

Anxiety: Phenomenology, Physiology, Psychology, and Possible Remedies

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When the topic of anxiety in children is brought up in my medical practice, most parents and educators approach it with a desire first and foremost for countermeasure strategies. But I have found that strategies must come only after an understanding of a problem is first developed. So we will begin by looking at the phenomenon of anxiety and try to understand its signature qualities.

The first attribute of anxiety is that it belongs to the world of sentient beings: animals and people. Plants, for instance, do not have anxiety, at least not in any sense in which we use that term. As far as we can tell, it is a matter of indifference to a blade of grass whether the cow will eat it or not. Anxiety is an aspect of the vigilance that animals and people develop in order to keep themselves safe. Our sensory organization and experiences of pain teach us that our environment is full of dangerous elements (some active, some passive), and that a level of vigilance is always necessary in order to remain alive and safe.

This vigilance is moving us toward wakefulness, and in important respects also toward pleasure. Experiences of pleasure are preceded by wakeful engagement and are followed by decreasing wakefulness and a tendency toward contentedness and sleepiness. For some people, the “rush” preceding an experience of pleasure is an important aspect of addiction. So on the one side, wakefulness leads toward pleasure, and on the other toward fear. Fear is the acute version of anxiety, or we can also say that anxiety is a chronic state of amorphous, non-specific fear.

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Our environment, as I mentioned, is full of dangers. This is as it should be. Removing all dangers from the environment would not make us happier or better people. We grow by learning to “metabolize” these dangers, by coping with them and mastering them. However, animals are generally much better at this than people are.

Animals are integrated into their environment in such a way that their instincts are usually all they need in order to survive, if not as specimen then at least as a species. People have to *learn* how to deal with danger; our instincts are weak. We remain vulnerable longer than animals, and ultimately our very upright posture places us in a vulnerable position. The abdomen is the most defenseless area, and while animals protect it by leaving it in the horizontal plane, our upright posture exposes it to potential attack.

Uprightness is not optimal for such survival mechanisms as running. We can see how, when human beings want to obtain a maximum burst of speed in a sprinting competition, they bring their body to a more horizontal position. Having only two limbs involved in locomotion is also sub-optimal for escaping danger.

We need older people to model for us how the dangers in our environment are to be met.

For the young child, this modeling has a formative effect on the development of the neurological system. We will return to that. I want to add now only that self-development in the older person is also often a process of learning to better manage anxieties and fears.

Physiologically, fear and anxiety are inseparable from the adrenal system and the kidneys with which the adrenal hormones interact. These glands produce cortisol, androgens, and mineralocorticoids, in addition to adrenaline. The kidney has many very interesting features that can help us develop a deeper relationship to the question we are pursuing. Its shape is reminiscent of an embryo, with the urethra and blood vessels resembling the umbilical cord. The kidney itself is surrounded by a capsular sheath, and unlike the sheaths of other organs, is made not only of fibrous tissue, but rather out of a special form of fat, commonly called suet. It forms an insulating envelope of fatty substance that helps to keep the kidney warm. Indeed, keeping the kidney area warm is in itself a helpful therapeutic intervention for alleviating anxiety—it has a grounding effect. The opposite holds true if the area around the kidney becomes chilled.

Morphologically, the kidney expresses a process of invagination in that it has a highly differentiated inner space with an exceptionally high perfusion of arterial blood. Its hormonal activity complements the adrenal hormones in the regulation of blood pressure. Anxiety, via adrenaline, rapidly leads to a rise in blood pressure.

I would like to return for a moment to the comparison of human beings to animals. In the embryological phase, the similarity of all vertebrate (and especially mammalian) embryos is striking. In the course of fetal development, animal species display an increasing morphological differentiation—specialization, if you will—while by comparison the human fetus remains essentially unspecialized, and therefore retains a connection to the archetypal form from which it was derived.

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The hoof of a horse, for example, corresponds, in fact, to an enlargement and specialization of two terminal bones of human fingers and toes. The human body remains unspecialized, and therefore more vulnerable. Humans also need a long period with their parents before they can survive alone.

The human brain requires a high level of stimulation and nurturing in order to support its healthy maturation. The newborn needs intensive physical and emotional care from the mother (or other primary caregiver) that goes far beyond the mere provision of nourishment. What begins as bonding in the first months of life has profound consequences for the maturation and integration of the visceral, emotional, and cognitive centers in the brain. As the horrific stories of children locked up in some orphanages have demonstrated, an absence of emotional bonding is catastrophic for the development of secure attachments in children. That, in turn, can have profound impact on the development of future personality structure.

Current neurological research demonstrates and confirms that bonding and the establishment of secure attachment are essential for healthy brain maturation. Safety and security not only have a lasting effect on neurological maturation, on myelination and integration of the various brain regions, but also on the metabolic development of the child.

Conditions of neglect may result in significant deficits in the connections between the visceral and emotional regions of the brain, often leading to serious emotional and behavioral dysfunction.

There are many characteristic elements that constitute sub-optimal care for a developing baby, including all kinds of under- or over-stimulation of the senses and lack of predictable responses

to arousal in the infant, for example to hunger or to bodily discomfort. Even subtler, distinctly modern ways of withholding attention need to be stressed, such as the case of a breastfeeding mother who is preoccupied with her cell phone instead of her infant. In the absence of *actual* attention to the child, mere actions (e.g., breastfeeding) are not sufficient. A multi-sensory resonance is required between mother and child if attachment is to become secure.

It is just as important that a proper process of separation from the mother also take place once attachment has been established. This is what Donald Winnicott called “graduated maternal failure.” Without this, the infant will not learn to manage the inevitable separation in an optimal manner. There is no absolute formula for a successful outcome of this process. Each infant will manifest his or her own pace in developing the capacities to manage anxiety. Attention to the specific needs of each child is essential.

Many people want to know if today’s children are more anxious than children of previous generations, and whether or not they have more cause to be. On the surface, we have to say that objective dangers to growing children in middle-class Western societies are far fewer than they used to be. One need only remember the World Wars that ravaged much of Europe during the last century, the effects of the Depression in the U.S. during the 1930s, or the epidemics of smallpox and other life-threatening or disabling illnesses such as polio and diphtheria. But a close look at cultural changes over the last century, especially evident in Europe since the new millennium, can alert us to some of the deeper reasons why anxiety may indeed be on the rise.

Traditionally societies have developed coping strategies for dealing with dangerous or upsetting

situations. I grew up in England, and the national defense was called “maintaining a stiff upper lip.” It was particularly evident in the boarding school culture, especially (but not only) in boys’ schools when children, perhaps only seven years old, would be subjected to emotionally, and not infrequently physically, traumatic treatment. In fact, the environment at these schools was often downright abusive, when judged by current paradigms, and the coping consisted in learning to suppress one’s emotional response to physical and emotional pain and humiliation with the aforementioned “stiff upper lip.” This is a form of dissociation from one’s inner self, a training almost designed to deaden one’s feeling life.

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Other societies have adopted other customs now considered to be abusive or criminal, such as female genital mutilation. But as societies and cultures have mingled, especially in the West, the trend has been toward the elimination of customs that suppress feelings and the emergence of individuality.

The two instances just cited are examples of practices that are now considered repressive, and for very good reasons.

Many other habits and defenses that helped former generations to mask and repress anxieties are similarly falling away: the demonization of the other, traditional religious structures, and mythological and historical narratives that gave one a sense of place, community, and continuity are all on the decline. However, as we know, not all those living in Western societies are abandoning them with equal willingness.

Once these defenses fall away, a deeper encounter with life’s threats and dangers confronts a child or a society, and new ways of coping have to develop. In some ways this process is similar to animal domestication: Instincts have to be superseded by learned responses. For human beings, the vulnerability of

our natural, bodily, and psychological condition is now re-enforced by a disappearance of culturally embodied defenses. However, this newly acquired vulnerability opens the door to new possibilities. The space that is created between human beings and their environment may potentially be filled by the development of empathy and resilience if the proper conditions for these are offered at the appropriate time.

So I would suggest that, although human beings do not necessarily have more outward reasons to be anxious nowadays, they do have fewer defenses, and their learning curve in confronting the hard realities of life is often much steeper. What is undoubtedly on one level a positive development brings along with it a new set of challenges. I believe this to be the case with regard to the loss of traditional customs.

It is also the case, for example, with the two-working-parents nuclear family. Without a doubt, the freedom that women have gained increases their individual liberty. At the same time, it increases the likelihood that healthy attachment in the first year of life will be compromised. Without exercising prejudicial judgment, it must be admitted that a working mother will be less able to direct her full attention to her children. When this happens during the crucial period of early infancy, this will not exactly help the basic neurological pathways that are responsible for the development of secure attachment and consequent resilience.

Another modern habit that stands in the way of resilience (and resilience is, really, our capacity to successfully manage dangerous, unhealthy, unhelpful, potentially anxiety-producing circumstances) is giving children large latitude

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to make choices before they are able to discern what in fact it is that they are choosing. When the young child senses, “The people responsible for me don’t know what is best, or won’t tell me,” this increases his or her anxiety and may precipitate capricious, conditioned decision-making that leads to addictive habits.

Possibly among the worst influence on the development of resilience is excessive anxiety on the part of the parents. This experience imprints itself directly into both the neurology and the physical organs of the child, creating what are called anxious or dissociative attachments, the effects of which are generally very difficult to transform later in life. By contrast, there is a range of experiences that help engender resilience. Positivity felt by the parents engenders hope in the child. Authenticity is also crucially important. When we deny our fears by lies—even when telling children in good faith that “everything is going to be fine” when we ourselves don’t believe it—we send mixed messages in which our words, feelings, and our body language don’t match one another.

This lack of congruence is a disorienting experience that can sometimes have lasting negative consequences for the child. When we are authentically present, managing our own fears as best as we can, we open the door for the child to experience how help is available to human beings from higher realms, from beings who can help support and carry us. Indeed, a sense for religion has even been identified as positively formative for the development of resilience.

I believe this to be crucially important; the idea that each one of us should be able to cope with life exclusively through personal autonomy,

through cultivating the capacities of our individual ego in isolation from others, is, I would suggest, based on a tragic misapprehension of humanity's goal. Without wishing to diminish the importance of cultivating individual expression, personal freedom, and choice, I believe that ultimately these represent a means to an end rather than ends in themselves.

I offer my conviction that human beings are ultimately mutually interdependent psychologically, socially, and even spiritually. Only through establishing new, non-racial, multicultural communities of interdependent human beings will society be able to meet the unprecedented demands and crises of this century, which in themselves are potentially anxiety-provoking on a global scale. I would submit the thought that the new responses to anxiety will have to be founded on *communities*—not only of earthly beings but ones that consciously include spiritual beings.

Reference:

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