is supported by current research and theory, and that is capable of guiding future practice.

## The Concepts of Emotion, Cognition and Motivation

Emotions are complex phenomena involving multiple systems that are loosely associated (Mennin & Farach, 2007) and involve physiological responses (e.g., heart rate, blood pressure), behavioural responses (e.g., facial displays and motor actions such as avoidance or escape) and subjective responses (e.g., feelings, verbally mediated thought). They involve relatively automatic appraisals of internal and external stimuli such as thoughts, interpersonal rejection or physical threats, and ready the organism to respond appropriately. Emotions are organism-wide phenomena and are typically experienced as occurring without volition. There are a range of emotional phenomena that vary in terms of their discreteness, persistence and duration. Specific emotions such as anger, joy and fear emerge readily in response to internal or external cues and serve to alert organisms to sources of threat or well-being. They usually last for a few minutes at most and are intentional in the sense they are directed to specific objects or cues. On the other hand, moods are longer lasting and may be present continually for several days, even weeks. Personality based dispositions are present more or less permanently and causally generate moods. Furthermore, emotions are motivating and direct the person to engage in goal directed actions of a particular kind. The type of goals and related actions reflect the theme or meaning of the affective state. In addition, the meaning of an emotional situation is partly a function of individuals' beliefs and attitudes. For example, fear will generate escape or avoidance goals (based on a threat appraisal) while anger causes retaliatory or self-protective ones (based on a perception of imminent, unjustified harm). Thompson (2007) captures the multi-faceted nature of emotion nicely in the following quote:

Emotion involves the entire neuroaxis of brain stem, limbic areas, and superior cortex, as well as visceral and motor processes of the body. It encompasses psychosomatic networks of molecular communication among the nervous system, immune system, and endocrine system. On a

psychological level, emotion involves attention and evaluation or appraisal, as well as affective feeling. Emotion manifests behaviorally in distinct facial expressions and action tendencies. (p. 363)

Thus, emotions are organism-wide responses, are initiated without intent, involve evaluations, are motivating (i.e., ready the organism for action), are generally adaptive and have meaning; they are in effect, 'sense-making' (Maiese, 2011). While there is disagreement concerning a number of their features, such as the degree to which specific emotions are discrete, there is consensus on these features (Frijda, 2008).

## Conceptual Issues

There are a number of conceptual issues relating to emotions that are currently the focus of research interest in affective science and which will help to elucidate cognition and motivation. These are: (a) the appropriate level of explanation of emotions; (b) the role of emotions in decision-making and rationality; (c) the relationship between cognition and emotion; (d) values and emotion; (e) conceptualization and emotional experience; and (f) emotion, cognition, and motivation.

### Level of Explanation

Although affective science researchers agree that emotions are associated with a range of biological, psychological and social/cultural elements, theories vary according to which factors are considered primary (Damasio, 1994; Frijda, 2008; Pessoa, 2013). For some theorists, somatic features such as heart rate, muscle tension or level of respiration are the core emotional phenomena and constrain subsequent evaluation and behavioural responses (Cannon, 1914). While, by way of contrast, cognitive theorists (e.g., Lazarus, 1991) argue that primary appraisal of the personal significance of certain events or stimuli sets the affective tone and, via a causal cascade, activates the other response systems. As I will discuss later, the cognitive model – which has been adopted in correctional psychology – fails to appreciate emotion as an organism-wide, multi-systemic phenomenon characterized by re-entrant and interacting causal processes. There is no such thing as *the* cause or one system that is primary.

