

The Effect of Taheri Consciousness Fields on Survival and Infectivity of SARS-CoV-2 at Various Temperatures

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**Dr. Laleh Amani was an outstanding, compassionate, and enthusiastic researcher in the Cosmointel, Inc studies who passed away in 2021. We extend our sincere condolences and appreciation for her extraordinary efforts in this research and pray for her peace.

ABSTRACT

The SARS-CoV-2 virus that causes coronavirus disease 2019 (COVID-19) has become a serious global public health problem. Both laboratory and epidemiological investigations have revealed that ambient temperatures can affect the survival and transmission rate of coronaviruses. Taheri Consciousness Fields (TCFs) introduced by Mohammad Ali Taheri, are novel fields that are neither matter nor energy. Therefore, they are non-quantifiable and cannot be directly observed or measured. However, it is possible to demonstrate and measure the effects of these fields through standard scientific experiments. This study aimed to investigate the effects of two TCFs (A and B) on the survival and infectivity of the SARS-CoV-2 virus in different temperatures. For evaluation of the effect of TCFs on virus replication in different temperatures, CPE (cytopathic effect) monitoring, fifty-percent tissue culture infective dose (TCID₅₀), and virus RNA copy number were used. The results demonstrated that the association of the TCFs (A and B) with temperature can further reduce the infectivity and survival of SARS-CoV-2. The TCFs eliminated the virus at 56 °C for 30 min, but the virus was active in the control group. Also, TCFs significantly reduced the virus titer and RNA copy number at temperatures of 4 °C and 24 °C for 24h compared to the control group. In this study, for the first time, we showed that TCFs as a qualitative intervention can affect the survival of SARS-CoV-2 in different temperature conditions. Further studies are highly recommended to examine the effects of TCFs on viruses in different environmental conditions.

Keywords: Taheri Consciousness Fields, T-Consciousness, COVID-19, SARS-CoV-2, Temperature



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INTRODUCTION

Currently, the novel coronavirus (COVID-19) has affected many countries all around the world. Recent evidence suggests that respiratory droplets are the main route of transmission of the virus among people who are in near contact with each other. Also, contacting contaminated surfaces and touching eyes or mouth without washing hands may infect people (WHO 2020a).

Recently, many reports have been published regarding the role of environmental factors such as temperature and humidity in the transmission of the coronavirus (Yuan et al., 2020, Chi et al., 2021). It has been reported that the incidence of COVID-19 disease declined with increasing temperature however the association between temperature and transmission is negligible (Sehra et al., 2020). Laboratory and epidemiological surveys have revealed that ambient temperatures can affect the survival and transmission of coronaviruses. Furthermore, viral inactivation approaches are urgently required to allow safe experimental laboratory conditions (Batéjat et al., 2021, Cutts et al., 2016, Edwards 2000, Leclercq et al., 2014, Saluzzo et al., 1988).

The nature of consciousness and its place in science has received much attention in the current century. Many philosophical and scientific theories have been proposed in this area. In the 1980s, Mohammad Ali Taheri introduced novel fields with non-material/non-energetic nature named Taheri Consciousness Fields (TCFs). In this perspective, T-Consciousness is one of the three existing elements of the universe apart from matter and energy. According to this theory, there are various TCFs with different functions, which are the subcategories of a networked universal internet called the Cosmic Consciousness Network (CCN). The major difference between the theory of TCFs and other theoretical concepts about consciousness is related to the practical application of the TCFs. These fields can be applied to all living and non-living

creatures, including plants, animals, microorganisms, materials, etc.

Mohammad Ali Taheri, the founder of Erfan Keyhani Halqeh, a school of thought, introduced a new science in 2020 as a branch of this school. He coined the term Sciencefact for this new science because it utilizes scientific investigations to prove the existence of T-Consciousness as an irrefutable phenomenon and a fact. Although science focuses solely on the study of matter and energy and Sciencefact, by contrast, explores the effects of the [non-material/non-energetic] TCFs, Sciencefact has provided a common ground between the two by conducting reproducible laboratory experiments in various scientific fields, and it has used the scientific approach in proving TCFs.

The influence of the TCFs begins with the Connection between CCN as the Whole Taheri Consciousness of the universe and the subjects of study as a part. This Connection called "Ettesal" is established by a Faradarmangar's mind (a certified and trained individual who has been entrusted with the TCFs). The human mind has an intermediary role (Announcer) which plays a part by fleeting attention to the subject of study and then the main achievement obtained as a result of the effects of the TCFs. These fields cannot be directly measured by science, but it is possible to investigate their effects on various subjects through reproducible laboratory experiments (Taheri 2013).

