

## NATURE VIDEO WATCHING: CONSEQUENCES ON ANGER AND ANXIETY

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### **Abstract**

*Extensive research has been conducted on the effects of natural environment on people's well-being, starting with the short term restoring effects on the brain, and continuing with the long-term effects on the emotional self-regulating processes. In the present research we have focused on the latter, trying to connect two of the problems in our world: the violent behavior, and the preservation of natural environment. Thus, the objective was to study the effects of watching a video from nature wild life on anger (the feeling and its expression), and state-anxiety. The statistical analysis indicated that, while there were no significant differences regarding anxiety (worry, internal tension) or general mechanisms in dealing with fury, watching the video significantly decreased the feeling of anger, and the tendency to express it either verbally or physically. As a main conclusion we highlight the link between the accessibility of natural environment, and the violent expressions of anger.*

*Keywords:* anger, anxiety, awareness, nature, violence

### **1. INTRODUCTION**

Two of the most significant problems the society is facing today are the protection of natural environment from the negative influence of human beings, but also the people's violent behavior in general, which has more and more diverse forms of expression. Above the highly feared wars, there is a high concern for finding ways to deal with the serious threat represented by the terrorist attacks, and the inability to find a psychological explanation for them; with the violence and bullying in schools or on the internet; with the use of psychological manipulation techniques in order to encourage suicide; but also with the violence against animals and forest cutting, and the replacement of recreational natural environments with artificial ones. In the psychological field, instead of using the research tools to find valid explanations that would generate viable solutions, there are voices speaking of emotion management and emotional self-control, ignoring the fact that a person's emotions are a global response (her response) to the degree to which her environment succeeds in meeting her needs in the most concrete way or to the perspective offered by it to do so. The gestaltist psychologists Perls, Hefferline, and Goodman (1951), a long time ago, made the important distinction between aggressiveness as a personality trait (which is essential to survival – starting from the simple, natural act of mastication, and following with the defense against harmful agents), and the violent behavior. In the healthy manifestation we talk about using the affective energy for need gratification. An important role in limiting the aggressive manifestation (so that it

does not transform in simple violence) is becoming aware of the personal needs and the degree of their gratification (expressed as affective states). In addition to a more careful preoccupation given to the need gratification, techniques designed to expand awareness would prevent the manifestation of aggressiveness as violence, by limiting its use only for as long as needed.

One of these techniques is the meditation by concentration on an external object (Zlate, 2000) or mindfulness. The technique had a complicated route: the occident, inspired by this Buddhist technique, has integrated it in empirical studies, proving its positive effects with objective and subjective means (Lebow, 2006; Kabat Zinn, 1991). Even though Jung (1999), for example, also integrated the oriental knowledge and practices in his theory, the European psychologists were convinced by its utility in dealing with depression and anxiety, and the general negative consequences of stress, by the empirical studies. Unfortunately, similar local practices have been ignored only because of the lack of such empirical support: For example, nature contemplation is similar with the type of meditation previously described, to which one may add the creative meditation, both of them being largely used in Romania, and not only. The popular creation *Miorița* is a proof of using creative mediation, with nature as stimulus, in order to overcome the negative emotions in a non-violent manner. Creative mediation is considered a type of meditation useful when facing pain that goes beyond the Ego's capacity to handle (Schaub, 1996), resulting from the violation of physical and psychological integrity. Kenny and Delmonte (1986) wrote about a higher level of abstraction in the form of life meaning reached by expanding the perceptual field to include new phenomena in the newly formed connections in a restricted area of interest. They highlighted the transcendent effects of meditation: Apparent opposites (the most important couple being interior-exterior, I – non-I) take their place in a wider perspective, helping the person getting in touch with high order personal constructs and goals.

According to Beyer and colleagues (2014), higher levels of green space in the neighborhood is associated with lower depression, anxiety, and negative consequences of stress, recommending “greening” as a solution of improving the mental health in the United States. Kerr and colleagues (2006) found that the natural environment has no significant influence on the emotional and stress reactions of exercising when compared to artificial environment, with the only exception of pride, which was higher in the recreational runners. It is important to notice, though, that exercising is in itself an activity which alleviates stress and reduces anxiety. A quasi-experiment exploring the short-term effects on state-anxiety of different types of exercising revealed that higher levels of perceived environmental greenness correspond to larger reductions in anxiety (Mackay & Neill, 2010).

Gatersleben and Andrews (2013) went deeper with the analysis of the restorative effects of natural environment. By means of an experiment involving watching several photos from different natural environments, and a survey following watching a slide show, they showed that accessible environments which allow a wider range of vision and have few hiding places are perceived as less dangerous, and, as a consequence, more restorative. Positive affect increases in large vision and low refuge environments, after laboratory walks, when compared to field walks. The decrease of sadness was higher for the low-prospect-high refuge environment, during field walks. Anger/aggression decreased in the persons walking in green spaces with higher prospect and low refuge, and it even increased in those taking a walk into environments with hidden places and spaces. The effects of lowering the aggression were higher when the persons walked in nature when compared to the laboratory walking. The effect of the accessibility to the eye of the participants of all corners was higher in laboratory conditions (an explanation would be the lack of possibility to

actively explore the field). When using physiological indices, laboratory walks had more calming effects.

The **general objective** of this research was to study the effects of watching a film from nature on the intensity of anxiety and fury, on the modalities of expressing anger, and the general mechanisms of controlling it.

