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Considerations of This Issue

1- Introduction

1-1 T-Consciousness and the New Discipline of Sciencefact

In the past few decades, the nature of Consciousness and its place in science has received considerable attention. Many philosophical and scientific theories have been presented so far in this field. In the 1980s, Mohammad Ali Taheri introduced new fields of non-material and non-energy nature, known as T-Consciousness Fields (TCFs). In Taheri's view, T-Consciousness, along with matter and energy, are the three main constituents of the universe, with T-Consciousness being different from matter and energy. According to his theory, there are a wide variety of TCFs, with each having certain functionalities. TCFs are also considered a subset of "Cosmic Internet Network" in Taheri's theory, which is named the Cosmic Consciousness Network (CCN).

The main difference between the theory of TCFs and other concepts introduced so far for describing the nature of consciousness is the applicability and practicability of TCFs. In other words, these fields can be applied to all living organisms and non-living objects, such as plants, animals, microorganisms, materials, molecules, atoms, etc. In this respect, Mohammad Ali Taheri introduced "Sciencefact" in 2020 as one of the subgroups of the "Erfan-e-Keyhani-e-Halgheh" school, which he had previously founded. The name "Sciencefact" was chosen to confirm the existence of T-Consciousness as a "fact" scientific research method is utilized. Although common science merely considers the study of matter and energy, Sciencefact investigates the effects of TCFs (which are neither material nor energy) on matter and energy and all their manifestations (such as humans, animals, plants, microorganisms, cells, materials, molecules, atoms, etc.). By repeatably conducting laboratory research experiments in various fields of science and applying TCFs, Sciencefact has emerged as a common ground between science and TCFs and uses this capability to investigate T-Consciousness and T-Consciousness Fields resulting from it.

The influence of TCFs begins withthe connection (Etesal) between the Cosmic Consciousness Network as the Whole Consciousness and the subject under study as a component. The connection is established by the mind of the Faradarmangar (a person who has been trained to assign TCFs). The human mind has the role of an intermediary (announcer) that acts with short and immediate attention to the subject under study, and the main achievement is obtained due to the effects of TCFs. These fields cannot be directly measured by science, but their effects on various subjects can be investigated through repeatable experiments (1).

1-2 Methodology used for T-Consciousness Fields Research

The research methodology followed in the study of T-Consciousness is based on *Assumption, Argument, and Proof:*

The basic *Assumption* is that the universe is formed by a third element, called T-Consciousness, and that is different from matter and energy.

The *Argument* is that the existence of TCFs can be shown through their effects on matter and energy (e.g., humans, animals, plants, microorganisms, cells, materials, molecules, atoms, etc.)

The *Proof* is the scientific verification of the TCFs' effects on matter and energy (according to the Argument) through various reproducible scientific experiments.

1-3 Study phases in Sciencefact

To investigate and verify the existence, effects, and mechanisms of TCFs, the five following research phases (Phase 0 to Phase 4) and their objectives are outlined below:

In Phase 0 of the studies, the goal is to demonstrate the existence of TCFs by observing their influence on matter and energy. The nature of T-Consciousness and what it is will not be addressed in this phase. Phase 1 is dedicated to exploring various effects of different TCFs. In Phase 2, one examines the reasons behind the effects of these fields. Then, during Phase 3, the mechanisms of TCFs' effects on matter and energy are investigated. Finally, the goal of Phase 4 is to draw conclusions, particularly with regard to the *mind and memory of matter* and their relation to T-Consciousness, etc.

1-4 Importance of computational research in the studies of T-Consciousness Fields and an overview of the design of experiment in this issue

Numerous studies were conducted to investigate the effects of TCFs on materials and living organisms. In all these studies, observable changes in physical, chemical, or biological phenomena were measured under the influence of TCFs [1-5]. The focus of all these studies was merely on examining the effects of TCFs at the level of matter and energy under both *'In vitro'* and *'In vivo'* conditions. Yet, there hasn't been a study examining the effects of TCFs on computational or *'In silico'* conditions. Specifically, the software and information systems frameworks have not yet been studied.

According to the theory of TCFs, every system or part of existence has two levels of consciousness: 'Constant or Invariable T-Consciousness'. The former is also known as the foundational consciousness of the system under study, which constitutes its inherent property, and the latter is 'Variable T-Consciousness', which affects the behavior of the system under study when encountering environmental variables [6]. Additionally, we know that the level of consciousness that is influenced by the effects of TCFs is this variable consciousness. To understand this concept better, let us take a look at an example from previous studies.