### Emotions and Decision-Making

Research on the role of emotion in decision-making and judgement contexts suggests that it can have both positive and disruptive effects (Damasio, 1994; Thiele, 2006). Positive effects are arguably due to the way emotions frame salient aspects of a problem task and help to focus attention and subsequent problem-solving efforts on these features. With respect to its disruptive effects, some individuals lack specific emotional competencies, such as emotional awareness or the capacity to manage aversive emotions adaptively, making it harder for them to make good decisions in certain contexts. These problems could be due to the

presence of distorted desires (e.g., seeking to dominate others) resulting from impoverished learning histories and opportunities. A study by Damasio and his colleagues provides a good description of the adaptive role of emotions in judgement tasks (Bechara, Damasio, Tranel & Damasio, 1997). In this study participants with bilateral damage of the ventromedial sector of the prefrontal cortex failed to demonstrate galvanic skin responses when engaged in a gambling task. The result was that their judgement was especially poor and they exhibited high levels of inappropriate risk-taking. Somatic markers such as a galvanic skin response (GSR) in normal participants appeared to function as a non-conscious cue that a particular card choice was 'good' or 'bad' and facilitated sound judgement. In other words, emotions can help people to make better judgements in some situations. The diversity of emotions and their association with multiple organism systems mean that they can enhance or obstruct decision-making depending on: (a) type of emotion, their strength, and the specific context in which they occur; (b) where in the decision-making process they exert an influence; and (c) the resources of the person concerned.

### **Cognition and Emotion**

Cognition is an umbrella concept that refers to a range of capacities and processes including attention, decision-making, perception, attention, evaluation, thinking, memory and problem-solving (Maiese, 2011). The relationship between emotion and the different types of cognitive functions is hypothesized to vary from mediation (where emotional processes and cognition are both causally involved in producing an effect) to moderation (where emotion affects the strength of the relationship between cognition and action). In many instances it is not possible to distinguish between the cognitive and emotional components of a psychological process. In fact, neuroscience research has demonstrated that emotion and cognition utilize many of the same neural circuits and, biologically speaking, are closely allied, even fused, processes (Pessoa, 2013). Furthermore, in a recent review of the relationship between cognition and emotion, Pessoa (2013) stated, 'the architectural features of the brain provide *massive* opportunity of cognitive–emotional interactions encompassing *all* brain territories' (p. 257) and 'when we consider the available neuroscientific data, attempts to characterize regions as either "emotional" or "cognitive" quickly break down' (p. 258). For example, in Richard Lazarus's appraisal theory of emotion, (cognitive) appraisal is at the centre of an emotional response, either primarily causing it or, at the very least, is an important associated factor (Lazarus, 1991). Johnson (2007) describes the role of appraisal process in the following quote:

every emotional response is part of a process in which there is some appraisal of how a given emotionally competent stimulus stands in relation to the potential well-being of the organism. Our emotional responses are based on both our nonconscious and conscious assessments of the possible harm, nurturance, or enhancement that a given situation may bring to our lives. (p. 60).

Thus affective phenomena such as moods, discrete emotion and affective dispositions contain cognitive elements as part of their nature. In addition, with respect to cognitive processes like attention and problem-solving capacities, theorists such as Colombetti (2014), Thompson (2007) and Maiese (2011) have plausibly argued that affective phenomena are essential for their normal functioning. In the case of attention, emotional framing directs attention resources to salient aspects of the internal or external environment for further processing. While, effective problem solving is crucially reliant on affective framing and filtering to help weight options and to arrive at a balanced solution.

### **Values and Emotion**

To grasp the relationship between emotions and values, the pervasiveness of normativity must be examined. Values refer to those aspects of the world that confer benefits to organisms (i.e., help it to survive, flourish, etc.). The influence of values is evident in norms that govern the functioning of different action sequences, such as predator behaviour, workings of biological systems, the application of human moral systems and social relationships. In speaking of the essential roles of norms in biological and social systems, Christensen (2012, p. 104) views normativity as being 'inherent in the organization or form of living systems, specifically in the form that generates their unity and hence explains their existence'. Normative principles are natural since they specify the functional parameters of biological systems and social practices and develop agency in organisms of all types. Norms are reflected in action goals and the strategies selected to further these goals are evaluated against these norms, typically in a fluid, dynamic and immediate manner, in 'real time'. In complex animals such as humans the capacity to flexibly adjust goal-directed strategies and plans in response to changing environmental contingencies is, in part, due to cognitive capacity and to the availability of social and cultural resources (Sterelny, 2012).

