

EMF Mitigation Symptom Checklist: Exploratory Retrospective Study

Paule Bellwood, Ph.D. · Jeffrey J. Stegman, B.Sc. · Gary E. Schwartz, Ph.D.

Keywords

Electromagnetic Field · EMF · Electromagnetic Field Mitigation · EMF Mitigation
Focused Life-Force Energy · FLFE · Sensitivity to Electromagnetic Field · Sensitivity to EMF
Electromagnetic Hypersensitivity

Abstract

Sensitivities to Electromagnetic Fields (EMFs) can affect individuals to varying degrees and one of the main strategies for relieving the symptoms caused by these fields is limiting exposure to them. Focused Life-Force Energy (FLFE) has developed an EMF mitigating service that is aimed at providing individuals relief from EMFs without having to avoid them or without having to limit one's exposure to them. This study explored the effects of the EMF Mitigation program on 56 individual post the introduction of the program to the FLFE customer base. This retrospective study employed a simple checklist of physical and psychological symptoms; this proved to be a limited yet useful first look at EMF related symptoms. Participants reported feeling more energy, less fatigue, better sleep, a decreased feeling of stress, decreased anxiety, and increased cognitive functioning (i.e., less brain fog).

Introduction

Sensitivities to Electromagnetic Fields (EMFs), also known as Electromagnetic Hypersensitivity (EHS) or "Microwave syndrome", are a clinical condition that encompasses various nervous system and skin symptoms as well as other health problems ranging from issues with neurological and cognitive functioning to negative autonomic nervous system effects [1, 2]. Typically, these symptoms and effects occur after exposure to EMFs in the environment [2]. EHS symptoms can be similar to those frequently reported by individuals with multiple chemical sensitivities (MCSs) [2].

Some researchers call for limiting exposure to EMFs [2], but new technologies are being developed and implemented at an increasing

pace, making the exposure to EMFs practically unavoidable. Others are suggesting the need for EMF mitigating approaches to alleviate the effects of exposure to EMFs [3].

Focused Life-Force Energy (FLFE) has developed an EMF mitigating service that is aimed at alleviating the symptoms of EMF sensitivities (<https://www.flfe.net/>). Its effects and mechanisms of action are not yet fully understood. This research study aims to begin the scientific exploration into these effects. Positive findings would warrant future research studies into this area, further exploring the effects of the EMF Mitigation program.

Background

EHS is a syndrome that often presents with common complaints (e.g., fatigue, headaches, general weakness, ringing in the ears, insomnia, brain fog and difficulty concentrating, irritability, aches and pains, difficulty with balance and vertigo, and even neuropsychiatric effects) that can also be attributed to other syndromes and conditions (e.g., chronic fatigue, fibromyalgia, multiple chemical sensitivity, depression, etc. [1, 4, 5]. In addition, the adverse health effects of EMFs are "a contentious issue [and] [...] primary care physicians have no objective diagnostic algorithms by which to diagnose EHS", thus often resulting in EHS sufferers being referred to a psychiatrist" [4, p. 217].

There is some evidence to suggest "that these symptoms are triggered by exposure to EMFs in sensitive individuals", including "both the extra low electromagnetic fields (ELF) coming from electricity and the radiofrequency (RF) EMFs coming from radar, communication devices, Wi-Fi,

Note: The Introduction and Background sections across all white papers on the topic of FLFE's effects on EMFs are very similar. This was done to ensure that all relevant information is included in each white paper and that each white paper acts as a standalone publication when read individually.

smart meters and many other forms of wireless devices” [4, p.217].

Currently, one of the main recommendations to avoid EHS is limiting exposure to EMFs [2]; however, the EMFs and RFs seem to be ever more prevalent in our environments, in some cases increasing between 20.1 and 57.1% annually [6] thus making electromagnetic radiation inescapable [2]. Others are calling for developing and implementing ways to mitigate EMFs in the environment, such as setting a specific threshold for the amount of power radiated per unit volume at a distance [3] or by using reconfigurable intelligent surfaces to manipulate the electromagnetic environment [7].

FLFE is a Canadian company offering a consciousness-raising subscription-based service for a property or around an object. The FLFE system is designed to focus available life-force energy and to activate a high consciousness field at a specified location (i.e., legal address or geographic coordinates) or around a personal object (i.e., mobile phone). The higher-level consciousness field, in combination with other enhancements, is intended to increase the beneficial nature of the local environment. The FLFE service claims are extraordinary [8] in terms of mainstream science and various experiments, such as the one detailed in this paper, have been conducted to explore the effects of the purported beneficial environmental changes. FLFE’s experimental philosophy is to first explore the effects (i.e., *‘Is something happening?’*) and then, when possible and practical, explore the mechanisms of action. For more information, please see the FLFE Gold Standard research statement (<https://www.flfe.net/research/>).

Methods

Once a week, the FLFE team uses their tools (i.e., applied kinesiology, muscle testing) to measure the Level of Consciousness (LOC) of all the properties on the FLFE Property service using the theory and method created by Dr. David Hawkins [9].

