Chapter 1

Varieties and functions of human emotion

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THE NATURE OF EMOTION

The concept of emotion is central to all aspects of human experience and yet the concept is quixotic when it comes to defining what emotion is precisely. Many aspects of emotion are described differently depending on the context. Like other aspects of human experience there are often common-sense understandings and theoretical definitions that do not precisely match, and yet without precision research into the nature of normal and abnormal emotional reactions is compromised.

When considering the nature of emotions, the components of subjective experience, verbal description, accompanying physiological response, motivational influences, behavioural expression, and consequences need to be considered. The components may be consistent with each other or there may be discrepancies between them. Depending on their orientation, some researchers view emotions as primarily biological and physiological (Panksepp, 1988) while others view them as primarily psychological (Lazarus, 1991).

The subjective experience of emotional states is only available to us via the verbal descriptions that are applied. The language used to describe emotions varies considerably from person to person, as do individual familiarity with emotional states. Some people are cut off from their emotions while other people are dominated by their emotions. Some are expressive of their emotions while others seldom show significant emotions. Does this mean they experience

them differently? Or has personal experience, biological differences, or cultural acceptance simply altered the expressive component of emotions? Because of the complexities of subjective experiences and expression emotions are difficult to study.

Emotions and feeling states direct attention to events, thoughts or stimuli, organize perceptual and thought processes, as well as activating and motivating many, if not most, aspects of human behaviour. The central role of emotion in human functioning applies both to interpersonal (or social behaviours) and personal solitary behaviours. Whether in the social, work, family, or solitary sphere of human endeavour, human emotions and affects direct much of our functioning. The universal nature of the principal emotions and the presence of recognizable emotional states within animal behaviour underscore both the biological and the adaptive functions of emotions. In spite of the universality of emotional states, there is considerable debate over the precise nature of the fundamental emotions.

The expression of emotion also has a significant secondary role in complex social communication, indicating to the observer not only the impact of contemporary events but also the likely response of the person being observed. The expression of anxiety may communicate to an observer the desire to avoid or escape, joy the likelihood of persisting and anger an intention to defend.

Emotions vary in terms of whether they are positive or negative experiences, in arousal and intensity (i.e. strongly aroused to weakly aroused), reactivity (i.e. whether easily aroused), centrality (i.e. whether they dominate consciousness or are peripheral experiences), and, of course, the situations that arouse them (i.e. universal situations to highly idiosyncratic situations). Given the multidimensional nature of emotional experiences and of emotional expression, it is not surprising that the boundaries of when an emotional reaction is considered inappropriate, pathological, or representative of a psychological or psychiatric difficulty are poorly defined. Emotional reactions that are extreme in relation to the situation, or that persist beyond a reasonable time, or that are attached inappropriately to the situation, may each be labelled as pathological or representative of a psychological or psychiatric difficulty. The boundaries of what is excessive, too persistent, or inappropriate are not fixed and are subject to interpretation.

Emotions are associated with a range of other related states, such as feelings, affects, and temperaments. All these form related aspects of our general emotional functioning. While having a degree of independence, immediate feeling states are responsive to the situation but also related to the other emotional realms of affect, emotion, and general temperament. The precise nature and delineation of emotions, affects, and temperament are seldom agreed upon, the concepts varying from researcher to researcher.

WHAT ARE OUR BASIC EMOTIONS?

Clearly, while there are many words to describe emotional experiences, the range of emotions are not endless. Most researchers agree there are a limited number of emotions, although the precise number and nature of our basic emotions remain in dispute. The most influential theorists in this debate come from the biological and social psychological perspectives.

Broadly speaking, there are approaches to emotion that emphasize the biological nature of emotional processes (Izard, 1977), others that focus on the cognitive processes whereby emotion is subordinate to the information processes of the human mind (Kagan, 1994). Other approaches emphasize the developmental nature of emotions and their role in facilitating learning, behaviour change, and development (Sroufe, 1996). There are those who view emotions in terms of their functional involvement in the interaction between the individual and his environment (Barrett & Campos, 1987). Others view emotions as social or cultural labels defined by the circumstance in which they occur (Abu-Lughod & Lutz, 1992). The difficulties considering the nature of emotions arise from the complex nature of the process of emotional arousal.