Emotions may be viewed as motivational states which function as signals that the organism needs to deal with relevant challenges, whether they are threats, reward opportunities, or physical needs. As I will discuss in the section on enactivism, persons, like all living organisms, are autonomous adaptive systems in which core affective processes direct internal and behavioural processes to protect, repair and advance survival; and in the case of human beings, to achieve greater levels of well-being.

### **Conceptualization and Emotional Experience**

There is current research interest in the neuroevolutionary origin of emotions and their role in animal and human functioning. Panksepp and Biven (2012) argue that empirical evidence supports the existence of seven emotional systems that have evolved in mammals: fear, seeking (desire), rage, lust, care, grief, play and self (feelings related to subjectivity). Each emotional system is thought to have powerful effects on organisms' abilities to respond to their environments and to engage in life-sustaining, enhancing and harm-avoiding behaviours. An important implication of this research is that emotional experience is comparable across mammals, although in human culture it shapes the nature of this

experience, and its expression, considerably. The similarity of emotional experience entails that it is non-conceptual, or at the very least, is not necessarily language dependent. This follows from the fact that although animals appear to experience emotions, they do not have language or a conceptual life in the same way that humans do. The possibility of experiencing emotions in the absence of language also applies to babies and young infants given that they also do not appear to possess language or categories. However, it is widely accepted that babies and young infants do have an affective life and are capable of emotionally responding to situations in comparable ways to older children and adults (Colombetti, 2014). In clinical domains, the difficulty that individuals who have offended hold in identifying, managing, or expressing emotions may also indicate problems describing psychological phenomena linguistically (Greenberg, 2002).

Subjective experience constitutes the meaning of the emotional episode for a person (e.g., threat, love, anger or pleasure). It is, therefore, mistaken to assume that because emotions can be expressed in language, a lack of linguistic description implies an absence of the relevant emotional experience. It also suggests that for some individuals therapeutic interventions might need to be relatively non-linguistic, even non-conceptual, and involve purely physical or action based techniques (see below).

### **Emotion, Cognition and Motivation**

As is evident from the above review, emotions motivate organisms to act in ways that promote their goals within certain environments; they are action tendencies evoked automatically by internal and/or external cues. A difficulty with cognitive theories of emotions is that they struggle to account for the immediacy of the call to action. This is because the action, experiential and somatic aspects of emotion are hypothesized to follow an initial appraisal process. It is thought that the meaning of a situation is evaluated in terms of its theme and implications for the welfare of the organism. However, this is doubtful for three major reasons. First, there does not appear to be a delay between an appraisal phase and the other emotional components (Colombetti, 2014). Second, the neuroscientific evidence suggests that emotional and cognitive processes emerge in a coherent way together and, in addition, overlap (Pessoa, 2013). Third, identifying emotionally salient features would be cognitively overwhelming unless there had been some kind of initial affective framing (see below). In other words, without some kind of prior affective and somatic responses, the organism would struggle to evaluate events as well-being related. There would be too many possible ways of interpreting situations. Therefore, cognition must be guided by, or linked to, the other facets of emotion right from the start.

Thus, contemporary theory and research points to a close relationship between emotions, cognition, and motivation. In fact, all three are components or the functional consequences of the experience of emotion. For example, the emotion of anger incorporates a cognitive element (e.g., 'I am under threat'), affective tone element (e.g., 'This feels bad') and a motivational element (e.g., 'I need to remove the threat'). The puzzle is to explain how these components are causally linked. I argue below that the enactive theoretical perspective can answer this question.

## An Enactive Approach

### The Enactive Mind

In his seminal book, *Mind in Life*, Evan Thompson (2007), building on his earlier work, developed an enactive, phenomenological view of the mind that sought to integrate philosophy, biology, psychology and cognitive neuroscience. In this book he stated that, 'Enaction means the action of enacting a law, but also connotes the performance or carrying out of an action more generally' (p. 13). While Thompson briefly considered the nature of emotion from an enactive perspective, in recent years theorists such as Colombetti (2014) and Maiese (2011) have developed this strand of enactivism in much greater detail. In this chapter I draw heavily on all three theorists. First I will describe the major theoretical assumptions underpinning the general enactive view of the mind that is consistent with contemporary neuroscience, philosophical and psychological research and at odds with current cognitive behavioural therapy (CBT) correctional practice.