In examining the impact of TCFs on the phenomenon of radioactivity in the field of nuclear physics, it was observed that the 'decay constant' of the radioactive element Strontium, which is part of its character and existential nature in the ecosystem, remains unchanged under the influence of TCFs, and in practice, we do not expect any alteration from it. This is because any alteration would disrupt the foundational elements of existence and the stability of nature in this cosmological epoch, which is not feasible or rational. However, when the studies were performed under the conditions that the radioactive Strontium was dissolved in an aqueous environment and interacted with water molecules, meanwhile being exposed to TCFs, a reduction in the 'effective half-life' of Strontium was observed. This indicates a change in the nature of the interaction or the behavior of the radioactive particles with an aqueous environment [7]. It is evident that the design of the study plays a fundamental role in observing the effects of TCFs wherein examining the behavior of a system in response to environmental factors (internal or external environment) or the 'variable T-Consciousness' level of the system is targeted.

In the current study and in the context of computer computations, which entirely rely on formulations and mathematical rules (programmed software and formulated algorithms) and the explicit information in this domain, we practically encounter a system that is entirely constructed from 'Invariable T-Consciousness'. This corresponds to the rules and regulations that form the foundational character of the system under study. The fundamental question here is how to pursue examining the effects of TCFs in the realm of computer computations. To address this question, we look into the nature of the subject under study and the details of the design

implemented therein, which constitute the first and fundamental step of the present study. Needless to say, continuous refinement and development through the collaboration of other specialists is always required.

According to the literature, the Monte Carlo method is a powerful tool to investigate structural behaviors within random and statistical processes [8]. For instance, atmospheric phenomena, traffic in major city streets, light propagation in a medium, and many other physical events in our daily lives are inherently random. This randomness leads to statistical distributions that are based on many constituents. These constituents contribute to the collective behavior of a population and are influenced by numerous internal and external variables of a system. Perhaps, a more tangible interpretation of this randomness is its probabilistic nature, or what we can call 'stochastic essence'. Unlike deterministic phenomena that lead to certainty in the responses to problems ahead, in Monte Carlo and other statistically based methods, we estimate an answer from a probabilistic environment, and in other words, a response prediction takes place [9].

The nature of Monte Carlo problems and the statistical environments related to responses is similar to finding a needle in a haystack or, in other words, detecting a signal in a noise matrix. This framework provides conditions where a factor or a variable can significantly impact the estimated result in the expected statistical environment. For a better understanding of the difference between deterministic and probabilistic computations, let us have a look at the following example: When calculating the area of a circle with a known radius, one can precisely determine the result by using the known formula for calculating the area of a circle. However, if one were to compute the same circle area by randomly throwing tiny ink particles with an inkjet printer and performing calculations, the resulting outcome would always have some uncertainty that arises from the stochastic nature of the process involved in producing the final result.

With this explanation, we turn our attention to the design of the present study, in which computer-generated random numbers and computational programs have been used to calculate a specific number of questions with known answers (similar to the inkjet printing that computed the area of a circle with a known radius). Subsequently, by applying TCF1 and TCF2 and calculating the values in both TCF-exposed and control groups, we delve into examining distinct trends that are both consistent and replicable in the TCF-exposed samples.

In this study, the effects of TCF 1 and 2 are examined progressively and at different levels. At level 1, a distribution of pseudo-random numbers is generated. Level 2 includes mathematical computations in one, two, and three dimensions, using one, two, and three sets of random numbers, respectively. In this experimental design, in addition to the stochastic nature of the problem and its inherent uncertainty in computing the response, an added uncertainty has been introduced. This additional uncertainty involves using incremental sets of random numbers from one to three sets in various computations, ranging from one dimension to three dimensions. Furthermore, randomizing the initial seed for generating random numbers is done in a way that the seed is changed by the computer program and not by the user. In fact, the nature of the system in this study is stochastic, and all possible tools have been used to increase uncertainty or, in other words, the system error, to better observe and differentiate the potential impact of external, non-material, and non-energy factors of TCFs on a software or system information.

2- Methods

2-1 Applying T-Consciousness Fields

The samples used in this study were exposed to T-Consciousness Fields (TCFs), which are in line with the specified protocol mentioned on the website of Cosmointel (www.cosmointel.com) under Research Management on T-Consciousness Fields. In order to use TCF, the request for *Etesal* (connection) to the cosmic

consciousness network should be submitted through the Cosmointel website and in the "Assign Announcement" section. This is a freely available opportunity for everyone. Researchers can register on this website anytime to experience TCF and conduct research in this area. Detailed information regarding an experiment needs to be provided to the research center. For example, the number and the name of samples and control groups must be specified. Studies in this issue were conducted in a double-blind manner, where lab technicians were completely unaware of TCFs theory, and the *Faradarmangar* at the Cosmointel research center, who establishes the consciousness bond, was unaware of the details of the study (except for the use of TCF2, which will be explained below).

