

EMOTIONS AND HUMAN HEALTH

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Summary

Emotions are experienced mentally as preoccupations that affect attention and that order priorities among people's concerns. They also set up frames of interaction with others. For instance, happy affection sets up a mode of cooperation; anger sets up a mode of conflict. Modern analyses of emotions indicate that they are important signals to ourselves and others of the progress of our interactions. They also affect health, including psychiatric and physical health. Indeed, the kind of health that can be thought of as flourishing, or well-being, has many of the same determinants as emotions, and may partly depend on them.

. . . human misery has awakened, stood before you, and today demands it proper place.
Jean Jourès (1897)

1. Introduction

Emotions signal to individuals and to others how an interaction with the world is faring. At the same time emotions provide the bases for interaction. When humans are happy, they engage in what they are doing. They tend to become creative and to cooperate with others. More than two millennia ago, Aristotle (fourth century B.C.E.) correctly regarded happiness as the process of engagement in worthwhile activity. The term he used was *eudaimonia*. Although this is usually translated as "happiness," modern classicists often now translate it as "flourishing," or "well-being," or even "excellence."

By contrast when people are unhappy, in the many ways in which unhappiness is possible, they are thrown back upon themselves. They no longer flourish in their interactions. Although in many states of unhappiness there are possibilities for personal reflection and growth, if unhappiness is prolonged or profound we speak, as did Jean Jourès, of “human misery”; it may be seen in the many varieties of non-flourishing: violence, despair, depression, and illness. In the hundred or so years since Jourès wrote, progressively greater attention has been paid to the fact that misery is the lot of a large proportion of the world’s citizens.

In a technical age of antibiotics and aseptic surgery, the view that emotions and health are inextricably linked can be seen as radical because it transcends the mind-body dichotomy that has become usual since the rise of science in the seventeenth century. We propose, however, that it forms the best current basis available for thinking about both emotions and health. Emotions are those processes that both engage us in the world in a way that promotes well-being, and that signal to us and to others how these interactions are going, that is to say whether we are or are not flourishing.

Although we can talk of them as separate, both emotions and health derive from the basic structures of our interactions with the world. It is even, one might say, something of an illusion to think of oneself as separate from the world, and therefore as having to enter into interaction with it. Rather, selves are part of that world: people are selves-with-the-natural-world, selves-at-work, selves-interacting-with-loved-ones, selves-with-those-who-do-not-care-much-about-one. But in the West, people are inured to individualistic thinking, and so talking of individuals and their relationships is probably the best path.

In the terminology of individuals and their close relationships, we show, first, that emotions set up modes of interactions with others. Second, we show that human mental illnesses are, for the most part, emotional states in the large that occur when people experience severe adversity. Third, we propose that in terms of whole populations, ill health is the result of people being unable to sustain robust and satisfying personal relationships and interactions with their worlds.

2. The Nature of Emotions

Emotions have been a primary concern of writers since the early origins of writing. No doubt this is because it has been clear that while emotions are at the center of who people are as human beings, they are often problematic—especially the emotions of conflict and war—and they are not always easy to understand. In the Middle East, the cradle of Western civilization, one of the earliest sets of stories, from 4000 years ago, was of Gilgamesh, who defied the gods. As a result, his companion Enkidu was killed, and this precipitated Gilgamesh into mourning and despair. From roughly the same time in Egypt comes the dialogue of a man, weary of life, weary with his soul. A thousand years later, Hebrew culture was also leaving written traces: there is the story of Abraham and the anguish of obedience to a God who could order the slaying of his son Isaac. From the Greeks at the same time comes the *Iliad*, which starts with the words “Of wrath sing, Goddess” as the storyteller invokes the muse to sing of angry conflict within the Greek army in the context of a larger long and bitter feud with the Trojans.

From India come writings of similar antiquity that include the Mahabarata, a tale of family feuding, allegorizing the battle of good and evil, with a final remorse of the heroes: they too have committed evil in their fight against it. Chinese epics of this early period probably existed, but have been lost because of the greater fragility of bamboo than papyrus and parchment. But writings have survived of Chinese sages such as Confucius, his follower Mencius, and the Daoists with the legendary author Laozi (Lao-tzu), with themes that include the importance of respect for others, and the practices of meditation. And here is this from Mencius, who recounts that a king he was encouraging to examine his occasional good feelings said: “I could not understand my own feelings, but as soon as you explained them to me, something in my own heart at once stirred.”