From the viewpoint of enactivism, organisms are dynamic, adaptive systems that are self-organizing and inherently purposeful. Natural norms direct the *actions* of dynamic systems to sustain, repair and protect themselves from internal and external threats. The individual components of systems are organized in concert with each other and in response to environmental perturbations and challenges.

The causal relationships within each dynamic system are bidirectional and complex. The overall form and functional integrity of the system is created by the individual parts and their interrelationships, but, in turn, the whole exerts a causal influence on each part and recruits the resources within it, and from the environment, to ensure it is able to function adequately. Any damage is repaired and the physical resources needed to ensure its survival are either created within the organism or extracted from the environment and converted into resources (e.g., energy). Thus, dynamic adaptive systems such as animals are self-sustaining and regulatory.

The above properties give organisms a subjective perspective and create a (proto) self in that all its actions and processes reflect a unique temporal, spatial and functional perspective. It has a point of view because its aim is to sustain and protect itself from external threats. The environment is monitored and evaluated with respect to its needs and interest and in this sense everything it does reflects its singular viewpoint. Consciousness and self-awareness enable organisms to direct attention more effectively to potential benefits and potential harms and to construct longer-term plans for adaptive action. The goal-directed nature of complex systems and the ability to flexibly control one's own activities and actions, causally generates the capacity for agency and a self-conception or sense of identity.

According to enactivism, the mind and its various psychological properties emerge from lower-level biological processes. The development of a mind gives the organism more degrees of freedom with respect to self-regulation and management of needs and core interests. An organism's goal-directed activities can be seen as sense-making, and as a form of cognition. Information



about the internal state of the organism and its relationship to the environment is relayed to its internal components and an appropriate response selected. Thus, the mind is not a *thing* but rather an interrelated set of psychological capacities and powers that are essentially dispositions to act in accordance with an organism's needs, interests and respective goals. Mental processes are completely and necessarily embodied in the brain, nervous system and all biological systems. The embodiment conception of human functioning is based on a relatively simple idea: human psychological functioning and sense of meaning is shaped in fundamental ways by bodily experience. Additionally, every bodily system (i.e., sensory, motor, nervous, immune, endocrine, etc.) is either constitutive of, or is causally implicated, in psychological functioning and subjective experience (Gibbs, 2006; Johnson, 2007). The mind and body are interrelated sets of processes. For example, physical gestures have been shown by researchers to provide a non-verbal means of addressing problems of various kinds (e.g., mathematical problems). The research evidence suggests that gestures can foreshadow solutions before a person has consciously solved a problem, and, what is more, such a role is not simply one of emphasis or salience (McNeill, 2005).

Dynamic adaptive systems such as humans always exist in relation to specific environments or contexts, to which they respond and which they shape in ways that increase their chances of survival and enhancement. Cultural resources (e.g., language, norms, institutions, practices, etc.) are simply the contextual aspects of humans' relationship to their social environment. Enactivism proposes that to understand dynamic systems you need to grasp that they always exist with respect to a specific environment, or what has been termed the world around ('*Umwelt*').

The scientific implications of an enactive conception of human functioning are considerable. First, the complexity of multi-faceted human autonomous systems means that explanation needs to be multi-level, dynamic and holistic rather than reductionist. Second, the basic role of sense-making in life and mind means that for humans it is imperative to include subjective experience when seeking to explain social phenomena such as crime. Third, the relational nature of humans as adaptive autonomous systems entails that explanations should take the external environment into account alongside individuals' relevant mental states and biological functioning. Relatedly, explanations should be dynamic and look to identify the causal processes that interact in the production of behaviour. The explanatory picture may change over time, and across contexts, and the relative balance of individual versus environmental explanation will vary accordingly.

### **An Enactive Model of Emotion, Emotion and Motivation**

The enactive model follows conceptually from the general enactive perspective sketched out above. In essence, it accepts a view of human beings as adaptive autonomous systems who are neurobiologically embodied. A variation on the general model is that provided by theorists such as Maiese (2011) and Colombetti (2014), who believe emotion is fundamental to the *sense-making* nature of

autonomous systems and operates in tandem with cognition; they are both instances of the sense-making actions of organisms. In this vein, Colombetti (2014) states:

I have argued that affectivity is a pervasive dimension of the mind, deeper and broader than the emotions and moods of the affective scientist; that emotional episodes are best conceptualized as self-organizing dynamical patterns of the organism (rather than as affect programs, psychological constructions, or component processes driven by a separate process of appraisal); ... that the process of appraisal ... is enacted by the organism in virtue of its organizational properties, including the deep interconnectivity and coregulation of brain and body; ... that the body can enter into an emotion experience in many different ways ... (p. 203)

Primordial or core affectivity is integral to the working of all dynamic autonomous systems and is evident in the basic self-regulating nature of such systems. Based on the core functions of sustaining, repairing, protecting and enhancing the organism, its structures and processes monitor the internal and external environment for cues that indicate goal progress. That is, it is constantly alert to signs indicating possible benefits or potential harms, and modifies its actions accordingly. The orientation towards 'good' outcomes and away from 'bad' is evaluative and involves all the organism's component systems. The feedback is immediate, physically and psychologically experienced, and information is pooled from multiple systems to be able to take immediate advantage of any opportunities for goal success. Maiese (2011) calls this filtering, evaluative system 'affective framing,' and states that

'affective framing' is the process whereby we interpret persons, objects, facts, states of affairs, images, ourselves, and so on in terms of *embodied desiderative feelings*. ... a frame is a cognitive shortcut that people rely on in order to carve out and highlight features of their surroundings and thereby make sense of the world around them ... carves out the 'starting points' for deliberation, thought, and other cognitive processes. (p. 83)

According to Thompson's (2007) enactive theory of emotions, following a precipitating event its meaning is appraised and affective salience noted. This results in a characteristic feeling tone (positive or negative valence) and motor embodiment with changes in facial expression. Different action tendencies associated with specific emotions may occur, or if the affective state is more diffuse, global intentions for acting on the world are formed. Intentions are cognitive in nature in so far as they are effective plans comprised of beliefs, expectations and goals. Additionally, there will be changes in cardiopulmonary variables, skin conductance, muscle tone and endocrine and immune system activities. The person will have been transformed by the cascading psychological and biological processes and oriented toward anticipated rewards or away from suspected threats. Emotions are in essence *actions* that are directed to aspects of the world or self. The intentionality of emotion is evident in the fact that their associated goals and

subsequent actions aim to create greater concordance between goals and internal or external states (self and/or the environment).

According to the enactive conceptualization of affective phenomena, emotional dispositions, moods and discrete emotions develop from these primordial or affective framing actions and reflect the specific types of situations encountered in particular contexts. For example, an individual is born into the world already having a subjective (first person) point of view and is therefore oriented towards rewarding experiences and situations and away from harmful ones. Frequent experience of neglect and harm may result in an anxious, somewhat pessimistic emotional style. A person with this type of emotional disposition is likely to experience more negative, anxious moods and emotions of fear and anger. In addition, social and cultural learning will influence the meaningfulness of the events the person encounters and also modulate the way he or she responds to and manages them.

Emotions provide direct, relatively unmediated access to others' emotional and mental states. This is primarily due to the acute sensitivity individuals have to emotional, contextual, physical and behavioural cues, and the information generated by their own bodies in response to such cues. The perception of emotions in others is as quick, automatic and direct as it is in ourselves. Because many of the major systems of the body are directly activated in emotional episodes (and in fact, constitute emotions), people learn to respond to their patterns rapidly and use them as reliable indicators of goal progress or frustration.

