EMOTIONAL HEALTH, AND SPENDING TIME IN NATURE

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Abstract
For many people, nature represents a place to rest and recover from daily stress. Recent researches emphasized that living in neighbourhood with comparatively plentiful walkable green space was correlated with a better perceived general health, and a lower mortality risk (Maars et all, 2006; Van Dillen et all, 2011). Moreover, physical activity in nature is an important recovery aspect in psychological illness, such as anxiety or depression.
This study proposed to investigate the relation between spending time in nature (as a preffered free time activity in the form of walking in the park, playing games in nature, trips etc.) and emotional health (functional/dysfunctional emotions).
We used Emotional Distress Profile to measure emotional health, and an open answer exercise ,,20 things I like to do``, to assess the spending time in nature variable. Statistical analyses were computed.
Results showed that people who preffered to spend time in nature expressed a higher number of functional emotions compared to people who preffered other activities (in door activities).

Keywords: green spaces, emotional distress, health.

1. INTRODUCTION

Urban living is often linked to poor respiratory health , sedentary lifestyle, increased obesity and cardiovascular disease. Moreover, recent researches emphasize that stress and associated mental ill-health are also rising (Irvine et all, 2013; Stigsdotter et all., 2010).
These trends heighten the need to identify the factors involved in generating urban living problems and implement sustainable patterns of healthy urban living.
In recent years there has been a growing theoretical and practical interest in the role of publicly available urban nature, such as parks (also called green space), for human well-being. Many European research programs indicated that green spaces may be of importance in managing stress and that green spaces may play an important role as health-promoting environments.
Stigsdotter, Ekholm, Schipperjin, Toftagen (2010) investigated the associations between green space and health, health-related quality of life and stress, respectively in 11,238 adults. Results showed that Danes living more than 1 km away from the nearest green space report poorer health and health-related quality of life, than respondents living closer. Respondents living more than 1 km away from a green space have 1.42 higher odds of experiencing stress than do respondents living less than 300 m from a green space. Respondents reporting stress are likely to use green spaces to reduce stress. Other researches (Maars, Verheij, Groenewegen, De Vries, Spreeuwenbrg, 2006; van Dillen et all, 2011) investigated the strength of the relation between the amount of green space in people's living environment and their perceived general health. Results showed that the percentage of green space in people's living environment has a positive association with the perceived general health of residents. The quantity and also the quality of green space in one's neighborhood seemed relevant with regard to health. Furthermore, streetscape greenery is at least as strongly related to self-reported health as green areas.
Groenewegen et all. (2006) described the effects of green spaces on health, well-being and social safety.
In the same context, Irvine, Warber, Devine-Wright, Gaston (2013) studied the extent to which park users conceptualize these places as a resource for health and well-being. Findings highlight a discrepancy between reasons for visiting (walking, green space qualities, and children) and derived

effects (relaxation, positive emotions within the self and towards the place, and spiritual well-being) from the use of urban green space.

Moreover, Aspirall, Mavros, Coyne, Roe (2013) investigates the use of mobile electroencephalography (EEG) as a method to record and analyze the emotional experience of a group of walkers in three types of urban environment including a green space setting (urban shopping street, path through green space, and a street in a busy commercial district. The equipment provided continuous recordings from five channels, labeled excitement (short-term), frustration, engagement, long-term excitement (or arousal) and meditation. Results showed evidence of lower frustration, engagement and arousal, and higher meditation when moving into the green space zone; and higher engagement when moving out of it.

The present study focuses on the relation between the subjective dimension of the functional and dysfunctional negative emotions, and the preference to spending time in nature activities.

The objectives of the study

General objective: the present study investigated the role that spending time in nature activities have in promoting physical and psychological (mental and emotional) health.

Practical objectives:

1. To identify the level of subjects' emotional distress;
2. To identify the preferred type of activity as the investigated persons described it;
3. To compare the level of emotional distress in two groups: persons who preferred spending time in nature activities, and persons who preferred other type of activities.