Psychological interests and interpretations of the emotions in the West derive also from the same period as Mencius. These themes include those of Aristotle. His proposal was that emotions are evaluations of events. They are thoughts of a particular kind that also affect the body. They strongly influence how people experience the world, and how they understand what others may say.

For Aristotle, *eudaimonia* was a central concept. It is not a state, but an activity: the happily flourishing life involves action and engagement with society. Close relationships, contemplation (or understanding), and fortune all played critical parts in Aristotle’s views on the flourishing life. Good luck, for Aristotle, was not a sufficient condition for flourishing, as the good life must be one of active and positive engagement. But the absence of severely bad luck was necessary. It is nonsense to think that those who suffer from great misfortune can still flourish. But friendship contributes to resiliency in times of misfortune. And understanding, too, is a mode for achieving *eudaimonia*. There is a fundamental human inclination to try to understand the nature of the world.

Aristotle pointed out that people have different capacities for a flourishing life. He described a range of civil status that descended from the level of full citizens (always male) to artisans, political slaves, women, and natural slaves. Though we see this hierarchy now as antique, we do not find odd the equivalent range of income in North America, or of social class in Europe. The point is that such ranges relate to people’s capacity to flourish. Both the antique and the modern hierarchies are of access to *goods* of which there are, according to Aristotle, three kinds: goods of the body, goods of the soul, and external goods. Goods of the body include health, fitness, and strength. Goods of the soul include virtues, intelligence, and wit. External goods include wealth, property, and civil status.

For Aristotle, the nature of people’s interaction varies across the life span. Children, who are learning how to become good citizens, are most amenable to education by habit formation. For adults, what is paramount is their active engagement both in their local group of intimates and in the larger society as a whole. In later life, people may enter a state of contemplation, which for Aristotle was the highest good. But this was not a good that could occur without a firm grounding in the earlier stages. Thus attention must be paid at each stage, not only to the individuals and their social contexts, but also to the nature of their interaction with them.

Both in the East and the West, and in the schools of thought and practice from Aristotle's time almost to the present, we see themes of people seeking the principles of a flourishing life, and freeing themselves from the effects that militate against it, prominent among which are negative emotions such as hatred, envy, destructive anger, and disabling fear, all of which have egotistical and disabling aspects. In the West, the Stoics, who are in direct line of descent from Aristotle, taught that philosophy is a kind of medicine for the soul, the object of which is to extirpate emotions, because of their unruly and antisocial effects, in order to become good people. Their work not only exemplified cognitive analyses of great and lasting value, but they provided the link between Graeco-Roman civilization and the values of Christianity that were to dominate Europe from the conversion of the Emperor Constantine to the present. In the East the practices of meditation, including those of Buddhism, had aims and effects that in many ways are comparable to those of Stoicism: to liberate individuals from egotistical material desires, from which unruly emotions would surely follow, and to liberate them also from the influences of social hierarchy that can also lead to destructive emotions.

The great rationalist philosophers René Descartes and Baruch Spinoza, writing in the period following the end of the European Renaissance at the dawn of the age of science and of the Enlightenment, provide a link from ancient to modern times. Descartes described how we are guided by emotions and can influence their effects by thought. He wrote the first book to link philosophy to what has become modern psychology and neurobiology of stimuli and their effects. Spinoza was the harbinger of modern psychotherapy. He argued that only by understanding our emotions and seeing our own place in the scheme of things do we liberate ourselves from what he called the "human bondage" that, when emotions are misunderstood, they can commit us to.

The notable early landmark in the scientific understanding of emotions was Charles Darwin's 1872 book *The Expression of the Emotions in Man and Animals*, in which he linked emotions to his theory of evolution. Darwin's legacy is that psychologists and neurobiologists now see emotions as very much as part of the human evolutionary heritage, passed on to each of us by our genes. Researchers now tend to see the importance of emotions as providing us with our core values and means of relating to each other, rather than (as in some former times) as the enemies of serenity and rationality.

Emotions then, since the beginning of writing, have been objects of fascination both because they concern what is most intimate and important to human life, and because some of their effects seem problematic and demand understanding.

In modern psychology, emotions are generally understood as those psychological states and processes that relate the outer world of events to the inner world of desires and concerns. An emotion is, in Aristotle's terms, an evaluation of an event. As modern theorists put it, an emotion is elicited by an appraisal of an event in relation to people's concerns, or goals. An emotion is an action-readiness that sets priorities among concerns, and hence determines the urgency of any such concern, and thereby the ways in which individuals interact with the world.

Each specific emotion is determined by particular features of an appraisal. For instance, an event such as a frustration or an insult impinges on a concern to maintain progress in a plan in which we are engaged, and in which our sense of self is involved. It is likely to elicit anger. Some researchers make a distinction between a primary appraisal (of the event in relation to the concern affected by it) and a secondary appraisal (of how to cope with the event). In this way, anger is primarily a frustration. Then secondarily, becoming angry is more likely if your concern for self could be enhanced by contending against the person who frustrated you. Anger then becomes, for a time at least, your way of interacting with the world. This emotion sets up a script of conflict with the other person that usually is resolved by some adjustment of the relationship. Either you succeed in asserting yourself against the other, or (the most usual outcome, since most episodes of anger occur with people who are known and loved) a reconciliation occurs in which you and the other both reevaluate what has gone wrong, and set forward again after an adjustment of the relationship.

This kind of thinking has led to the investigation of coping with adverse events, and with the emotions they elicit, and it is important in the psychology of health. An example: imagine you are waiting for your 12-year-old child to return from school at a certain time. She does not arrive. You experience a growing anxiety. The emotion sets your mental priority to only this issue: your child's safety. You put aside all thoughts of other activity; all mental processing is switched to the urgent concern for her. You make plans to see what has happened to her. Finally she arrives. The anxiety is quelled, and ordinary life continues. By contrast, chronic anxiety about a child's welfare, for instance if you live in poverty with its consequent lack of resources to make plans to ameliorate the situation, can lead to chronic undermining of psychological and physical health.

A typical modern psychological treatment of emotions, influenced by both Aristotle and Darwin, is by Oatley and Jenkins (1996) who argue that emotions that are biologically given provide the bases for modes of organizing the brain and mental life into distinct modes. These modes have been selected for during evolution. With each one, the brain is switched into a pattern of activity that is functional in response to a certain recurring kind of event. Such events are those that relate to our concerns and goals as, for instance, when a person's mental life is switched to anxiety if her child does not return home when expected. Table 1 shows a set of basic, biologically given, emotions, the kinds of event that elicit them, and the priorities they accomplish. These basic patterns are then built upon by culture and by individual development and experience.

Emotion (mode)	Eliciting event or object of emotion	Priorities and the actions to which attention is switched
<i>Emotions that can occasionally be free-floating</i>	<i>Goal condition</i>	<i>Adjustment of plan</i>
Happiness	Subgoals being achieved	Continue with plan, modifying if necessary; cooperate; show affection
Sadness	Failure of major plan or loss of active goal	Do nothing; search for new plan; seek help

Anger	Active plan frustrated	Try harder; aggress
Fear	Self-preservation goal threatened or goal conflict	Stop current plan; attend vigilantly to environment; freeze and/or escape
<i>Emotions that always have an object</i>	<i>Goal</i>	<i>Adjustment of plan</i>
Attachment love	Proximity to caregiver	Keep contact, talk
Caregiving love	Care for offspring	Nurture, help, support
Sexual love	Sexual partner	Engage in courtship, sexual activity
Disgust	Reject contamination	Expel substance; withdraw
Contempt	Reject outgroup person	Treat without consideration

Table 1. Nine basic emotions as postulated by Oatley and Johnson-Laird, with the events relevant to concerns (goals) that elicit them, the functions they perform and the transitions they accomplish. Emotions in the first group can occur without the experiencer knowing what caused them; those in the second group always have an object.

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Bibliography

Aristotle (1984). *The Complete Works of Aristotle: The Revised Oxford Translation* (ed. J. Barnes), 2 vols. Princeton, N.J.: Princeton University Press. [This includes Aristotle’s main book in which he discussed emotions, *Rhetoric*, and his discussions of leading the good life, in *Ethics*, and *Politics*.]

Black D. (1980). *The Black Report: Inequalities in Health* (ed. P. Townsend and N. Davidson). London: Penguin. [Influential report on health in the U.K., showing that social class continued to have huge effects on health despite the population’s equal access to medical care by means of the National Health Service.]