In 2017, several properties were discovered where the LOC had lowered from the previous specified level to a lower level of consciousness. At the same time, several FLFE customers explained that they

felt something had changed and that they did not feel as good on the FLFE service as they had previously. These customers were engaged via informal interviews to explore what changes were happening in their environments. For each one there was a change that increased the electrical fields and EMFs near them (e.g., new cell towers nearby, newly installed smart meters for remotely reading gas and electric usage, and, in some cases, new and more powerful home Wi-Fi routers). These influences were potentially lowering the LOC of these environments.

A solution was found, and a beta test was carried out to mitigate the consciousness-lowering effect of EMFs on the FLFE environments. Several self-identified EMF sensitives came forward spontaneously and asked to be on the beta test. A short survey was administered 14 days after the service was activated. This questionnaire is available in Appendix A.

Results

Participants reported reductions in both physical and psychological symptoms related to EMFs. For physical symptoms, the biggest changes were observed in energy, sleep, presence of headaches, digestion, and presence of heart palpitations (Figure 1). For example, 57% of participants reported (i.e., checked the item) more energy, less fatigue/tiredness and 54% reported better sleep.

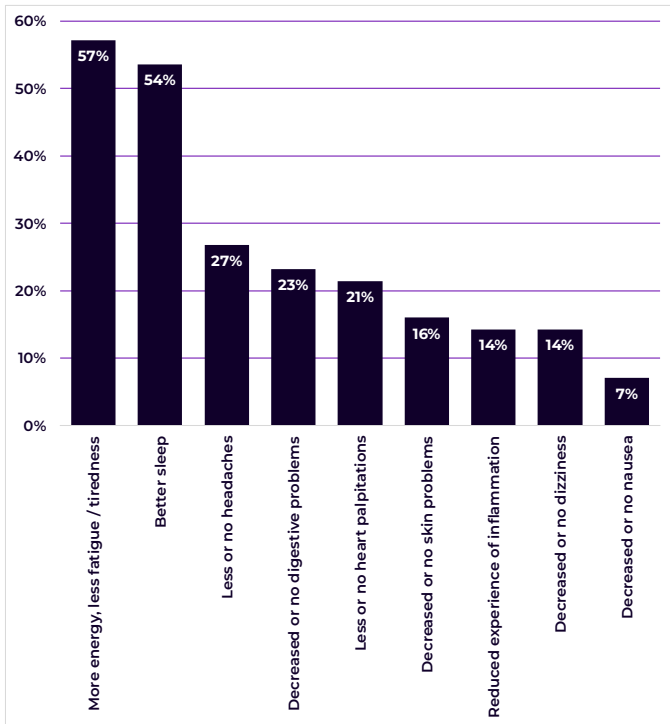


Figure 1. Changes in physical improvements for n=56.

For psychological symptoms, the biggest changes were observed in stress (61%) and brain fog (41%) (Figure 2). 20% did not report any changes.

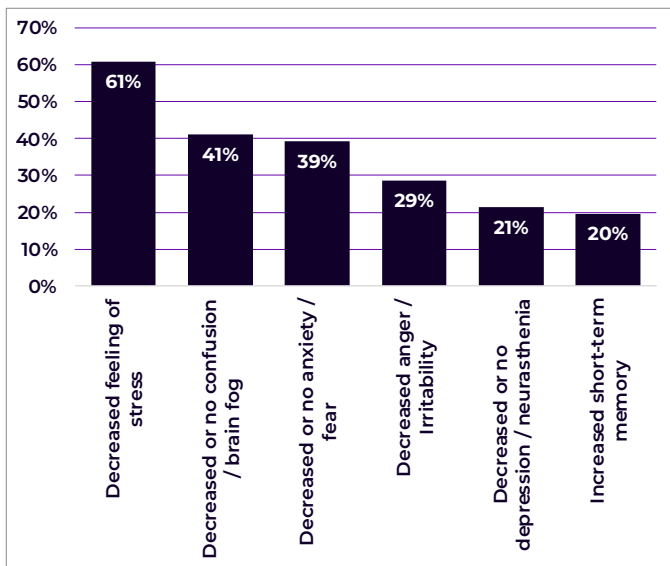


Figure 2. Changes in psychological improvements for n=56.

This study also revealed that participants who experienced psychological improvements also tended to report experiencing physical improvements (Perceived Physical Improvements

correlated with Perceived Psychological Improvements $r=0.701$, $n=56$, $p<0.0000001$; Figure 3).