Izard (1984) and colleagues have persuasively argued on the basis of observable, distinct and recognizable neuromuscular expressions (facial) of emotion that there are ten basic innate emotions. These "differential emotions theorists" propose the ten basic emotions are biologically distinct. The manner of their expression may be modified through childhood into adult life with the maturation of the underlying biological structures, muscles, and nerve connections. The wide variety of labels humans apply to their emotional experience in adult life is seen as resulting from the various combinations of these "basic emotions". While the ten basic emotions are seen as comprising the basis of all human emotional expression, what elicits the emotion will be determined and changed with learning and an interaction with cognitive or the information processes involved.

The ten basic emotions identified by the differential emotions theorists are:

- interest–excitement;
- enjoyment-joy;
- startle-surprise;
- distress-anguish;
- rage-anger;
- disgust-revulsion;
- contempt-scorn;
- fear-terror;
- shame-shyness-humiliation;
- guilt-remorse.

The way an individual expresses emotions may be modified by family, social, and cultural influences. Learning in all its various forms plays a significant role in

determining what is considered the socially or culturally appropriate emotional expression in a particular situation.

Those theorists interested in the cortical circuitry of the emotional systems of the brain (Panksepp, 1988) propose, on the basis of the brain circuitry, that there are four basic emotions, anger, fear, sorrow, and joy. Other affective states are seen as representing complex interactions between these basic emotional systems. This approach proposes there are a limited number of underlying primary emotional circuits within the brain that have a "command circuit design ... (and) bring a variety of brain functions into rapid coherence to generate coordinated behavioural, physiological and hormonal states" (Panksepp, 1988, p. 49). From an evolutionary viewpoint, Panksepp (1988) acknowledges the possibility that the affective properties of various stimuli activate one of two particular systems, a generalized pleasure system that is based on things that help sustain life and a generalized aversion based on events incompatible with sustaining life. Within these two general systems, Panksepp (1988) proposes four to five primary command systems (1) the foraging-expectancy-curiosity-investigatory system, (2) the anger-rage circuit, (3) the anxiety-fear circuit, (4) the separationdistress-sorrow system and perhaps a fifth one a "social-play" circuit. This biological evolutionary approach to emotion does not deny secondary learned cognitive elaborations of the primary systems.

The approach of Panksepp (1988) is also consistent with the emotional processing model of Davidson (1992) and his colleagues, who have proposed that the processing of emotional events involve either positive or approach activity or negative avoidant activity. They propose that different parts of the brain and information processes are involved in the approach and the avoidant emotions. In their view, the approach–avoidance motivational axis underlies all emotional responses, with left and right hemisphere anterior regions being differentially involved in emotional responses and cognitive style.

The various perspectives in the debate over whether there are basic emotions are outlined in Ekman and Davidson's (1994) discussion. While there is still considerable debate, those involved in this field agree on the need for greater data and that our level of knowledge in this important field remains rudimentary. The labels used to describe emotional states may be used idiosyncratically and have considerable culturally defined influences, but there is also consistency in the physiological component of responses in relation to environmental events (Ekman, 1994).

THE EMOTIONAL PROCESS

Considering the nature of emotions involves examining each stage of a complex multi-stage process (Figure 1.1). It is necessary to examine the events that elicit emotional responses and the detection of those events and the perceptual processes that determine how those events are processed. With the perception of an

Eliciting event \rightarrow	Detection of the event
\rightarrow	Change in basal arousal (orienting and preparing to respond)
\rightarrow	Appraisal of the significance of the event (interpretation)
\rightarrow	Emotional response consistent with the interpretation
\rightarrow	Subjective experience of the emotion
\rightarrow	Change in motivation
\rightarrow	Motivated behaviour
\rightarrow	Secondary appraisal of the significance of the response

Figure 1.1 Stages of an emotional response

event, there is a change in the base level of arousal. This is more than an orienting to the change in stimulation, as it may also involve the initial learned or genetically encoded interpretations (e.g. danger, etc.). There is evidence that humans may be pre-programmed to respond to certain events such as heights and small fast-moving animals (e.g. spiders, mice, rats, etc.). The major contribution to our emotional response comes with the interpretation of the significance and nature of the event. Whether an event is perceived as threatening or enhancing of well-being is based on cognitive processes of interpretation. These processes are learned and set against past experiences and beliefs. The emotional response, including the physiological responses, subjective awareness, and behavioural intention, follows the appraisal of the situation. The subjective experience of the emotional state flows on to motivation to behave in pre-programmed or learned ways. The behaviour designed to deal with the situation motivated by the resulting emotional state follows.