The main **hypothesis** was that, by expanding awareness, and supporting the equilibrium between stimulation and time left for reflection, watching a video from nature helps in reducing the intensity of anger, and of its manifestations. We anticipated that similar effects would be observed on anxiety (fear, restlessness, internal tension).

## 2. MATERIALS AND METHODS

We used a quasi-experimental design, comparing the posttreatment results with those of the population of reference. The independent variable consisted in watching a 50-minutes video from nature (presenting life in the Plitvice Natural Park, Croatia). The dependent variables were: state-anxiety, state anger (feeling angry, feel like expressing anger verbally, feel like expressing anger physically) and trait-anger (angry temperament, angry reaction), exterior anger expression, exterior anger control, internal anger expression, and internal anger control.

**Participants:** First year psychology students at the Clinical Psychology: Assessment and Intervention master, attending a practical lesson of “Health Psychology”, thirteen females and two males (with ages between 22 and 43 years), took part in the experimental task. The exercise was introduced as part of the regular course activity (the current theme being *Life Style and Well Being*), being followed by objective and subjective assessments of the effects.

### **Instruments:**

*The State-Trait Anxiety Inventory Y* (STAI, Y, Spielberger, 2007) is a 40-item questionnaire that assesses state-anxiety (the anxiety the person feels in that specific moment), and trait-anxiety (the tendency to experience anxiety in general). Starting from a 4-step Lickert scale for each item, some of them being reversed-scored, it allows the calculation of two scores, one for the first 20 items representing state-anxiety, and one for the next 20 for the trait-anxiety. For this research, we used an adaptation for the Romanian population, in terms of content and norms, with an alpha Cronbach of .92 for the *State-Anxiety*, and .86 for *Trait-Anxiety*.

*The State-Trait Anger Expression Inventory 2* (STAXI 2, Pitariu, Iliescu, Spielberger, 2015) is a questionnaire assessing anger, also as state and as trait, and the tendency to either express it, or control it. It contains 57 items divided in the corresponding three sections: “How do I feel right now”, “How do I feel in general”, and “When I am upset or angry...”. There are four answer variants: from “not at all” to “very much” for the first section made of self-descriptions, and from “almost never” to “almost always” for the other two sections describing emotional and behavioral reactions. The *State Anger* assesses the intensity of anger/fury in the moment or in a specified situation, being sensitive enough according to the situation, according to the feeling itself, and the tendency to express it either verbally or physically. The *Trait Anger* targets the person’s general tendency to get angry, as a personality trait. Finally, the general tendency in dealing anger is characterized according to the tendency either to express anger towards others and objects or by turning it inwards, or to control it in order to prevent expressing it outwards or by inducing a calm state. The internal consistency varies from .57 to .96 (the highest for the *State-Anger*). The instrument has a strong validity.

**Procedure:** The participants watched the 50-minutes film on a video-projector, on a Friday afternoon. Afterwards, the students filled in the questionnaires, and they discussed the subjective effects they had had observed. The questionnaires were anonymous.

### 3. RESULTS AND DISCUSSIONS

The descriptive characteristics of the data distributions and the results of the t-test for one sample are presented in Table 1.

*Table 1: Descriptive characteristics of the variables and the results of the t-test*

Variable	Mean	Standard deviation	t-test	p
State Anger: Feeling Angry	5.33	1.29	-5.00	.000
Feel like expressing anger verbally	5.26	0.79	-3.556	.003
Feel like expressing anger physically	5.13	0.35	-9.539	.000
Trait-Anger: Angry Temperament	5.8	1.89	-2.449	.028
Trait-Anger: Angry Reaction	12	3.31	4.671	.000
Exterior Anger Expression	16.66	4.70	1.37	.191
Exterior Anger Control	17.66	4.63	1.391	.186
Internal Anger Expression	24.66	5.30	1.218	.243
Internal Anger Control	22.46	3.09	-.668	.515
State Anxiety	31.66	7.87	-1.148	.270

As we can see in Table 1, while the participants used the anger control mechanisms, both internal and external, in the same manner as the rest of the population (there were no significant differences for the external and internal anger control), and also there were no significant differences for their external and internal anger expression, after having watched the film, they reported less intense feelings of anger, and also significantly more reduced tendencies to express anger either verbally or physically. The angry reaction was also significantly lower.

As for the state-anxiety (worry, fear, restlessness at that moment), there were no significant differences for the participants when compared with the general population.

The results are in the line with a previous study showing that, among Romanian population, nature contemplation (in the form of a video presenting wild life) contributes to a higher awareness of needs, and the accessible resources to satisfy them, thus facilitating positive affective states (Răban-Motounu, 2014). Natural elements have been giving people symbols that help them in getting in contact with the profound Self, like the tree, the garden, the water, the fire, the air, the earth (Răban-Motounu, 2014a, 2014b; Vitalia, 2014, 2016), allowing the access to unconscious or subconscious potential resources to meet their needs, resulting in positive affective states, well-being, and integrity. Thus, nature contemplation helped the persons in developing a transcendent perspective, which significantly decreased the accumulation of internal tension in the form of anger, and the tendency to express it as verbal or physical violence, also keeping a normal level of anxiety.

### 4. CONCLUSIONS

Nature contemplation contributes to expanding awareness in the long term, allowing the interruption of a vicious cycle created by the transformation of the adaptive aggression into useless

destructive violence. The current study brings evidence to support the use of nature contemplation as a technique of expanding awareness which helps in dealing with the anger.

The connection between the violent actions and the accessibility of the natural environment, arguing in the favor of protecting it, seems to be stronger than previously acknowledged or studied.

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