The enactive conceptualization of emotions is essentially a process model where cognitive and emotional causal processes interact and function to orientate organisms to significant personal goals, and to signal to self and others the degree of goal progress. Affective states are strongly evaluative in nature and also involve whole organism systems. The enactive view of affective phenomena, with its strong interpersonal and relational aspects, makes it easier to appreciate its role in generating empathic behaviour. According to Oxley (2011) empathy is 'both an act *and* a capacity' (p. 15). Individuals engage in acts of empathy when they imagine how someone else is likely to be feeling in certain situations, or alternatively, anticipate how they would feel in similar circumstances. In order to act empathically individuals require cognitive and emotional capacities such as the ability to psychologically decentre, emotional knowledge, and the possession of emotional regulation, deliberation and perspective taking skills. Emotions have evolved to provide rapid and often non-verbal evaluations of other people and enable us to quickly identify what they are feeling and experiencing. The natural resonance between different people's emotional states (e.g., facial expressions, body posture, voice tone, etc.) enables us to respond quickly to subtle cues and to pick up on possible goal threats or opportunities for cooperative actions. As Maiese (2011) suggests, emotional responsivity between two people is like a dance: there is a synchronization of expression, body posture, voice inflection and emotional tone.

A final point is that from an enactive viewpoint, emotional experience is sometimes unable to be verbally articulated, and even if it can be, the resulting description is imprecise and arguably a poor substitute for the full body experience, so to speak. A person may be aware of the meaning of an emotionally

charged situation and experience the physiological and psychological changes associated with a specific emotion, be motivated to act in ways consistent with this evaluation, but find it difficult to express exactly what they are feeling. Or, they may describe an emotion that is not consistent with their overall response.

## **Correctional Therapeutic Implications**

I would like to now discuss some of the major practice implications suggested by the enactive model of emotion, cognition and motivation. My comments will be preliminary, as the rest of the book will review correctional assessment and therapy in detail. In my view, we need to adopt a broader perspective on emotions in order to more effectively design treatment programmes in line with cutting-edge affective research and theory. Thus, most importantly, we should not prioritize cognition within interventions and dedicate entire modules to this topic (see Ross, Fabiano & Ross, 1989). Instead, the key focus should be on emotion. In some respects this will turn practice on its head and align it more with emerging trends such as strength-based approaches and agency-level explanations of crime.

A first point is that given the grounding of emotions in primordial affectivity and affective framing, they are causally involved in every type of problem experienced by clients. Every treatment module will refer directly or indirectly to affective phenomena of one type or another. For example, individuals with general self-regulation problems are likely to have emotional factors associated with their goals. Additionally, clients who routinely misinterpret interpersonal cues and as a consequence act aggressively are likely to hold dysfunctional core beliefs and values – both linked to problematic affective framing of social encounters. In view of the pervasiveness of affective elements in clients' array of difficulties, it makes sense to think more flexibility about emotional competence and affective framing throughout the whole of treatment. It also raises questions about the usefulness of having treatment modules devoted to problems such as stress management or emotional regulation, rather than working with clusters of interventions that are delivered according to a person's intervention plan.

A second point is that emotions have their evolutionary and developmental origins in the enabling of agency and search for meaning. They are inherently evaluative and reflect what people care most about. The link to desire is evident when you take into account the valenced nature of emotions and their motivational role (i.e., desires for certain outcomes or experiences). The relevance for treatment is that when developing intervention plans for individuals in correctional contexts their core values should be placed at the centre of a treatment plan. Deeply held values are likely to elicit powerful emotions and, conversely, generating emotional states in therapy will make it easier to detect what matters most to them. Going with (rather than against) intense emotional states (using them as indicators of core values) and understanding their relationship to agency and a meaningful life increases the chances of clients investing in treatment.

Third, an important implication of enactivism can be traced to its emphasis on action and, relatedly, the fact that emotions are associated with body-wide systems. Sometimes those who have offended will not be able to verbally express what it is they are fearful of, why they become aggressive in some situations, or why they are feeling lonely. Using emotionally focused techniques and working in an emotional activating and alive way will give therapists an opportunity to clarify these issues (Greenberg, 2002). Relying solely on CBT techniques lessens the chance of this occurring and restricts the range of possibilities for therapists to effect change.