At each stage of the process of emotionally responding there is constant feedback that attempts to restore the organism to balance or homeostasis. At the same time, each stage of the emotional response is subject to its own interpretation and from this a secondary emotional process, similar to that just described, commences.

The elicitors of the emotional response may be an external event or an internal process. Internal processes include our own thoughts, images from memory or changes in bodily sensations. Events may be responded to because we have an innate sensitivity (such as with the perception of heights) or because of learned experiences (previous traumatic events).

A change in arousal state prepares us for the response. The degree of change will be influenced by our basal state when the event occurs. The arousal change from a stressed individual may be considerably amplified when compared to the response from a relaxed individual.

Our appraisal of the event is the most significant component of our emotional responses. Perhaps more than any other animal, the complex nature of our interpretations, taking into account our beliefs about our world and about ourselves, allows a complex of emotional responses. As noted earlier, there is a range of elaborate emotional responses available to the adult human well beyond the basic emotions discussed earlier. Contradictory emotional responses may also be experienced from the same events.

FUNCTIONS OF EMOTIONS

For the individual, emotions are viewed by most researchers as having an adaptive purpose or function, with either a protective or a nurturing function. This overriding adaptive function of protecting from negative consequences and maximizing positive consequences was identified early in the study of emotion in Freud's *Beyond the Pleasure Principle* (Freud, 1920). Through essentially biologically programmed processes, emotions activate protective mechanisms or behaviours in situations of danger, threat, or loss, as well as the processes involved in seeking out ways of meeting, in a nurturing way, human needs.

For human beings in the 21st century, emotional experience, physiological accompaniments, and behavioural responses are often manifest in situations that do not require the protective actions of primitive humans. Being biologically wired into our neurotransmitter systems, the emotional state remains, however, available for a protective purpose should the need arise. Most of us do not experience real threat or danger, but a socially or individually created perception of threat, danger, or loss, the result of interpretive cognitive processes. Similarly many of the basic needs are met and activation of additional nurturing is above and beyond basic human requirements.

Emotions and feeling states direct attention to relevant events, thoughts, or stimuli, organize perceptual and thought processes, as well as activating and motivating many, if not most, aspects of human behaviour. The central role of emotion in human functioning applies both to interpersonal (or social behaviours) and personal solitary behaviours. Whether in the social, work, family, or solitary sphere of human endeavour, human emotions and affects direct much of our functioning. The universal nature of the principal emotions and the presence of recognizable emotional states within animal behaviour underscore both the biological and the adaptive functions of emotions.

What are the functions served by emotions? Not all consequences of emotions are functional, some may be unintended and the long-term consequences may differ from those in the short term. Similarly, asking the question of the functions of emotions, we need to consider the differences between functions for the individual versus functions for the social group within which the individual operates. Emotion may be protective of an individual's well-being, but also a form of communication as far as the social group is concerned. Asking "What are the functions of emotions?" may also lead to asking "When is emotion dysfunctional?" and "Where are the boundaries between functional and dysfunctional?"

Emotions, when provoked by the interactions with the environment or from internal processes, organize attention toward the relevant events and away from others deemed to be less relevant. Having shifted attention to what is perceived to be the emotion-eliciting event(s) and, as a result of the interpretation of the nature of that event, emotions activate affective and behavioural programmes consistent with the interpretation. The arousal of motivation based on the interpretation of the event is usually connected with behaviours that communicate the emotion to others and those designed to resolve the presenting situation. Perceptual and cognitive organization (attention shift), social communication, arousal of motivation, and precipitating behaviours (biologically determined as well as learned), that have the purpose of resolution of the situation, are all the adaptive functions of emotions. Because of the individual variations in arousability and learned responses, as well as the constant feedback from one aspect of emotional experience to the other, the emotional expression observed by others may be complex and variable.

Emotions allow us to communicate to others verbally, non-verbally, and behaviourally the impact events have on us. Emotions observed in others may activate empathic emotional experiences in the observer. They may allow the observer to engage in solution-focused actions without having to emotionally experience the event themselves.

