

***The impact of an environmental recreational program on patients with
psychological depression***
***El impacto de un programa recreativo ambiental en pacientes con depresión
psicológica***

Laid Bensemicha¹, Salah Abdi², Mouloud Kenioua³

¹University Center of El Bayadh, El Bayadh, 32000, Algeria

²University of Ouargla, Ouargla, 30000, Algeria

³University of Ouargla, & SAMH Laboratory, Mostaganem University, Algeria

Email:

lbensemicha@cu-elbayadh.dz

salahabdi5@gmail.com

moukenioua@gmail.com

Reception date: October 14, 2024

Acceptance date: November 13, 2024

ABSTRACT

This study examined the impact of an environmental recreational program on patients with depression. The study was conducted at the Mental Health Hospital in Tiaret state, and included a random sample of (12) patients divided into control and experimental groups. The "Beck" scale was used as a tool for data collection, in addition to personal interviews and observation. The study found that the environmental recreational program had a positive effect on depressed patients through recreational sessions, aerobic exercises, and yoga included in the program. Therefore, it is necessary to focus on green environments and their gardens and coordination to help depressed patients walk in them, to release the negative energies within them, and provide them with positive energy to cope with psychological pressures.

Keywords

Recreational activities; Green environment; Depression; Psychological pressures.

RESUMEN

El estudio se realizó en el Hospital de Salud Mental del estado de Tiaret, e incluyó una muestra aleatoria de (12) pacientes divididos en grupos de control y experimental. Se utilizó la escala "Beck" como herramienta para la recogida de datos, además de entrevistas personales y observación. El estudio descubrió que el programa recreativo ambiental tenía un efecto positivo en los pacientes deprimidos gracias a las sesiones recreativas, los ejercicios aeróbicos y el yoga incluidos en el programa. Por lo tanto, es necesario centrarse en los entornos verdes y sus jardines y coordinación para ayudar a los pacientes deprimidos a pasear por ellos, liberar las energías negativas que llevan dentro y proporcionarles energía positiva para hacer frente a las presiones psicológicas.

Palabras clave

Actividades recreativas; Entorno verde; Depresión; Presiones psicológicas.

INTRODUCTION

Engaging in recreational activities within the social fabric of the systems that comprise society, and paying attention to them, is one aspect of individual civilized behaviour (Singh & Kiran, 2014), due to their importance in achieving a balance between work and leisure (Gungaphulet al., 2012), as well as their contributions to individuals' psychological happiness (Mardan et al., 2022). According to Yiğiter & Bayazıt (2013), they can help individuals solve a variety of modern-day challenges. And contribute to the integrated and balanced development of personality, societal stability, and enriching life in accordance with modern-day elements (Felice, 2024).

Depression is considered one of the psychological disorders that many individuals suffer from, and includes feelings of frustration and loss that appear at different stages of life (Sartorius et al., 1996). Therefore, the difference in depression is not in type but in degree (Bowins, 2015). It is one of the most widespread psychological disorders due to its serious effects on the mental, emotional, behavioral, and physical aspects (Miniati, 2010). It is associated with life environmental changes such as academic failure, separation, death, material disasters, or the characteristics of the natural or cultural environment in which they live (Rautio, 2018).

The importance of the green environment is evident through relaxation and engaging in recreational activities for an hour daily to reduce the psychological pressures faced by depressed patients through some used exercises (Gao et al., 2019). The exercises of identifying automatic thoughts and working on correcting them, self-monitoring, exposure, daily tasks, guided discovery questions, and self-dialogue relaxation (Jørgensen, 2017; Taylor, 2001).

Depression in the current study is mild depression and not clinical depression, and the study problem has been exacerbated by observing the green environment, and its impact on a person's psyche through relaxing in a green place while engaging in recreational activities such as walking helps in treating depression symptoms without taking sedatives or sleeping pills.

In light of the above, the problem of the study crystallizes in the following questions:

- 1- Are there statistically significant differences between the mean scores of individuals in the control group and the mean scores of individuals in the experimental group regarding the levels of psychological depression in the post-measurement?
- 2- Are there statistically significant differences between the pre-measurement scores and the post-measurement scores in psychological depression among individuals in the experimental group of depressed patients?

3- Are there statistically significant differences between the post-measurement scores and the follow-up measurement scores in psychological depression among individuals in the experimental group of depressed patients?

METHODS

The study sample represents patients with mild or moderate depression at the psychiatric hospital in Tiaret state, included a sample of (12) patients, (6) patients in the experimental group, and (6) patients in the control group, the sample was selected randomly.

The study relied on the following methods to collect the necessary data and information:

Sessions of dialogue were conducted with depressed patients inside the mental health hospital in Tiaret, establishing social relationships between the researchers and the depressed patients, and then obtaining direct information from them.

The original "Beck" scale and studies close to the subject of the study were adopted, which have not been modified and remain as they are with the same phrases of the original scale with its answer key.

An environmental recreational program was developed into a cognitive behavioural non-pharmacological program through relaxation in a green environment and programmers together, a set of recreational activities practiced for an hour daily, aerobic exercises, yoga exercises, and practicing some light activities such as walking in the gardens, in addition to relaxation sessions in the green environment through some exercises used, such as exercises (identifying automatic thoughts and working on correcting them, self-monitoring, exposure, daily duties, guided discovery questions, self-relaxation dialogue), provided to individuals in the experimental group with the aim of alleviating their depressive symptoms.

The arithmetic mean, standard deviation, percentage, and t-test were used Through the statistical package SPSS.

RESULTS

Table 1: Shows the results of the (t) test for studying the differences between the individuals of the control group and the individuals of the experimental group in the levels of psychological depression in post-measurement.

Groups	N	M	SD	T	Sig
Control group	6	25.89	3.52	2.64	Statistically significant.
Experimental group	6	29.43	2.7		
The tabulated value at significance level (0.01) and degrees of freedom (11) = 2.20.					

N: participants; M: mean; SD: standard deviation; T: T-test; Sig: significant.

The results shown in Table (01) indicated the presence of significant statistical differences between the mean scores of the control group members and the mean scores of the experimental group members in terms of psychological depression scores in the post measurement, and the differences were in favor of the experimental group members.

Table 2: Shows the results of the T-test for studying the differences between pre-measurement scores and post-measurement scores in the levels of psychological depression among the experimental group individuals.

Experimental group	N	M	SD	T	Sig	Improvement percentage
Pre- measurement	6	24.32	3.09	4.12	Statistically significant.	21%
Post-measurement	6	29.43	2.7			
The tabulated value at significance level (0.01) and degrees of freedom (11) = 2.20.						

N: participants; M: mean; SD: standard deviation ; T : T-test ; Sig : significant.

The results shown in table number (02) revealed significant statistical differences between pre-measurement scores and post-measurement scores in depression among psychiatric patients at the Mental Health Hospital in Tiaret state in the experimental group, with the differences favoring the post-measurement.

Table 3: Shows the results of the T-test for studying the differences between the scores of post-measurement and the scores of follow-up measurement in the levels of psychological depression among individuals in the experimental group.

Experimental group	N	M	SD	T	Sig
Post-measurement	6	29.43	2.7	1.30	Not statistically significant.
The follow-up measurement.	6	27.96	2.58		
The tabulated value at significance level (0.01) and degrees of freedom (11) = 2.20.					

N : participants ; M : mean ; SD : standard deviation ; T : T-test ; Sig : significant.

The results shown in table (03) indicate no statistically significant differences between the scores of post-measurement and follow-up measurement in psychological depression among patients with psychological depression at the Mental Health Hospital in Tiaret in the experimental group. This indicates the continued effectiveness of psychological counseling sessions in reducing the level of psychological depression for patients with psychological depression at the Mental Health Hospital in the state of Tiaret.

DISCUSSION

Many pieces of evidence indicate that connecting with the natural environment and green spaces enhances good health, and that engaging in regular physical and recreational activity generates physical and psychological health benefits (Pretty et al.,2007). Gascon et al (2015) indicated that given the increase in mental health problems and rapid urbanization, it is necessary to enhance urban areas with green and blue spaces in order to promote mental health. The green space undoubtedly reduces depression (Gascon et al,2018). Walking, running, or cycling in green areas is very important for those with psychological problems such as anxiety and depression, it has become Lifestyle Medicine (Sarris et al.,2014). The authorities in Doha are working to improve the mental health of its citizens by providing green urban spaces, recreational activities, and proposing policies that can provide more opportunities for individuals and the government to create a healthier environment in Doha. The effects include shaping urban design strategies, raising public awareness, enhancing healthcare initiatives, and confirming the positive impact of well-designed green spaces on mental well-being (Patel et al.,2024). Understanding the impact of green spaces on public health is crucial for urban planning and enhancing psychological well-being in small and medium-sized cities, of course with recreational activities accessible to everyone (Delgado-Serrano et al.,2024).

CONCLUSION

The study found that the environmental recreational program had a positive effect on depressed patients through recreational sessions, aerobic exercises, and yoga included in the program.

After obtaining the results, it has become necessary to focus on the green environment and coordinate it to help depression patients and stroll inside its gardens and release the negative energies inside them and provide them with positive energy to face psychological pressures.

Educating the Algerian society about depression disorders, and explaining it from the psychological aspect, through audiovisual media, seminars, and lectures.