Brown G.W. and Harris T.O. (1978). *Social Origins of Depression: A Study of Psychiatric Disorder in Women*. London: Tavistock. [The most important single piece of research showing that depression has social causes; these causes are typically severe social losses that can be buffered to some extent by supportive social relationships.]

Darwin C. (1998). *The Expression of the Emotions in Man and Animals, with an Introduction, Afterword, and Commentaries by Paul Ekman*, 3rd edn., 472 pp. New York: Oxford University Press. [The first book on emotions influenced by the theory of evolution, and the founding book of modern ethology (the evolutionarily influenced observation of animal and human behavior).]

Glouberman S. (2000). *Towards a New Perspective on Health and Health Policy*. Ottawa: Canadian Policy Research Networks. [A wide-ranging report by one of the authors of the current article of a three-year study sponsored by the Canadian Policy Research Networks' Health Network.]

Goffman E. (1961). *Encounters: Two Studies in the Sociology of Interaction*, 152 pp. Indianapolis: Bobbs-Merrill. [The best introduction to the psychology and sociology of role, the idea that people take part in ongoing relations that have some script-like properties.]

Kiecolt-Glaser J.K., Gage G.G., Marucha P.T., MacCallum R.C., and Glaser R. (1998). Psychological influences on surgical recovery. *American Psychologist* **53**, 1209–1218. [Example of the important work of this group of researchers, who are in the forefront of showing effects of emotions and stress on physical aspects of health.]

Levi P. (1958). *If This Is a Man*. London: Sphere. [Probably the most thoughtful and moving account published of survival in the Auschwitz concentration camp.]

Marmot M. (2000). Inequalities in health: causes and policy implications. *The Society and Population Health Reader: A State and Community Perspective* (ed. A.R. Tarlov and R.F. St. Peter), pp. 293–309. New York: New Press. [Marmot is the author of the famous Whitehall studies of British civil servants, whose health was found to depend on their status, although their access to health care was the same. The book in which this article appears is a useful reader on population health.]

Oatley K. and Jenkins J.M. (1996). *Understanding Emotions*, 448 pp. Oxford: Blackwell. [The standard textbook on the psychology of emotions; it includes sections on evolution, culture, child development, and mental health.]

Ramirez A.J. (1988). Life events and cancer: conceptual and methodological issues. *Psychosocial Oncology: Proceedings of the Second and Third Meetings of the British Psychosocial Oncology Group, London and Leicester, 1985 and 1986* (ed. M. Watson, S. Greer, and C. Thomas), pp. 53–60. Oxford: Pergamon. [An important study using the methods of Brown and Harris to measure life events, and showing how adversity affects recovery from cancer.]

Biographical Sketches

Keith Oatley was born in London, England. He has lived in Toronto since 1990. He was educated at the University of Cambridge and the University of London, and before moving to Canada he worked at the University of Sussex and the University of Glasgow. He is a professor of cognitive psychology at the University of Toronto, where he is chair of the Department of Human Development and Applied Psychology. His research is on emotions and their effects, on the influence of adversity on emotional disorders such as depression, and on the cognitive and emotional processes that occur when people read fiction. He is a Fellow of the Royal Society of Canada, the author of more than 120 journal articles and chapters, five books of psychology, including *Best Laid Schemes*, and (with Jennifer Jenkins) *Understanding Emotions*. His first novel, *The Case of Emily V.*, won the 1994 Commonwealth Writers Prize for Best First Novel. His second novel, *A Natural History*, takes readers inside the mind of a scientist in 1849, trying to discover the causes of infectious illness.

Sholom Glouberman was born and grew up in Montreal, Canada; he holds a Ph.D. in philosophy from Cornell University. He has spent many years applying analytic methods to the study of organizations and systems primarily in the notoriously intractable area of health. In the U.K., he works with community services organizations and chief executive officers of hospitals and purchasing organizations. In Canada and the USA, his clients have included everyone from human resource executives to psychiatrists, and most types of organizations, including governments, hospitals, and voluntary organizations. He lectures widely. His recent publications include *Beyond Restructuring*, a collection of papers from a King's Fund seminar, and "Towards a New Perspective on Health and Health Policy" (2000), the result of a major policy research project.