The cognitive-behavioural perspective, which dominates contemporary thinking about dysfunctional emotions, views emotional responses as the products of interpretations of the psychosocial world. Anxiety is always at some level a result of perception of threat. Anger, in its various forms, is a result of a perception of attack or threatened loss. These are the two sides of the "fight or flight" mechanism. Unhappiness is about loss or threatened loss of sources of satisfaction, self-esteem, and safety. Depression is viewed as the result of beliefs, whether valid or not, that the person's psychosocial world is punishing, that their well-being is threatened, that there may not be a solution to this adversity, and that it represents personal failure. Guilt arises from blaming ourselves for the adversity of others, while joy arises from perceived success or satisfaction in meeting needs, in achievement, or affiliation.

EMOTIONS AT WORK

In the workplace, as in all aspects, emotions may serve to motivate, organize, direct, and activate behaviours, but also may be disruptive to the other appropriate work-related and social behaviours. Broadly, both positive and negative emotional states have the capacity to enhance or interfere with work-related behaviours. Success and achievement may motivate but, if it fulfils the individual's needs, prior success may mean that motivation for further success diminishes. Mild anxiety or even unhappiness may motivate for change. Significant anxiety or unhappiness that reaches the state of clinical depression may severely interfere with work and social functioning.

Emotion may also disrupt by distracting the individual from the task at hand. It may disorganize cognitive processes and behaviour, making information processing and complex behaviours ineffective. Decision making and problem solving may be interfered with either directly as the arousal disorganizes information processes, or indirectly as a result of being a distraction from the task at hand.

Emotion may precipitate other consequences, such as alcohol misuse, that interfere as secondary processes in effective functioning.

In the past, the workplace was promoted naively as an emotion-free environment with decisions being made on an unemotional rational basis only. The denial of emotional factors in the workplace is not realistic. The failure of the workplace that attempts to suppress emotion, and the realization that a positive emotion may be beneficial to work outcomes, lead to both employee-assistance programmes and teambuilding, and rewards-based work practices.

Emotional states may be communicated directly via verbal and behavioural means, inferred from facial and bodily communications, or indirectly inferred from behaviours. Irritability or risk-taking behaviours may be the indirect expression of unhappiness, while alcohol or drug abuse a communication concerning unhappiness, depression, or anxiety.

THE PRINCIPAL EMOTIONS IN THE ADULT

Adults can experience and discriminate between a large variety of complex emotional states. These emotional states arise from interactions between internal and external experiences and manifest themselves, in differing degrees, in subjective experience, physiological changes and behaviour. They may be short lived or persistent, largely dependent on internal processes or largely a response to external events. Emotional states may have a positive or negative impact or valence and may vary in intensity from mild to extremely intense. They may be appropriate or inappropriate to the situation provoking them. The appropriateness may be in terms of the situation, the intensity, or the duration.

If inappropriate to the situation or inappropriately intense or persistent, emotional states may represent a clinical problem. Most of the research on emotional states has focused on negative emotions, as in their extreme forms they are problematic because they interfere with the individual's functioning.

Perhaps surprisingly, research shows (Bradburn, 1969) happiness is not the opposite of unhappiness; in fact, they may be independent dimensions. It is not possible to feel happy and unhappy at the same time. The relationship between the positive and negative valence is an inverse relationship but only a moderately inverse relationship (Kammann & Flett, 1983). The intensity of emotions are positively related; that is, those who report feeling most intensely positive are also those who feel most intensely negative (Diener, Sandvik, & Larsen, 1985). The sources of positive feelings, while they may vary dependent on cultural situations, have been identified by Argyle (1987) as feeling associated with extroversion, education, employment, positive life events, and satisfying leisure. Negative emotional states are associated with proneness to anxiety (neuroticism), low social status, poor health, low self-esteem, being female, and stressful life events.

SATISFACTION

A number of research studies have identified a general dimension of well-being made up of a "thoughtful appraisal of quality of life as a whole, a judgement of satisfaction with life" (Argyle, 1987, p. 5). Satisfaction, like many emotional states, is a relative matter. The level of personal satisfaction is compared with past levels or with what is believed to be the experiences of others. The domains that determine satisfaction may also vary and depend upon personal priorities. Priorities may vary between domains of relationships, family, personal recognition, finances, job, health, self-esteem, and achievements.