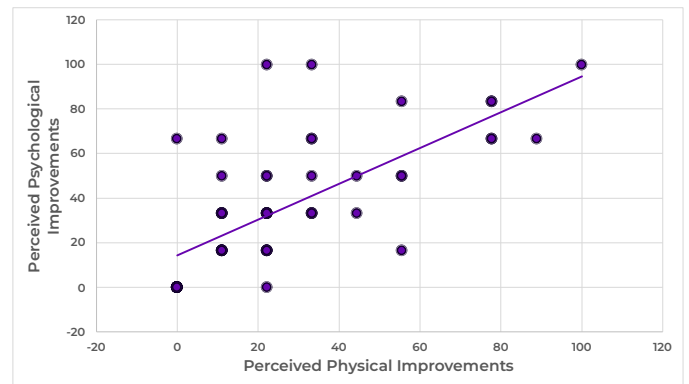


Figure 3. Scatter plot showing highly significant correlation between the physical and psychological improvements across the 56 participants.

Limitations

Limitations to this study include a small number of participants as well as a simple checklist being used to determine the initial effects of the EMF Mitigation program. This study was carried out prior to the introduction of the FLFE Research Gold Standard (<https://www.flfe.net/research/>); however, it did help inform future research phases of this topic and did provide the evidence to suggest that an effect of the program was being observed in a subset of FLFE’s customer population.

Conclusion and Future Directions

Findings from this exploratory study replicate and extend FLFE customers’ spontaneous reports that FLFE can help mitigate symptoms of EMF sensitivity. Overall, the primary EMF mitigations include symptom reductions in insomnia, fatigue, headaches, malaise, and head sensations.

Future research is planned to include a replication study with a larger number of participants as well as Phase 2 blinded comparison experiment to address the role of expectation, placebo effect, and spontaneous improvement. In addition, future Phase 1 and 2 FLFE EMF mitigation experiments may investigate how these effects occur, including (a) exploring changes to the electromagnetic fields that may explain the EMF mitigation effects observed, and b) possible biophysical, biochemical, cellular, and physiological mechanisms in humans

and other organisms (including animals and plants). FLFE also plans to investigate further FLFE service development, including future upgrades to the EMF mitigation service, to enhance the emerging FLFE EMF mitigation effects.

References

[1] World Health Organization. (2004). Electromagnetic hypersensitivity: Proceedings, International Workshop on Electromagnetic Field Hypersensitivity, Prague, Czech Republic, October 25-27, 2004. <https://www.who.int/publications-detail-redirect/9789241594127>

[2] Stein, Y., & Udasin, I. G. (2020). Electromagnetic hypersensitivity (EHS, microwave syndrome) – Review of mechanisms. *Environmental Research*, 186, 109445. <https://doi.org/10.1016/j.envres.2020.109445>

[3] Nasim, I., & Kim, S. (2019). Mitigation of human EMF exposure in downlink of 5G. *Annals of Telecommunications*, 74(1), 45–52. <https://doi.org/10.1007/s12243-018-0696-6>

[4] Carpenter, D. O. (2015). The microwave syndrome or electro-hypersensitivity: Historical background. *Reviews on Environmental Health*, 30(4), 217–222. <https://doi.org/10.1515/reveh-2015-0016>

[5] Pall, M. L. (2016). Microwave frequency electromagnetic fields (EMFs) produce widespread neuropsychiatric effects including depression. *Journal of Chemical Neuroanatomy*, 75, 43–51. <https://doi.org/10.1016/j.jchemneu.2015.08.001>

[6] Urbinello, D., Joseph, W., Verloock, L., Martens, L., & Rössli, M. (2014). Temporal trends of radio-frequency electromagnetic field (RF-EMF) exposure in everyday environments across European cities. *Environmental Research*, 134, 134–142. <https://doi.org/10.1016/j.envres.2014.07.003>

[7] Santos, H. L. dos, Vaca-Rubio, C. J., Kotaba, R., Song, Y., Abrão, T., & Popovski, P. (2023). EMF Exposure Mitigation in RIS-Assisted Multi-Beam

Communications (arXiv:2305.05229). arXiv. <https://doi.org/10.48550/arXiv.2305.05229>

[8] Schwartz, G. E. (2021). *Extraordinary claims require extraordinary evidence: The science and ethics of truth seeking and truth abuse*. Cardiff, CA: Waterside Productions.

[9] Hawkins, D. R. (2014). *Power vs. force: The hidden determinants of human behavior*. Hay House, Inc.

Appendix A

1. Please note changes since the start of the FLFE EMF Mitigation program on the effects of EMFs on your health.

- Less or no headaches
- More energy, less fatigue / tiredness
- Better sleep
- Decreased or no dizziness
- Decreased or no nausea
- Less or no heart palpitations
- Decreased or no digestive problems
- Reduced experience of inflammation
- Decreased or no skin problems (rashes, tingling, burning sensations)
- Other: _____

2. Please note changes since the start of the FLFE EMF Mitigation program on negative emotional or psychological effects of EMFs.

- Nothing noticed
- Decreased feeling of stress
- Decreased or no depression / neurasthenia
- Decreased or no anxiety / fear
- Decreased or no confusion / brain fog
- Increased short-term memory
- Decreased anger / irritability
- Other: _____

3. Can you please describe what you have noticed since the start of the FLFE EMF Mitigation program? Please write as much as you would like:
