

Scandinavian Journal of Child and Adolescent Psychiatry and Psychology Vol. 10:102-113 (2022) DOI 10.2478/sjcapp-2022-0011

Perspectives



A possible anti-anxiety effect of appetitive aggression and a possible link to the work of Donald Winnicott

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Abstract

Various pleasant sensations that give a particularly intense pleasure are able to improve anxiety. In the present study I consider the possibility that their anti-anxiety action depends on the strong pleasure they provide, and I propose a possible mechanism of this action. According to some studies, also appetitive aggression (an aggression that provokes a strong pleasure and that is performed only for the pleasure it provides) can improve anxiety, and in this article I consider the possibility that the pleasure of appetitive aggression is able to reduce anxiety by the same mechanism I have proposed for other intense pleasurable sensations.

The aggression performed by a child against the mother or against a substitute for the mother in the first period of life (a period in which this aggression is not dangerous) is a recurring theme throughout the work of of Donald Winnicott. Winnicott stresses that this aggression is necessary for the normal development of the child, and that the child must be free to practise it. According to Winnicott, this aggression is highly pleasurable and is not a response to unpleasant or hostile external situations. For these characteristics it seems to correspond to appetitive aggression in the adult that has been found to be able to reduce anxiety. Consequently, aggression performed by the child in the first period of life may also relieve anxiety, in the same way that appetitive aggression helps against anxiety in the adult.

In his writings, Winnicott returns several times to an unthinkable or archaic anxiety that children experience when they feel abandoned by their mother for a period that is too long for them, and all children, according to Winnicott, live on the brink of this anxiety. In this study I propose the hypothesis that aggression in the early period of life may be necessary for children because the intense pleasure it provides may help them against this continuously impending anxiety.

Keywords: Stress, Anedhonia, Anxiety, Pleasure, Aggression, Winnicott

Introduction

Various pleasant sensations are able to improve anxiety in man and in animals. For example, in man, opiods (1) and other drugs (2, 3), palatable foods (especially sweet or fatty foods) (4, 5), and physical exercise (6–10) can relieve anxiety, and are sought out for this purpose. In animals, opioids (11, 12), physical exercise (13, 14), an enriched environment (15-17) and palatable sweet or fatty foods (18, 19) reduce anxiety.

All these pleasures that are able to have a positive influence on anxiety have one particular feature: they give a pleasure more intense than ordinary everyday pleasures. The intensity of the pleasure produced by drugs is well known, and sweet or fatty foods (20, 21), as well as physical exercise (if voluntary) (22-24) are strong pleasures for both men and animals. Moreover, for animals, an enriched environment implies, as well as the possibility of physical exercise, also continuous novelties (25, 26), and novelties provide strong pleasure (27).

Anxiety is accompanied by anhedonia (a reduced ability to feel pleasures) (28-33), and perhaps the pleasures capable of reducing anxiety must be particularly intense in order to overcome the high threshold for pleasures that characterizes anhedonia. The presence of anhedonia in anxiety could depend on the fact that both anhedonia (34-36) and anxiety (37, 38) are induced by stress.

How stress might induce anhedonia

Some hormones are released during intense or repeated stress: adrenalin and noradrenalin which help to combat stress by increasing the flow of blood and glucose to the muscles and the brain, and corticotropin-releasing hormone (CRH) which provokes the release of cortisone, the action of which accompanies and reinforces that of adrenalin and noradrenalin. The CRH also releases another hormone, dynorphin (39, 40), which reduces the release of dopamine (DA) in the nucleus accumbens (41-43). The dopamine released in the nucleus accumbens is the basis for producing pleasure (44, 45), so that stress can cause anhedonia by reducing dopamine through the action of dynorphin. (As well as dopamine, opioids too are involved in feeling pleasure (46), and it has been proposed that dopamine is more involved in the search for pleasure, while opioids are involved in its enjoyment (47). However, the action of dopamine and that of opioids are closely interwoven and overlapped, since dopamine releases endogenous opioids (48, 49), while the opioids in turn release dopamine in the nucleus accumbens (50, 51). In this chain of interconnections between dopamine and endogenous opioids, some authors believe that dopamine could be the "basic link" (52)).

Anhedonia might possibly accompany stress because the loss of the pleasure of aiming for a goal and achieving it (including defending oneself and escaping from a danger) could lead to immobility, and immobility offers the extreme chance of safety when an animal is facing the worst possible stressful situation - being seized by a predator - as in this case any movement can further stimulate the predator's aggressiveness. It might also discourage devouring, since many predators are reluctant to eat the flesh of animals that have been dead for some time (53), and the immobility that occurs when at the mercy of a predator is tonic (hence the term tonic immobility, or playing dead), that is, as rigid as an animal a few hours after death. Also rigidity might be influenced or caused by anhedonia, since the relaxation of the antagonist muscles coinciding with the action of the agonist muscles (a relaxation indispensable for each fluid movement whether active or passive) is linked to the ability to feel the pleasure connected to the movement (54). Tonic immobility might be connected to catatonia (55), the inability to move and speak sometimes seen in serious anxiety, depression and schizophrenia (55, 56), but that can even happen to mentally sane people when they realize that death (the predator they can no longer evade?) is imminent and inevitable (55).

Dynorphin as a possible cause of anxiety

In addition to anhedonia, dynorphin can also cause anxiety. Its anxiogenic effect has not been considered in relation to anhedonia, and has been considered a possible consequence of a direct action of dynorphin on the anxiogenic centres, in particular on the amygdala, through dynorphinic receptors - KOR (xopioid receptors) present in the amygdala (41). However, some authors leave open the possibility that anhedonia could intervene in the pathogenesis of anxiety. Since the reduction of the release of dopamine in the nucleus accumbens due to dynorphin could cause some features of depression, Van't Veer and Carlezon Jr. suggest that "given the high comorbidity of depressive and anxiety disorders KOR signaling and control of DA function may underlie the pathophysiology of both." (37). Besides, rodents conditional knockouts of KORs in DAcontaining neurons show reduced anxiety-like behaviour (57), and this suggest that "the activation of \varkappa opioid receptors in the mesocorticolimbic DA system plays a key role in anxiety"(58). In addition, the anti-anxiety action of intense pleasures (as exposed at the beginning of the article) suggests that anhedonia may help to cause anxiety. It is perhaps worth considering that a possible direct action of dynorphin on the anxiogenic centres may be accompanied by an indirect anxiogenic action mediated by the anhedonic effect of dynorphin. But how could anhedonia arouse anxiety, that is, arouse an inexplicable fear of a grave imminent and unknown danger?

How anhedonia might influence the visual aspect of our surroundings

The image of the world we receive through what we see has to be continuously reassembled and reorganized, otherwise it could become distorted and fragmented, and could change so much we hardly recognize it. In fact: "our perceptual impressions of an object and its context are in permanent flux as we move or as the object moves or transforms itself: the (perceived) world is not static but permanently physically changing" (59). We must immediately realize that a foreshortening is not a real deformation, that an object that is partially hidden is not cut off but extends under the cover, that a cloud seen through the branches of a tree is not part of the tree, and so on. For example, every time we look at a three-dimensional object from a different angle: "the observer should be expected to see an object of changing shape. The cube should undergo constant amoebic transformations ... Fortunately, but surprisingly enough, this does not happen." (60 p71). But perhaps this might happen if something interferes with the mechanism of the indispensable continuous reorganization and interpretation of an "amoebic" reality. In this case, the alterations might become evident, objects might seem deformed and frightening, sky and clouds might seem headspinningly close to the observer, making the surrounding world flat and oppressive, and so on.

Even in a person without psychiatric pathologies, the sudden awareness of a deformation of the appearance of the environment, deformation that had always been present but had previously been ignored, may give rise to intense anxiety. An example of this can be found in "Art and visual perception", a book by Rudolf Arnheim, former president of the Division of Psychology and the Arts of the American Psychological Association, where the author describes the distressed reaction of a student when, following a suggestion by the teacher, she became aware of the deformations assumed by the appearance of an object according to the viewpoint from which it was observed, deformations which she had always corrected automatically without realizing it. "It is very difficult for many persons to visualize the working of perspective, even when it is demonstrated to them with a yardstick. Recently an intelligent and sensitive young college student, to whom I tried to show the oblique shape of a box on the table, finally hid her face in sudden terror and exclaimed, 'It is true - how horrible!"" (60 p 160). And in the case reported by Arnheim, it was only a completely explainable alteration of the appearance of a single small object.

One of the possible factors that might interfere indispensable and continuous with the reconstruction of the world could be anhedonia. According to many researchers, our capacity for feeling pleasure can influence our ability to perceive and link sensory information and the ability to learn. For example, in animals, when two separate stimuli, which individually do not provoke pleasure, are mentally connected to each other, the formation of this new bond causes pleasure, and this is considered important for learning in general (61, 62). In man, satisfying a curiosity is pleasant (63), just as it is pleasant to grasp an inner meaning (64), and the pleasure connected to awaiting a novelty (novelties are pleasant (65)) facilitates learning (66). As regards the visual aspect in particular, recognizing an expected image gives pleasure, and if the image is unexpected the pleasure is even greater (67). Recognizing a shape in an ambiguous context gives pleasure (64, 68), which is all the stronger the higher the degree of ambiguity (69), and this stimulates us to look for other ambiguous shapes to discover their correct shape (59). Besides, visual learning is facilitated by a simultaneous pleasure, even if this pleasure is completely extraneous to vision (70).

Anhedonia could reduce these pleasures and therefore interfere with the correct processing of visual sensations. According to Der-Avakian et al.: "if an individual is unable to derive pleasure from a normally rewarding activity or from anticipation of that activity, then it is unlikely that the individual will be motivated to pursue that activity" (71). It therefore seems possible that, in the case of anhedonia, the spur to perceive, link and interpret all the unceasing new and different aspects of what we see (for example, understanding that foreshortening does not imply deformation of the whole object but just depends on the viewer's angle) might be weaker, or be lacking. In this case the usual appearance of objects may change and various degrees of frightening alteration of the aspect of the environment might result. If this happens, then perhaps even just a very brief, but unexpected and inexplicable deformation of some aspect of the environment might give in some cases the sensation that the apparent normality of the objects is only a fragile veil, which could be torn and reveal inexplicable and frightening deformities. Even just the vague feeling that this might happen might induce indefinable, inexpressible fear of imminent catastrophe, generating a state of anxiety, the cause of which cannot be explained to other people because the sufferers cannot explain it to themselves. Moreover, to provoke a reaction of fear or anxiety it is not necessary to be aware that one has seen a danger: the danger can influence behaviour also if seen only subliminally, unconsciously (72-74); indeed, if a stimulus has been perceived unconsciously, the subsequent defence reactions may be stronger than when it is perceived consciously (75, 76).

Alterations in the appearance of the environment and a possible predator

Close correspondences have been found between anxious reactions in anxiety disorders and the reactions of defence against a predator (77-79). However, in anxiety disorders, since the predator does not exist, these defensive reactions would be unjustified and aberrant (78, 79). But perhaps it is possible that, even in the absence of a real predator and excluding hallucinations, if certain facilitating external circumstances occur (for example stressful experiences with consequent serious anhedonia) a healthy person could at any time and unexpectedly feel faced with a predator. In fact, in man it is sufficient to feel cornered and with no possibility of escape for extreme defence reflexes to be triggered that occur when one is seized by a predator (53), and a deformed environment not only can be felt hostile, but takes away any possibility of finding a refuge; in addition, any loss of the ability to see depth would

prevent seeing an escape route. In this case, inexplicable environmental deformations could be equivalent to a very close and inescapable predator and the apparently aberrant defensive reactions of people with anxiety disorders could be justified.

How a pleasure, sufficiently intense to be felt, could improve anxiety

The mechanism by which a strong pleasure seems able to reduce anxiety is still not clear, but might be suggested by a particular aspect of the pleasant stimuli: besides giving pleasure, they also allow simultaneous or subsequent pleasures to be felt more intensely for a certain period. For example, in animals various drugs increase non drug-related pleasures such as food (80-84) and social play (85, 86), while non drug-related pleasures in turn increase the pleasure given by drugs (86-88). In man, opioids increase the pleasure of foods (89, 90) and the attractiveness of opposite-sex faces (91), while the pleasure procured by nicotine "amplifies the reinforcing and pleasure-inducing properties of other rewards" (92). Moreover, a non drug-related pleasure can increase other non drug-related pleasures. (93-95). This could mean that, as Wallace et al. write, "the perceived value of present reward is built upon past reward exposure" (96).

This particular ability of pleasant stimuli could make it possible to propose an explanation of why some intense pleasures improve anxiety. Their antianxiety action could depend on their ability to overcome the high threshold for pleasure present in anhedonia, to be perceived and thus increase other pleasures. In this way, lost or faded pleasures could become more intense and be perceived again. If the recovered pleasures included those involved in and correctly connecting perceiving visual information, anhedonic persons could recover the normal, indispensable ability to reconstruct the continuously variable aspect of the environment, which would thus be safe and familiar again. In this way, a sufficiently intense pleasure could reduce anxiety for a certain time.

Appetitive aggression and its possible antianxiety action

Violence can give a strong pleasure to both actors and spectators, and has always been sought for the pleasure it provides. "Violence has a long history of being a source of entertainment and pleasure, and today there are still numerous socially appropriate ways for people to watch and consume violence, indicating that observing violence is not always aversive, but can also be desired and contain pleasurable aspects for the viewer. These appetitive aspects are apparent in nearly all forms of popular media: television, movies, video games, etc. where violent content is overtly marketed." (97). In addition "historically, the *enjoyment* [in italics in the text] of cruelty has been sufficiently powerful to have led to huge social resources being channelled into cruel rites and spectacles, and this enjoyment remains a primary driver of the modern entertainment industry." (98).

Violence is generally understood as the physical aspect of aggression, but, since there is no consensus on the definition of violence, some authors use the two terms, violence and aggression, interchangeably (99), and also in this article they will be used interchangeably. Aggression is divided into reactive aggression, which is carried out in response to a dangerous or frustrating situation, and intentional or proactive aggression, which has no defence purpose, but which aims at obtaining some practical advantage (100). Intentional aggression is pleasurable (97, 101), and the pleasure might at least partly depend on the anticipation of a hoped-for gain (100, 102). But intentional aggression also gives a pleasure that is independent of any gain, and that originates from violence in itself (103). At times this pleasure, which is considered connected with the ancient pleasure of hunting (104), clearly prevails over the pleasure of possible gains, for instance in hunting, in violent sports and video games (situations where violence is regulated and socially acceptable (100)), and in certain extreme forms of violence which occur mainly in conflicts and wars (104)). When this pleasure originating from violence in itself is prevalent and represents the main or only cause of violence, the term appetitive aggression is used (103, 104)). Appetitive aggression can be particularly pleasurable (105-107), according to some authors as much as drugs (108).

It could perhaps be useful to add that, besides aggression, victory also gives much pleasure (109, 110) and it is also pleasing to be just spectators (111). The additional pleasure associated with a victory could help explain the widespread displaced aggression, a form of violence against people who have done nothing to deserve it, and who are generally weaker or somewhat more vulnerable than the aggressor (112). In practice, they act as innocent scapegoats and allow the aggressor to experience with minimal risk the pleasure of violence associated with that of victory. This entails for all people who are physically weaker or otherwise more vulnerable, such as children, women, the elderly, the disabled, subordinates, etc., a high risk of being innocent and privileged victims of violence. The pleasure of victorious aggression towards a person with limited possibilities of defence could be connected to the transmission to children (also in an underhand way acceptable to present-day culture (113), for example with the excuse of educating (114)) of the violence suffered by their parents. Violence towards children is in fact linked to violence suffered by parents both in childhood (115-117) and in recent times (117-120). Besides, the transmission of violence to children can take place not only through an action exercised directly by the parents, but also indirectly, exposing their children to other perpetrators of maltreatment (121, 122).

Like the intense pleasures mentioned at the beginning of the article, perhaps even aggression, because of its pleasant effect, could prevent or reduce anxiety. I have not found any studies on a possible effect of intentional aggression on anxiety, but with regard to appetitive aggression it has been found that it reduces concerns about future threats (123), concerns that seem to be a characteristic of anxiety disorders. In fact, in anxious individuals there are higher expectancies of encountering threat as well as higher expectations that such encounters will have aversive consequences, and these biased expectations "may constitute a core characteristic of anxiety disorders" (124).

Furthermore the presence of appetitive aggression reduces both the symptoms (102, 105, 125) and the risk (126) of posttraumatic stress disorder (PTSD).

PTSD, previously classified as an anxiety disorder, has been classified in DSM-5 (2013) in the new category 'trauma and stressor-related disorders", since its other characteristics different from anxiety, in particular its close dependence on trauma, have been considered more important. But moving it to a group that is better characterized by trauma dependence does not reduce the importance of anxiety in PTSD (127). In fact, PTSD is accompanied and characterized by anxiety (128-130), has been considered "the quintessential anxiety disorder" (128), and "occurs when one's anxiety control mechanisms are disrupted" (131). PTSD also has as pathogenic marker an overgeneralization of fear (132), that is, a fear response even to non-fearful stimuli in the same way as the generalized anxiety disorder (GAD) and other anxiety disorders (132, 133). Appetitive aggression, which can reduce both concerns about future threats and the frequency and severity of PTSD, therefore seems to be able to prevent or reduce at least some forms of anxiety.

Other factors can prevent or reduce anxiety, but, unlike appetitive aggression, without being a danger to others. For example, in the child, the presence of the mother prevents or reduces anxiety (134, 135) reducing the feeling of danger and thus reducing stress (135). With a probably analogous mechanism, that is, reducing the feeling of danger, also sufficient self-esteem (136) or the feeling of having in any case control of the events (137) (control which may be even only illusory, for instance obtained through beliefs and/or rituals that allow a person to feel, in some way, protected (138, 139)), can reduce anxiety. However, if these or other possible protective factors are not available, or are not sufficient, then in order to prevent or reduce the anxiogenic effects of any stress one may be tempted in some cases to resort to intense pleasures though they may be dangerous for oneself and/or for others. Among these dangerous pleasures, appetitive aggression and displaced aggression could be among the most easily available and inexpensive.

Donald Winnicott and the importance of aggression in the first period of life

Appetitive aggression can entail very serious dangers for the attacked people, and is obviously unacceptable if not in strictly regulated forms such as sports, video games, etc.. But there is also an aggression which, although violent in its intentions and unregulated, is not dangerous, and it is the aggression carried out by a child in the first period of life. This aggression, against the mother or a substitute for the mother gathered under the term "good object", is a recurring theme throughout the work of the paediatrician and psychoanalyst Donald Winnicott, and in the last years of his life became the central theme of his work. (140).

According to Posner et al. for Winnicott this kind of aggression is "central to emotional development" (141), and according to another commentator, Jan Abram: "If there is one paper that brings together the whole of Winnicott's forty years of thinking on issues related to aggression, it is 'The Use of an Object and Relating Through Identifications', which was presented to the New York Psychoanalytic Society in 1968. The main tenet of the paper, as may be seen from the above, is that aggression - in this paper destruction - is an essential aspect of ordinary emotional development" (140 p.37). Winnicott uses the term aggression in his first writings, then adds and prefers the term destruction (140 p.15). In this article the terms aggression and destruction will be used with interchangeable meanings.

Winnicott emphasises the intensity of pleasure associated with this type of aggression: "and the important thing to note about this instinctual aggressiveness is that ... it is something that increases during excitement and the exercise of it is highly pleasurable" (142 p.76). Moreover he points out that this aggression is not dangerous: "This [the first period of life] is the right moment in the child's development, because of the child's relative feebleness, so that destruction can fairly easily be survived" (143), and he stresses that the type of aggression in question is not the child's response to unpleasant or hostile external situations: "In the destruction of the object to which I am referring *there is no anger* [in italics in the text]" (143). The importance of the absence of anger is highlighted by Winnicott's commentators: "Winnicott is very concerned that his use of the term 'destruction' will lead the reader to believe that he views the infant as reacting to reality with aggression. For Winnicott, it is the other way round: destruction is not a response to reality, it 'creates' reality ('the quality of externality')." (144). Winnicott's statement that "it is the destructive drive that creates the quality of externality"(143) can arouse perplexity, and various interpretations have been proposed (for a recent analysis of the topic see Elkins (145)).

Unthinkable or archaic anxiety in children

The reason why it is essential for the child to destroy the good object, does not seem to have been entirely clear to some of Winnicott's colleagues. For example, this was the reaction of Marion Milner, a psychoanalyst friend of his: "It was after I had just read for the first time Winnicott's paper on the destruction of the good object that I rang him and said, 'yes, but just why does the good object have to be destroyed?' He thought for a little and said, 'because it is necessary'." (146 p.231). Perhaps, among the reasons for this necessity it might be useful to consider also the possibility that this destruction may have some other effect in addition to the pleasant one.

The destruction to which Winnicott refers is not a response to frustration, is without anger and is also "highly pleasurable". It therefore seems to correspond to appetitive aggression in the adult, which as exposed above has the ability to reduce or prevent at least some forms of anxiety. Winnicott in his writings returns several times to an "unthinkable" anxiety that children experience when they feel abandoned by their mother for a period that is too long for them. Referring to "babies who have been significantly 'let down', once or in a pattern of environmental (related failures, to the psychopathologic state of the mother, or mothersubstitute)", Winnicott writes that " these babies carry with them the experience of an unthinkable, or archaic, anxiety. They know what it is to be in a state of acute confusion, or the agony of disintegration." (147 p.260). (Could this archaic anxiety be connected to the sensation of feeling alone and helpless at the mercy of a predator?). "Unthinkable or archaic anxiety" which must never be experienced again: "The baby, child, adolescent or adult must never again experience [in italics in the text] the unthinkable anxiety that is at the root of schizoid illness" (148 pp.197-198). And all children, according to Winnicott, live on the brink of this anxiety (149 p.57).

Perhaps it would be worth considering the possibility that problems in the relationship with the mother (or with a substitute for the mother) may represent a serious trauma for the child, causing severe anhedonia. Anhedonia may result in the loss of the pleasure of understanding that the continuous alterations in the appearance of objects are due to changes in the child's or the object's position, thus interfering with the indispensable incessant reorganisation and interpretation of the continuous changes in the appearance of objects. The loss of the pleasure of understanding could in this way increase the risk that foreshortenings appear as real and dangerous distortions of objects, that partially covered objects appear amputated of the hidden part, etc., and cause unbearable anxiety. In this case, the child might seek aggression not only because it gives him intense pleasure, but because this pleasure serves to ward off anxiety with the same mechanism proposed above for the anti-anxiety effect of the intense pleasure of appetitive aggression.

The possible need to dispel anxiety might perhaps help to understand why, according to Winnicott, it is so important that aggression can be practised freely in the first period of life. Winnicott particularly stresses the importance of the survival of the object to destruction, and on this subject he writes :"A new feature thus arrives in the theory of object-relating [as it evolves into object-usage]. The subject says to the object: 'I destroyed you', and the object is there to receive the communication. From now on the subject says: 'Hullo object!' 'I destroyed you.' 'I love you.' 'You have value for me because of your survival of my destruction of you.", (150 p.90). This opinion of Winnicott's profoundly influenced the way in which the mother-child relationship was considered, as reflected by this comment of T.H. Ogden: "After the infant 'says' to his mother, 'I destroyed you' and the subject is there to receive the communication, what the infant says to his mother is put in an unforgettable way 'From now on the subject says, 'Hullo object!' - how better to create in words the relief and the joy in the greeting the infant gives his mother who has survived and whom he loves (and by whom he feels loved) in a way he never before experienced because it can only be experienced with a mother who is a person separate from him? The exclamation point is important stage direction here... it is a picture of the great relief and joy felt by the infant on finding that his primary objects are sturdy and can be treated thoughtlessly, dismissively, casually, insouciantly, playfully, scornfully, ragefully, cavalierly, and all the while the object can be counted on to survive." (144).

Probably for the child other intense pleasures (for example all those resulting from a satisfactory emotional and physical contact with the parents, etc.) could help against anxiety, but, unlike other pleasures that the child may experience in the first period of life, the pleasure of aggression can be sought and found at all times without having to depend on the intervention of others, and this could help explain the particular importance that Winnicott attaches to aggression in this period of life.

Aggression and motility

According to Winnicott, as well as aggression, motility is also a pleasure for the child: "In every infant there is this tendency to move and to get some kind of muscle pleasure in movement, and to gain from the experience of moving and meeting something" (142 p.81), and he speaks of "muscular erotism" (151 p.216). Winnicott's observation that the use of muscles causes pleasure has been confirmed: as exposed at the beginning of the article, voluntary physical exercise is very pleasant in both adults and children. Aggression generally requires movement, and movement and aggression are both pleasures that the child can obtain without requiring the intervention of other people: these relationships could perhaps help explain why Winnnicott repeatedly stressed the close connection between aggression and motility (152).

How the pleasure of aggression and that of movement can intertwine and result in a very intense pleasure is expressed very effectively in this memory of Thomas H Ogden, included in his commentary on Winnicott's work and which shows a deep empathy towards his enthusiastically aggressive son: "I remember vividly one of my own children - who must have been about six months old - sitting in his high chair like a king with his food tray in front of him. I recall the wide grin on his face as he looked at me straight in the eyes and picked up the small bit of a frankfurter that I had placed on the tray, and I remember his exhilaration as he used his full muscle strength to hurl it to the ground as he screamed with delight. I would pick up the frankfurter and place it back on the tray, never losing eye contact with him, and he would grin, hurl, and jubilantly scream with joy again as he threw it to the ground again. (He had begun playing a kindred game, the peek-a-boo game, a few months earlier, but that game lacked the jubilance of the dropping game)." (144).

As exposed at the beginning of the article, physical exercise in the adult besides giving an intense pleasure can also have an anti-anxiety function, and movement could have the same function also in the first period of life. Maybe as he grows older, and if the environment allows it, the child could continue to use the pleasure of movement (freely chosen) even as an anti-anxiety function, perhaps as an alternative to aggression. In this regard, it might be interesting to recall Norbury and Husain's observation that good family finances could enable the need for intense pleasures to be met in a way that is not dangerous for oneself and/or others, for example through sport, legitimate adventure experiences, etc., and could thus reduce the search for other intense but dangerous pleasures (153).

Conclusions

The visual appearance of objects changes continually, that is, objects take on different shapes all the time. How can we recognise the same object that presents itself in ever-changing forms, for example a box that we know is rectangular and which we see foreshortened, deformed? We can do this if we realise that the deformations of the foreshortened box depend on the fact that we have changed our point of view, or that the box has been moved, and that it is therefore not the box that has changed shape, but our position or that of the box has changed. In everyday life, we must continually be able to understand that the constant changes in the appearance of objects around us have explainable causes, as in the case of foreshortening. If we are unable to understand what the cause of changes in the appearance of objects is, we risk seeing objects as really deformed, different, frightening.

This article proposes the hypothesis that the inability to experience pleasure, that is, anhedonia, (which is usually caused by trauma) may reduce or erase the continuous, indispensable ability to understand the natural causes of changes in the appearance of the environment (e.g. in the case of foreshortenings, to understand that changes may depend on our position). In fact, clarifying aspects of the unexpected environment, understanding new things, is pleasurable, and among the pleasures reduced or cancelled by anhedonia could be included, for example, the pleasure of realizing that seeing a foreshortened object does not mean that the object is really deformed, but that the foreshortening depends on a change in our position or that of the object. In the case of anhedonia severe enough to erase the pleasure of understanding, it might then become easier for a foreshortening to appear as a real distortion of the object. The object might become frightening, and the environment become unlivable. And living in a deformed, hostile environment may be equivalent to feeling at the mercy of a predator, with similar reactions of unspeakable anxiety.

A possible anxiogenic action of anhedonia could explain why intense pleasures reduce anxiety. An intense pleasure can in fact overcome the high threshold for pleasure present in anhedonia and be felt again. Since a pleasure felt has the capacity to increase other pleasures, an intense pleasure can increase pleasures that had been reduced or cancelled by anhedonia and make them noticeable again. If these recovered pleasures also include, for example, the pleasure of realizing that a foreshortening is due to a change in point of view, the foreshortened object returns to being the familiar object it always was, and is no longer frightening.

Winnicott noted how, in the child, feeling abandoned by the mother or by a substitute for the mother for too long a period causes unthinkable anxiety. Winnicott also insisted that in the early period of life (a period in which aggression does not entail dangers) the child should be free to practise aggression. This article proposes the hypothesis that in the child the trauma of feeling abandoned by the mother may cause severe anhedonia, with the consequent loss of the pleasure of understanding that the constant changes in the appearance of objects are due to changes in the position of the child or the object. This loss of the pleasure of understanding could increase the risk of seeing all the foreshortenings and other continuous alterations in the object's appearance as real and dangerous deformations; it could cause unbearable anxiety, and push the child to seek the intense pleasure of aggression in order to reduce this anxiety.

Conflicts of interest

The author declare no conflicts of interest.

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