Satisfaction is an extremely important emotion in the workplace. It is complex and may represent a combination of positive emotions. Satisfaction may be dominated by a focus on relationships (affiliation) or achievement of goals (and recognition), or by combinations of these. This means that some people in their workplace are dominated by the quality of their relationships, by their acceptance by others, or their disapproval. These workers may be gregarious in seeking out the company of others, or, alternatively, easily distressed by their apparent nonacceptance of rejection by others. Approval is a primary motivation for these individuals, either in the form of seeking the approval of others or fearing their disapproval. At the other extreme is the worker whose satisfaction is determined be their own approval for having succeeded, rather than by others' recognition of their success. These people may be relatively insensitive to others' emotions, and prone to seeking success and achievement at all costs.

HAPPINESS AND JOY

Satisfaction is one of the positive emotions humans experience. Joy and elation, excitement and interest, and contentment and comfort are other positive emotional states experienced by adults. Happiness and joy are not just the absence of unhappiness.

Positive emotions are associated with pleasures. Some pleasures deal with satisfying human needs and wants, and changing or decreasing unpleasant physical states, such as the needs for food, drink, warmth, and rest. Some pleasures involve the stimulation of pleasure centres of the brain, releasing pleasurable experiences, such as with sex and exercise (known to release endorphins). Others' pleasures are more of a social nature, affiliation, recognition, etc. Less easy to explain are the positive emotions associated with music, reading, personal achievement, and aesthetic experiences, which do not seem to reflect appetite-related nor social needs.

People seldom complain of too much joy or happiness although disinhibition and an extreme elevation in mood may be a problem for family, friends, and co-workers.

STRESS

The term "stress" is often used as though it is a description of an emotional state or even a disorder. It may be used as an apparent diagnosis; as a description of the state of psychological or physical distress; as the precipitant of sub-clinical and clinical disorders; or to describe the situations that evoke discomfort. This wide use of the term lacks precision and interferes with research and communication.

More appropriately, stress should be used to refer to the highly individualistic process whereby personally significant events are found to evoke a distressing response. The psychological and/or physiological response, not the conditions that evoke it, is more reasonably what we refer to as "stress". Even restricting the use of the term to the presence (acknowledged or otherwise) of a distressing response to personal, social, or environmental conditions, the term has a variety of uses. Stress may refer to a temporary unpleasant affect, or to a symptom of some more significant disturbance or a more clearly defined clinical syndrome (medical, psychological, or psychiatric).

"Stress" itself is a process and not strictly an emotion. The various contributors to the individual's stress response include environmental and lifestyle factors; the individual factors, including emotional reactivity, subjective thinking about problem situations, coping strategies available, self-esteem, learned responses, and the availability of social supports.

Not all stress is negative, although clinically we reserve the term for that which causes distress. As an acute response to the environment (and for some people even the repeated acute response), stress may be a motivating force to action, it may act as a useful and even sought-after stimulant to problem solving and productivity. In this way, we need not assume stress is always problematic. The concept of "eustress" has been introduced to describe the difference between this positive motivating pressure, on which some thrive, and the "distress" which we are commonly referring to in talking of the stress that appears in the clinical situation. Where the subjective distress is persistent, severe, or chronic, the activation of the ongoing sense of threat may result in a clinical syndrome, most commonly anxiety, or if the sufferer feels powerlessness to cope, a depressive disorder may be precipitated.

Where there is persistent or chronic physiological arousal, stress may result in physical damage to bodily processes unable to re-establish balance in physiological processes through homeostasis.

As a clinical problem, stress occurs when the demands being made on the person by the situation exceed, or are perceived by that individual as exceeding, their ability to cope. In other words, stress is experienced when the demands of the situation are threatening or perceived as threatening the individual (or in some situations the hyperarousal occurs because of excessive responses to information overload), or if the demands of the situation are perceived to exceed the coping mechanisms available (in reality or as a result of their beliefs and expectations about their coping abilities). It is by this process that psychological and

physiological hyperarousal is experienced as the acute stress response (Lazarus & Folkman, 1984). The distressing psychological (affective) state of threat or impending threat, and the physiological impact that is distressing in the acute state, disturbs and is potentially damaging of the homeostatic functioning of bodily and psychological processes alike, particularly if repeated.

The occurrence of the stress response is highly individual. While we may agree on certain events, such as tragedies which are stress producing for almost everyone, there are a whole range of events that do not fall into this class. What may be simply problematic and challenging for one person may be threatening and highly stressful for the next. The personal relevance and availability of coping mechanisms are the key factors, again making it even more sensible to define stress by the response rather than the problematic situation. The distress response will therefore relate to individual personality characteristics and flexibility; the life experiences and life history; other ongoing problematic or challenging situations; the availability of suitable coping strategies to resolve problematic situations; the patient's confidence in putting these into effect and their ability to tolerate partial solutions to challenging situations.

"Stress", as a process, can activate the arousal of vigilance, in search of the maximum possible information to facilitate problem solving, or activate the already existing coping mechanisms to deal with the perceived situation. This enhancement of the processes to deal with the situation is a positive contribution to resolving the challenge perceived as confronting the individual. If a solution is not evident, this stress response can activate the processes necessary for escape from the perceived threat. If problem solving or escape is not seen as possible, an individual's perception of threat and/or of a lack of effective coping mechanisms to deal with the threat, may result in a level of subjective or physiological distress (often experienced as anxiety). Repeated or chronic experience of such distress may evoke a sense of powerlessness and depression.

It needs to be noted that there is a very large individual variation in the responses to the challenges of life and the perceived threat that comes from being unable to, or believing you are unable to, effectively solve the presenting problem. First, there is wide individual variation in whether a situation is perceived as problematic. Second, the existence or belief in coping strategies available varies widely. Both of these factors, plus the personal history of confronting difficult or distressing situations, alters the perception of threat as well as the perceived ability to "cope". Some have a lowered threshold for perception of threat because of their earlier experiences in childhood and early adult life. If threat is perceived, whether real or believed, there is considerable individual variation in how it affects the individual. There appears to be considerable individual variation in how the repeated arousal to this perceived or real threat affects psychological and physical health.

Psychological or physical hyperarousal, caused by this perceived imbalance between the situational demands and the coping mechanisms, leads to a wide range of subjective feelings (i.e. tension, anxiety, irritability, anger, depression, guilt, overstimulation, etc.); acute physical symptoms of stress (in the skeletomuscular, cardiovascular, respiratory, gastrointestinal and genitourinary systems); the neuropsychological effects on concentration, memory, learning and problem solving; and personal and social behaviour (including habit disorders, drug and alcohol abuse, risk-taking behaviours, gambling, and antisocial behaviours).

The individual variation, most likely the result of genetic predispositions (although it is not impossible that it has been acquired through conditioning), manifests itself by some patients responding primarily within one biological system while another patient manifests the stress response in a different manner. For some, the cardiovascular response is the acute (and most likely chronic) response, while for others it may involve primarily psychological or respiratory or muscular responses. Any combination of systems manifesting acute stress can present in the primary care setting.

FEAR AND ANXIETY

Anxiety is a normal emotion experienced at some time by virtually all humans. It represents threat or danger, whether that is perceived or a reality. Anxiety is designed to motivate the seeking of solutions to the perceived danger. In its acute form, the perception of threat to our existence, well-being, or ability to cope results in an alerting response and the "flight or fight" response.

The immediate signs of anxiety are well recognized, but there is considerable variation in how each individual experiences or expresses anxious feelings. For some, anxiety, in both its normal and abnormal forms, is represented and experienced primarily as a subjective emotional state with an internal sense of apprehension, worry, excessive alertness, poor concentration, overactive and uncontrollable thought processes, and, in the more extreme states, a sense of fear or panic. For others, the experience of anxiety is primarily present as a physical state with a sensation of tension, elevated heart rate, blood pressure, sweating, muscle tension, and gastric or urinary activity. Such signs may be accompanied by nausea, headaches, dizziness, and a plethora of physical symptoms. Alternatively, anxiety may manifest itself primarily through behaviours, such as difficulties in sitting still, excessive talking, procrastination, avoidance and distraction, and self-medicating use of alcohol or sedating drugs either illicit or prescribed. Any or all of the subjective, physical, and behavioural signs of anxiety may be present.

Clearly the distinction between normal and abnormal anxiety needs to be established. Normal anxiety serves a useful and protective function in some situations, and, through changed motivation, anxiety may be performance enhancing. On the other hand, abnormal anxiety (too intense, protracted, or attached to situations without a cause) serves no useful purpose, and is associated with an inability to function at a satisfactory level. While anxiety is common in its extreme forms, it may present as an anxiety disorder (i.e. phobia, panic, obsession, etc.). Anxiety is often specific to a situation, as with a phobia, but it may also be general to a wide range of situations, or habitual without specific eliciting situations.