The TCFs employed in the studies of this issue are TCF types 1 and 2. According to Taheri, the effect of TCF1 is to optimize the subject under study based on the laws of the ecosystem. To use TCF2, a specific request needs to be submitted based on the recognized rules from the relevant domain, and it will be done by the 'announcer'.

In this study, the application of TCFs to the systems under study was carried out with a minimum interval of 24 hours to prevent potential interference of TCF effects. In other words, on each day and after concluding the study of that day, the system under study remained without any new announcements or further investigations for up to 24 hours, and on the next day, it was used for the next study.

Additionally, on each day of this study, after obtaining the information related to the control group, the data from the TCF1-exposed samples (called sample 1) were acquired first, followed immediately by obtaining the data from the TCF2-exposed samples (called sample 2). Therefore, the acquired data from the TCF1-exposed sample is independent, but the data from the TCF2-exposed sample is a combination of the effects of both TCFs applied during this project. According to the theory of TCFs, at the end of the data acquisition for the TCF1-exposed group, the functionality of this field does not necessarily cease, and the impact of TCF2, used shortly after employing TCF1 (within the range of three to five minutes (due to the time required for program execution)) is added to it practically. Therefore, the data from applying TCF2 in these studies should be considered as combined data resulting from the effects of both fields.

2-2. Execution Method for the Computational Studies

Three stages were considered to investigate the impact of TCFs on Monte Carlo computations. Given that the cornerstone of Monte Carlo computations is random numbers, the first stage was to examine the effect of TCFs on generating random numbers within the range of zero to one. In the second stage, the effects of the TCFs on the results of simple mathematical computations (which were performed using random numbers) were studied. In the third stage, the influence of the successive stages in previous computations is compared under identical conditions and in between the control and the samples.

2-2-1. Examining the impact on random number generation

A- Random Number Generation: Recognizing that computer computations are influenced by the computer hardware, operating system, and the software used, two different computers—a laptop (LP) and a desktop (Desktop)—and two operating systems, Windows (W) and Linux (L), were employed for random number generation (details of the systems used are provided in the System Details section of the relevant study). Additionally, two programming languages, Fortran (F) and C++, were utilized. For this purpose, the desktop was equipped with Windows 7 and Kubuntu 16.04 operating systems, while the laptop had Windows 7 and Kubuntu 16.04 Linux. In Windows, Fortran, Microsoft Power Studio (Fortran 90), and Borland C++ coding programs were used. In Linux, software packages 'gfortran' and 'gcc' were employed for Fortran and C++, respectively. Overall, in this section of the study and as provided in Table 1, a total of eight combinations

of effective components in the calculation were developed, and each was used to generate 10000 random numbers between zero and one. These codes developed are provided in Appendix 1. The programs were configured to use random seeds, and with each run, a different set of random numbers was generated.

Table 1. Possible combinations of variable system vomponents in this study: systems, operating systems, and programming languages.

	Linux		Windows	
	Fortran	C++	Fortran	C++
Desktop	1	2	3	4
Laptop	5	6	7	8

B- Obtaining Sample and Control Data: Before applying the TCFs, each program generated and stored 10 sets of 10000 random numbers. This first set of 100,000 elements is considered as the control population. Then, TCF1 and TCF2 were applied separately in two distinct stages. This means that the targeted system under study was labeled, and the operating system, together with the custom program name (specified for this study), were put under announcement (Nazar). As far as TCF2 is considered, the intention was to concentrate or centralize the data and reduce its entropy. This choice was made to observe the effect during the investigations.

For each type of TCFs, similar to the control, the program was executed 10 times, and it generated 10000 random numbers each time. Additionally, there were two types of sample populations, each containing 100,000 random numbers with conditions exactly similar to those generated in the control. As mentioned earlier, it is important to note that the numbers are, first of all, random. Second, their random seed is the same in each comparison between the control and TCF-treated samples and in accordance with a unified software program and system. In this section, after generating random numbers with the combinations mentioned in Table 1, the control and sample data were analyzed and compared.

2-2-2 Examining the Impacts on Mathematical Computations with a Variable Number Made of Random Number Sets and Variable Seed

In the next phase of the studies, simple mathematical calculations with a definite answer were selected to compare the Monte Carlo computations with known analytical results. Based on the results obtained from the previous section, the same Desktop computer equipped with the Linux Kubuntu 16.04 operating system and the C++ programming language were used for computations. The calculations were performed for one, two, and three dimensions, using one, two, and three sets of random numbers, respectively. This was to enable the comparisons between the different sets of random numbers. The codes developed for this purpose are provided in Appendices 2, 3, and 4.

A- Calculating the Integral with One Set of Random Numbers (One Dimension)

For one-dimensional calculations, $\int_0^{\pi/2} \sin x dx$ is calculated using a set of 10000 random numbers. The analytical solution to this integral is 1. The program written for this purpose is provided in Appendix 2. The independent quantity x in the integral was randomly sampled 10000 times, using random numbers in the range of 0 to π/2. The program has been consecutively executed

100 times for the control data and data exposed to TCF1 and TCF2. Finally, the obtained results were analyzed.

B- Calculating the Area of a Rectangle with Two Sets of Random Numbers (Two Dimensions)

For two-dimensional calculations, two sets of 10000 random numbers were used to calculate the area of a rectangle with the dimensions of 2 and 4 (see Appendix 3). One set of random numbers determines the length of the rectangle, and the other set determines the width. Both are randomly sampled in the ranges of 0 to 4 and 0 to 2, respectively (10000 times each). This program was also consecutively executed 100 times, with three repetitions for each of the control and the samples.

C- Calculating the Volume of a Rectangular Prism with Three Sets of Random Numbers (Three Dimensions)

The volume of a rectangular prism with the dimensions of 2, 4, and 5 has been calculated (see Appendix 4). The length, width, and height were randomly sampled 10000 times within the ranges of 0 to 4, 0 to 2, and 0 to 5, respectively. The volume was then calculated accordingly. Similar to the previous two situations, this code was also consecutively executed 100 times, with three repetitions for each of the control and TCF-treated samples, followed by statistical analyses of the results.

2-2-3 Calculating Entropy

In all the mentioned stages, after obtaining the populations for the control, TCF1, and TCF2 samples, the frequencies of the corresponding elements were analyzed through binning and determining a specific distance. This was to determine the frequency of the numbers in each interval (and in each comparison between samples and controls). The purpose of this stage was initially to plot and compare the histograms of the random numbers and calculated values, which were generated in the control and TCF-treated samples. Subsequently, by obtaining the distributions, the entropy of each distribution was calculated using the Shannon formula [10]:

$$S = -\sum p_i \ln p_i \quad (1)$$

In this equation, $p_i = \frac{n_i}{10000}$, and it is the probability of a random number being in the i-th interval, and n_i is the number of random numbers in this interval.

3- Data Analysis

Descriptive statistics, frequency analysis, normality tests, and graph plotting were performed using GraphPad Prism version 9. Entropy calculations were also performed by using SPSS version 28.

References

1. Taheri, M. A., Payervand, F., Ahmadkhanlou, F., Torabi, S., & Semsarha, F. (2022). The Distinction of Taheri Consciousness Fields from Conventional Physical Fields: Evaluating the Magnetic Properties of Materials. *Journal of Cosmointel, 1*(4), 8–19.

2. Taheri, M. A., Payervand, F., Ahmadkhanlou, F., Yazdanparast, R., Torabi, S., & Semsarha, F. (2021). Investigation of the Effect of Consciousness Fields on the Mechanical Properties of Materials. *Available at SSRN 3955533*.

3. Taheri, M. A., Payervand, F., Ahmadkhanlou, F., & Semsarha, F. (2022). The Theory of the Existence of the "Mental Body in Matter" Based on the Experimental Laboratory Results and Taheri Consciousness Fields. *Journal of Cosmointel, 1*(4), 20–31.

4. Taheri, M. A., Mahdavi, M., Afsartala, Z., Amani, L., & Semsarha, F. (2022). The Influence of Faradarmani Consciousness Field on the Survival and Death of MCF-7 Breast Cancer Cells: An Optimization Perspective. *Journal of Cosmointel, 1*(6), 8–21.

5. Taheri, M. A., Moslehi, A., Payervand, F., Ahmadkhanlou, F., & Semsarha, F. (2023). Interpopulation Analysis of Function of Taheri Consciousness Fields in the Thermoluminescence Process. *The Scientific Journal of Cosmointel, 2*(11), 29–32. https://doi.org/10.61450/joci.v2i11.160

6. Taheri, M. A. (2013). *Human from Another Outlook*. Interuniversal Press. 2nd Edition. ISBN-13: 9781939507006-, ISBN-10: 1939507006 2013.

7. Taheri, M. A., Payervand, F., Ahmadkhanlou, F., Torabi, S., & Semsarha, F. (2021). Investigation of the properties of Tc-99m radioisotope and water contaminated with Tc-99m under the influence of Consciousness Fields. *Available at SSRN 3917935*.

8. Barbu A, Zhu S-C (2020) Introduction to Monte Carlo methods. In: Barbu A, Zhu S-C (eds) Monte Carlo methods. *Springer*, Singapore, pp 1–17.

9. Metropolis, N. (1987). The beginning of the Monte Carlo method. *Los Alamos Science 15* (Special issue): 125–130.

10. C. E. Shannon. (1948). A mathematical theory of communication, *The Bell Sys. Tech*. J., 27, 379.