Hypothesis: Persons who prefer to spend time in nature express a lower level of emotional distress compared to those who prefer other type of activity.

2. MATERIAL AND METHOD

Method:

- Psychometrical methods: The Emotional Distress Profile;
- Statistical methods.

Instruments:

1. The Profile of Emotional Distress (PED) is an instrument elaborated to assess the subjective dimension of functional and dysfunctional negative feelings (affect). The PED is a 39-item self-report instrument that measures functional and dysfunctional negative emotions from the "concern/anxiety" and "sadness/depression" categories. The scale allows for the calculation of a general score of distress (all items) and also of separate scores for "concern – functional", "anxiety – dysfunctional", "sadness – functional" and "depression – dysfunctional". The scale was elaborated by Opriş and Macavei (2005), based on the short version of Emotional Distress.
2. ,,20 things I like to do`` exercise is a humanist-experiential working technique.

Subjects: in this study participated 46 subjects. All subjects were 3 rd grade students, in the Socio-Humanistic Faculty.

Procedure:

Each subject enumerated 20 preferred activities in written form. Then, each student selected 5 activities he/she has done in the last two weeks. Considering these preferences, we made two groups: the first group – persons who preferred nature activities (taking picture of nature, gardening, playing with children in the park, travelling in nature, biking in the park, walking in the park alone/with family, or friends, or pets), and the second group – persons who preferred other type of activities (watching movies, going parties, hand making objects, cooking, playing computer games alone/with friends, shopping). In the end, all subjects completed individually the instrument mentioned above, without time limit.

3. RESULTS AND DISCUSSIONS

Statistical analysis was used to confirm the hypothesis of this study. Descriptive statistics for the investigated variables were presented in Table 1.

Tabel 1: Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Emotional distress total score	46	48	157	84,35	21,731
Functional emotions score	46	14	55	31,70	9,213
Disfunctional emotions score	46	29	102	53,04	16,580
Valid N (listwise)	46				

Independent Student T test (SPSS 17.00) was used to test the significance of the differences between groups regarding the level of emotional distres. In the comparison between gropus there were significant differences regarding the level of emotional distres (t=-1967; p <.01). Students from the first group (nature activities) expressed a lower level of emotional distress.

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Tabel 2: Group Statistics

	Expressed preference	N	Mean	Std. Deviation	Std. Error Mean
Emotional distress	In nature activities	27	79,22	17,820	3,430
	Other activities	19	91,63	25,029	5,742

Statistical results confirmed the research hypothesis: persons who preferred spending time in nature activities reported a lower level of emotional distress compared to perrsons who preferred other types of activities.

Results showed an incresed level of emotional distress as a characteristic of the investigated subjects, with an incresed level of disfunctional emotions and a medium level of functional emotions. As a consequence, the investigated persons had significantly higher levels of disfunctional emotions such as: anxiety, panic, irritability, despair. Other researches (Opris, Macavei, 2007) showed that subjects reporting high levels of distress have significantly higher levels of maladaptive cognitive schemas, irrational beliefs and dysfunctional attitudes, and lower levels of unconditional self-acceptance, compared to those who experience a lower level of distress.

Spending time in nature (green spaces or parks) is related to a decreased level of distress. Nature activities give people an opportunity to express certain negative emotions, to became aware of their personal inner feelings or to meditate on their experiential environment. People became more open to their personal experiences. In time, they can develop a more adequate self-knowledge, a higher number of positive emotions, and a spiritual well-being.

4. CONCLUSIONS

1. Spending time in nature activities were related to a decreased level of general emotional distress;
2. People prefered spending time in nature as an opportunity to decrease their general level of emotional tension; green spaces became a resource for health and well being because of the derived effects as lower level of disfunctional emotions (emotional tension, anxiety, sadness, fear), and higher level of relaxation, positive emotions within the self and towards the place, and spiritual well-being.

5. REFERENCES

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