Abnormal anxiety is also far too common. The prevalence, course, and age of onset of anxiety disorders vary according to the particular disorder. Nevertheless, it has been estimated that perhaps as many as 10% of the population may experience anxiety severe enough to qualify as an anxiety disorder.

FEARS AND PHOBIAS

An estimated 5-10% of the population may be afflicted with phobias. Specific phobias are more common than agoraphobia or social phobia. A specific phobia involves fear that is triggered by the presence or anticipation of a specific object or situation. The most common fears and phobias involve inappropriate anxiety in response to heights, blood, the dentist, closed-in spaces, dogs, or spiders.

Agoraphobia is literally "a fear of the marketplace", a debilitating fear of being away from what are perceived to be safe environs. It is not a common condition, but can significantly interfere with employment and social functioning. Most commonly, safety is only experienced at home and anxiety is overwhelming when even short distances from home "safety". Often, people with agoraphobia may be unable to work because of anxiety; however, some find home and work the "safe" environments and may manage to function only within these two environs. Others with agoraphobia turn to sedating drugs or alcohol to "cope" with the "threatening" work situation.

Social anxieties are common, many people experience anxiety when they are in a social situation. They may use alcohol to facilitate the social relationship. Social anxieties commonly reach phobic proportions. These phobic responses involve persistent and excessive anxiety in one or more social or performance situations. They are particularly associated with the presence of unfamiliar people or where public scrutiny may be possible. The individual often fears the evaluation of others and humiliation. They may fear having an anxiety (or panic) attack or behaving in a way that is embarrassing or humiliating, such as shaking or blushing. The most common forms of social phobia revolve around public speaking or eating, but they can also present as a difficulty in using public toilets.

UNHAPPINESS, SADNESS, GRIEF, AND DEPRESSION

Unhappiness, sadness, and grief are common human emotions. In a significant number of people it turns to depression. Where does happiness become unhappiness? Is there neutrality in-between? What is the starting point at which unhappiness or sadness become depression and at what point does commonly labelled depressed mood become clinical depression? There is no clear delineation and yet the definition of these boundaries is essential for our understanding of the causes.

Unhappiness and sadness may be interchangeable terms, and refer either to the experience of loss or of an absence of satisfaction. We are usually unhappy when we perceive the world as not meeting our needs, or desires, or when previously experienced satisfactions are taken from us. Receiving adverse experiences also results in unhappiness, sadness, and common, as opposed to clinical, depression.

Grief is perhaps easier to specify. It is experienced as a normal emotional response to real or perceived loss (of another person, significant other, lifestyle, job, or contributor to self-esteem). When normal grieving becomes abnormal and problematic depends somewhat on cultural values and definitions. If grief is "excessive" or prolonged or inappropriate to the situation, it may be considered a clinical problem.

The signs of unhappiness and depression are well known, including a sense of dysphoria, sadness and loss. There may also be a combination of other signs including a flatness or non-reactivity of mood, little enthusiasm, energy for or interest in normally motivating situations, irritability, poor concentration, decreased interest in food and sex, disturbed sleep, weight loss or gain. Self-depreciation, guilt, self-abuse and suicidal thoughts, impulses or feelings may be less easily identified, as they may be hidden from family, friends, peers, colleagues, and workmates. Some people continue to function in one environment, while ceasing to function poorly in others. At work, unhappy and depressed persons may, for a significant period, hide their distress, while they struggle to function in other contexts, such as at home or with their hobbies or interests. Relationship difficulties, erratic behaviour, anger, alcohol, and illicit drug use may all be signs of the depressed state. Risk-taking behaviour may also represent the expression of personal distress with a lack of concern over their safety or well-being.

Depressive disorders requiring clinical treatment are common and associated with significant morbidity and mortality. Lifetime prevalence rates have been estimated from US epidemiological studies at 17%. In studies conducted elsewhere (e.g. in New Zealand) similar rates have been reported. In women, depression appears to be about twice as prevalent as it is in men, and there do not appear to be significant differences between racial groups. While the mean age of onset of depressive disorder is about 40 years, an onset between 20 and 50 years of age may occur. Furthermore, depression may be present from childhood or it may occur in old age. Depression is associated with an increased incidence of suicide. Annual suicide rates in depression are three-to-four times higher than that of other psychiatric disorders and 20 to 30 times higher than the rate for the general population.