Conducting more studies on the effectiveness of therapeutic psychological counselling in getting rid of and alleviating many different psychological disorders.

BIBLIOGRAPHIC REFERENCES

Bowins, B. (2015). Depression: discrete or continuous? *Psychopathology*, 48(2), 69-78.

Delgado-Serrano, M. M., Melichová, K., Mac Fadden, I., & Cruz-Piedrahita, C. (2024).

Perception of green spaces' role in enhancing mental health and mental well-being in

- small and medium-sized cities. *Land Use Policy*, 139, 107087.
<https://doi.org/10.1016/j.landusepol.2024.107087>
- Felice, G. D. (2024). Dynamical Systems Research (DSR) in Psychotherapy: A Comprehensive Review of Empirical Results and Their Clinical Implications. *Systems*, 12(2), 54.
- Gao, T., Song, R., Zhu, L., & Qiu, L. (2019). What characteristics of urban green spaces and recreational activities do self-reported stressed individuals like? A case study of Baoji, China. *International journal of environmental research and public health*, 16(8), 1348.
<https://doi.org/10.3390/ijerph16081348>
- Gascon, M., Sánchez-Benavides, G., Dadvand, P., Martínez, D., Gramunt, N., Gotsens, X., ... & Nieuwenhuijsen, M. (2018). Long-term exposure to residential green and blue spaces and anxiety and depression in adults: A cross-sectional study. *Environmental research*, 162, 231-239. <https://doi.org/10.1016/j.envres.2018.01.012>
- Gascon, M., Triguero-Mas, M., Martínez, D., Dadvand, P., Forns, J., Plasència, A., & Nieuwenhuijsen, M. J. (2015). Mental health benefits of long-term exposure to residential green and blue spaces: a systematic review. *International journal of environmental research and public health*, 12(4), 4354-4379.
<https://doi.org/10.3390/ijerph120404354>
- Gungaphul, M., Kassean, H., & Ramnarain, T. (2012). Promoting recreation and leisure in the workplace. *African Journal for Physical Health Education, Recreation and Dance*, 18(sup-4), 86-94.
- Jørgensen, N. N. K. (2017). Pilgrimage walking as green prescription self-therapy? In *The many voices of pilgrimage and reconciliation* (pp. 124-137). Wallingford UK: CABI.
- Mardan, M. S., Muhammed, H., Kazem, N. H. S., & Salman, A. S. (2022). The effectiveness of recreational activities in the psychological happiness of students. *Journal of STEPS for Humanities and Social Sciences*, 1(2).
- Miniati, M., Rucci, P., Benvenuti, A., Frank, E., Battenfield, J., Giorgi, G., & Cassano, G. B. (2010). Clinical characteristics and treatment outcome of depression in patients with and without a history of emotional and physical abuse. *Journal of psychiatric research*, 44(5), 302-309.
- Patel, S., Jabbour, N., John, D., Ahmad, A. M., Furlan, R., Al-Matwi, R., & Isiafan, R. J. (2024). The impact of urban design on mental well-being by integrating green spaces in Doha

- City, Qatar. *Journal of Infrastructure, Policy and Development*, 8(3).
<https://doi.org/10.24294/jipd.v8i3.3147>
- Pretty, J., Peacock, J., Hine, R., Sellens, M., South, N., & Griffin, M. (2007). Green exercise in the UK countryside: Effects on health and psychological well-being, and implications for policy and planning. *Journal of environmental planning and management*, 50(2), 211-231. <https://doi.org/10.1080/09640560601156466>
- Rautio, N., Filatova, S., Lehtiniemi, H., & Miettunen, J. (2018). Living environment and its relationship to depressive mood: A systematic review. *International journal of social psychiatry*, 64(1), 92-103.
- Sarris, J., O'Neil, A., Coulson, C. E., Schweitzer, I., & Berk, M. (2014). Lifestyle medicine for depression. *BMC psychiatry*, 14(1), 1-13. <https://doi.org/10.1186/1471-244X-14-107>
- Sartorius, N., Üstün, T. B., Lecrubier, Y., & Wittchen, H. U. (1996). Depression comorbid with anxiety: results from the WHO study on psychological disorders in primary health care. *The British journal of psychiatry*, 168(S30), 38-43.
- Singh, B., & Kiran, U. V. (2014). Recreational activities for senior citizens. *IOSR J Human Soc Sci*, 19(4), 24-30.
- Taylor, M. E. (2001). *Meditation as treatment for performance anxiety in singers*. The University of Alabama.
- Yiğiter, K., & Bayazıt, B. (2013). Impact of the recreational physical activities on university students' problem-solving skills and self-esteem in Turkey. *European Online Journal of Natural and Social Sc.*