A final point concerns the relationship between dynamic risk factors (criminogenic needs) and emotionally oriented work with clients. Dynamic risk factors are essentially predictive constructs derived from large quantitative studies (Ward, 2014). Recently we developed a model in which dynamic risk factors were broken into their elements and incorporated within an agency model of offending (Durant & Ward, 2015; Heffernan & Ward, in press; Ward & Beech, 2015). In this model, emotions play a central role and are causally linked to individuals' needs and values, action goals, interpersonal strategies and social and cultural contexts. Each dynamic risk factor was hypothesized to be directly or indirectly associated with some kind of affective phenomena and, once conceptually reconstructed, appeared to play a central role in establishing offence meaning and associated benefits. The key point is that the use of dynamic risk factors on their own is unlikely to alert therapists to their emotional significance, while locating them within an agency model of some kind can illuminate their affective relevance and utility.

## Conclusions

Emotions and the broader range of affective phenomena have been conceptualized in an impoverished and intervention limiting way in correctional psychology. The stress has primarily been on their potential for disrupting prosocial motivations and for biasing problem solving and impairing individuals' social judgement. Furthermore, cognitive processes have been viewed as having causal priority. In other words, emotions are seen as bad news for both clients and practitioners. This negative and partial view has been paralleled in recent years by attempts to create more positive, constructive environments in correctional facilities and treatment centres (Gannon & Ward, 2014; Ward & Maruna, 2007). As a result of this desire to establish positive therapeutic environments, research attention has been directed to the therapeutic alliance and the attributes effective therapists possess. Interestingly, greater emotional awareness as highlighted in features such as empathy and interpersonal warmth, is a central part of these suggestions.

Therefore, it is timely to think about emotion and its conceptualization in greater depth and to derive what messages we can from contemporary affective science. In my view, one of the most exciting recent developments has been the enactive view of the mind in general, and its application to emotion in particular. It is a rich way of thinking about emotion and psychological

functioning and is capable of accommodating many of the conceptual issues and controversies evident in the emotional literature. For one thing, the reciprocal causal links between emotion and cognition and their subsequent impact on motivation are well addressed by enactive theory and related research. My hope is that practitioners will find much of interest in this body of theory and research, which will assist them to deliver more effective treatment. Programmes that, while reducing the risk of further harm to the community, will also help individuals who have committed serious crimes to find more meaningful ways to live.

## References

- Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*. New Providence, NJ: Anderson.
- Bechara, A., Damasio, H., Tranel, D., & Damasio, A. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, *28*, 1293–1295.
- Cannon, W. B. (1914). The interrelations of emotions as suggested by recent physiological researchers. *American Journal of Psychology*, *25*, 256–282.
- Christensen, W. (2012). Natural sources of normativity. *Studies in the History and Philosophy of Biological and Biomedical Sciences*, *43*, 104–112. doi: 10.1016/j.shpsc.2011.05.009
- Colombetti, G. (2009). From affect programs to dynamical discrete emotions. *Philosophical Psychology*, *22*, 407–425. doi: 10.1080/09515080903153600
- Colombetti, G. (2014). *The feeling body: Affective science meets the enactive mind*. Cambridge, MA: MIT Press.
- Damasio, A. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: G.P. Putnam & Sons.
- Durrant, R., & Ward, T. (2015). *Evolutionary criminology: Towards a comprehensive explanation of crime and its management*. San Diego, CA: Academic Press.
- Frijda, N. H. (2008). The psychologists' point of view. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotions* (3rd ed.) (pp. 68–87). New York: Guilford Press.
- Gannon, T., & Ward, T. (2014). Where has all the psychology gone? A critical review of evidence-based psychological practice in correctional settings. *Aggression and Violent Behavior*, *19*, 435–436. doi: 10.1016/j.avb.2014.06.006
- Gibbs, R. W. (2006). *Embodiment and cognitive science*. New York: Cambridge University Press.
- Greenberg, L. S. (2002). *Emotions-focused therapy: Coaching clients to work through their feelings*. Washington, DC: American Psychological Association.
- Hall, G. C. N., & Hirschman, R. (1992). Sexual aggression against children: A conceptual perspective of etiology. *Criminal Justice and Behavior*, *19*, 8–23. doi: 10.1177/0093854892019001003
- Hanson, K., & Harris, A. J. R. (2000). Where should we intervene? Dynamic predictors of sexual offense recidivism. *Criminal Justice and Behaviour*, *27*, 2–35. doi: 10.1177/0093854800027001002