While, on the one hand, severe depression is usually readily recognized, milder forms of the disorder are often difficult to differentiate from emotional changes associated with daily life. Bereavement, job loss, divorce, and other stresses of life, which might result in a reactive depressed mood of short duration, do not constitute a diagnosis of depressive illness. Depressed mood of itself is not sufficient for a diagnosis of depressive disorder. It is often associated with other emotional difficulties and clinical disorders (e.g. anxiety disorders).

Major depression is a syndrome consisting of a number of symptoms, one of which is persistently lowered mood. Together with cognitive and vegetative symptoms, the presence of depressed mood constitutes a diagnosis of depressive disorder. Other features of depression can include disorganized thinking, delusions, early morning wakening, decreased libido, and constipation. A family history of depression, a previous episode of depression or of hypomania (an excessive elevation of mood) provide additional evidence to support a diagnosis of clinical depression. To date, there are no laboratory tests that can confirm a suspected diagnosis of depression. Of the symptoms, together with either depressed mood or loss of interest or pleasure, to be present every day for a minimum of 2 weeks before a diagnosis of clinical depression can be made. Furthermore, the symptoms should cause significant distress or impairment in social, occupational, or other important functions of the patient's life.

Sometimes, the first manifestations of depression are the changes in efficiency in the workplace, poor concentration, and forgetfulness. Changes in motivation and a lack of enjoyment of previously enjoyed activities, social withdrawal, irritability, and, at times, risk-taking behaviours such as gambling, alcohol, or drug use are all manifestations of unhappiness.

ANGER/RESENTMENT

Angry feelings are the other side of the "flight or fight" mechanism. Anger is an adaptive emotion designed to activate self-protection at times of perceived attack or threat. Anger is a defensive response to particular events and revolves around a perceived threat to safety, well-being, self-esteem, or threatened loss of status, possessions, or relationships of particular personal value. Intolerance, irritability, anger, and rage are on a continuum. The normal range of angry responses include subjective experience of anger, an increase in physiological arousal, focused attention on the provoking situation, motivated behaviour to both decrease the aroused state and to deal with the situation to remove the perceived threat of loss or danger.

Seldom in normal life is a threat to safety actually experienced. More likely, the threat may be to perceived self-esteem. Interference with achievement or relationships, while not a threat to safety, may provoke angry responses. Barriers to achievement or the recognition of achievement may provoke angry responses at the perceived cause of the interfering barrier. Interference with relationships and affiliation may threaten loss of the relationship, particularly in the person with

poor self-esteem for whom such a threat of loss or interference takes on enormous significance.

Anger and resentment can also be carried from one situation to another, or be expressed indirectly rather than directly to the threatening situation. Uncooperative behaviour and attitudes may reflect such an indirect expression of anger. In the workplace, inhibitory processes of what is acceptable or will be tolerated may interfere with the expression of angry feelings.

CONCLUSION

The variety of emotional responses ranges from normal reactions to the abnormally persistent, intense, or inappropriate. The boundaries between the normal and abnormal are poorly defined, as the appropriateness, duration, or intensity are open to considerable interpretation. This makes the study of both ends of the spectrum, the normal emotional response, and the clinical problem difficult. The words used in describing emotional states are also influenced by personal, educational, and cultural influences. Variable manifestations in any combination of subjective experience, physiological response, and behavioural expression makes the study of this important field difficult. Agreed definitions and standardized ratings of severity improve research endeavours, but remain based on agreements that have no external criteria to confirm them.

Emotions were developed in primitive mankind to serve adaptive functions of protection from danger or loss and nurturance of biological and social needs for the individual. Emotion is central to all aspects of human experience. Emotions and feeling states direct attention to events, thoughts or stimuli, organize perceptual and thought processes, as well as activating and motivating many, if not most, aspects of human behaviour. The central role of emotion in human functioning applies both to interpersonal (or social behaviours) and personal solitary behaviours. Emotions also serve as a means of communication within a social group, and yet the purpose served by emotions in the 21st century remains tainted by the requirements of the adaptive functions of primitive mankind. The precise nature and delineation of emotions, affects, and temperament are seldom agreed upon, the concepts varying from researcher to researcher. The lack of precise agreement on the existence of basic emotions, what they might be, the process of modification with experience, and the boundaries between normal and abnormal emotion makes their study more difficult.

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