- Heffernan, R., & Ward, T. (2015). The conceptualization of dynamic risk factors in child sex offenders: An agency model. *Aggression and Violent Behavior, 24*, 250–260.
- Helm, B. W. (2002). *Emotional reason: Deliberation, motivation, and the nature of value*. Cambridge: Cambridge University Press.
- Hutto, D. D., & Myin, E. (2013). *Radicalizing enactivism: Basic minds without content*. Cambridge, MA: MIT Press.
- Johnson, M. (2007). *The meaning of the body: Aesthetics of human understanding*. Chicago: University of Chicago Press.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Leahy, R. L. (2015). *Emotional schema therapy*. New York: Guilford Press.
- Lewis, M., Haviland-Jones, J. M., & Barrett, L. F. (Eds.). (2008). *Handbook of emotions* (3rd ed.). New York: Guilford Press.
- McNeill, D. (2005). *Gesture and thought*. Chicago: University of Chicago Press.
- Maiese, M. (2011). *Embodiment, emotion, and cognition*. Basingstoke, UK: Palgrave-Macmillan.
- Marshall, W. L., Marshall, L. E., Serran, G. A., & Fernandez, Y. M. (2006). *Treating sexual offenders: An integrated approach*. New York: Routledge.
- Mennin, D., & Farach, F. (2007). Emotion and evolving treatments for adult psychopathology. *Clinical Psychology: Science and Practice, 14*, 329–352. doi: 10.1111/j.1468-2850.2007.00094
- Oxley, J. C. (2011). *The moral dimensions of empathy: Limits and applications in ethical theory and practice*. London: Palgrave-Macmillan.
- Panksepp, J., & Biven, L. (2012). *The archaeology of mind: Neuroevolutionary origins of human emotions*. New York: W. W. Norton & Company.
- Pessoa, L. (2013). *The cognitive–emotional brain: From interactions to integration*. Cambridge, MA: MIT Press.
- Ross, R.R., & Fabiano, E.A. (1985). Time to think: A cognitive model of delinquency prevention and offender rehabilitation. *Johnson City, TN: Institute of Social Sciences and Arts*.
- Ross, R. R., Fabiano, E. A., & Ross, R. D. (1989). *Reasoning and rehabilitation: A handbook for teaching cognitive skills*. Ottawa, Canada: The Cognitive Centre.
- Solomon, R. C. (2007). *True to our feelings: What our emotions are really telling us*. New York: Oxford University Press.
- Sterelny, K. (2012). *The evolved apprentice: How evolution made humans unique*. Cambridge, MA: MIT Press.
- Stewart, J., Gapenne, O., & Di Paolo, E. A. (2010). *Enaction: Toward a new paradigm for cognitive science*. Cambridge, MA: MIT Press.
- Thompson, E. (2007). *Mind in life: Biology, phenomenology, and the sciences of the mind*. Cambridge, MA: Belknap-Harvard.
- Thiele, L. P. (2006). *The heart of judgment: Practical wisdom, neuroscience, and narrative*. New York: Cambridge University Press.
- Thornton, D. (2013). Implications of our developing understanding of risk and protective factors in the treatment of adult male sexual offenders. *International Journal of Behavioral Consultation and Therapy, 8*, 62–65.
- Ward, T. (2014). The explanation of sexual offending: From single factor theories to integrative pluralism. *Journal of Sexual Aggression, 20*, 130–141. doi: 10.1080/13552600.2013.870242

- Ward, T., & Beech, A. R. (2015). Dynamic risk factors: A theoretical dead-end? *Psychology, Crime & Law, 21*, 100–113. doi: 10.1080/1068316X.2014.917854
- Ward, T., & Hudson, S. (1998). The construction and development of theory in the sexual offending area: A metatheoretical framework. *Sexual Abuse: A Journal of Research and Treatment, 10*, 47–63.
- Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk paradigm*. London: Routledge.