The research methodology in the study of T-Consciousness has been founded on the process of *Assumption, Argument, and Proof*, in which the basic Assumption is: The Cosmos was formed by a third element called T-Consciousness that is different from matter and energy.

The Argument: The existence of TCFs can be demonstrated by its effects on matter and energy (e.g., humans, animals, plants, microorganisms, cells, materials, etc.)

The Proof: is the scientific verification of the effects of TCFs on matter and energy (according to the Argument) through various reproducible sci-

entific experiments.

Accordingly, to investigate and verify the existence, effects, and mechanisms of TCFs, the following five research phases (Phases 0 through 4), and the aims of each phase are outlined below.

Phase-0 studies aim to prove the existence of TCFs by observing their effects. The nature of T-Consciousness and what it is will not be addressed in this phase. Phase-1 explores the varied effects of different TCFs. Phase-2 examines the reason behind the varied effects of these fields. Phase-3 investigates the mechanism of TCFs effects on matter and energy. Finally, Phase-4 draws significant conclusions, particularly with regard to the *mind and memory of matter* and their relation to the T-Consciousness, etc.

In previous research, the effects of the TCFs on MCF7 cancer cell line (Taheri et al., 2020a), Alzheimer's disease rat models (Taheri et al., 2021b), spatial memory, and avoidance behavior of a rat model of Alzheimer's disease (Taheri et al., 2021c), wheat plant (Torabi et al., 2020), bacterial population growth (Taheri et al., 2021d), viral growth (Taheri et al., 2021a), and the electrical activity of the brain during the Faradarmani Connection in the Faradarmangars population (Taheri et al., 2020b) have been investigated.

The present work aimed to study the effects of the TCFs (A and B) on survival of SARS-CoV-2 exposed to various temperatures for different periods of time was evaluated and viral infectivity was assessed via the TCID₅₀ method and RNA copy numbers of SARS-CoV-2.

MATERIAL AND METHODS

Application of Taheri Consciousness Fields

TCFs were applied to the samples according to the protocols regulated by COSMOintel research center (www.cosmointel.com). A request for Connection to CCN to utilize TCFs can be placed through the COSMOintel website in the "Assign Announcement" section. This access is available for

everyone at no cost. In order to study and experience this Connection, the researchers can register on the site above at any time and in order to report the experiment to the COSMOintel research center. Certain details of the experiment must be provided to the center; for example, the characteristics or number and name of samples and controls must be specified.

This entire experiment was carried out as a double-blind method where lab technicians were completely unaware of TCFs theory, and the Faradarmangar at the COSMOintel research center who established the Connection was unaware of the details of the study. Double-blind is a gold standard that is common in science experiments in the field of medicine and psychology, involving theoretical and practical testing. In the present study, TCFs were used exactly at the same time as the start of temperature application in cell culture flasks in laboratory treatment groups.

Culturing of Vero cell and SARS-CoV-2

A T-75 flask of the confluent Vero cell line was trypsinized, centrifuged, and re-suspended in DMEM media with 10% fetal bovine serum (Gibco). Also, cells were subcultured and incubated at 37 °C and 5% CO₂ until 80% confluency.

The specimens isolated previously from the nasopharyngeal cavity of COVID-19-positive patients (Cycle threshold (CT) values 10 in Real-Time PCR analysis) were used for the present study. All examinations on the SARS-CoV-2 were performed in a laboratory with a biosafety level 3 facility (WHO 2020b). Comparative virucidal activity of different temperatures on TCFs treatment groups (A and B) and the control group separately were performed. So, SARS-CoV-2 propagations, Real-time PCR as well as TCID₅₀ assays were done before initiation of the study. For the TCID₅₀ assay (virus titration), cells and viruses were seeded in a 96-well plate, and results were evaluated by the Reed-Muench method (Reed et al., 1938). Finally, based on analysis of the result, virus culture with log TCID₅₀/mL



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(virus titer) ~6 and Ct value 11 was selected for inoculations into incubation with different temperatures in TCFs groups and control group.

Deactivation of SARS-CoV-2 virus at different temperatures

Comparison of virulence activity and reduction of infectivity of different temperatures was performed in the treatment and control group against SARS-CoV-2 based on the protocol of the European Standards NF EN 14476-A2 (<https://www.analytice.com/en/nf-en-14476-laboratory-biocide-efficacy-test>). Briefly, four μl of the 10^6 TCID₅₀/mL virus culture supernatant was placed at different temperatures according to the following profile: 4 °C and 24 °C for 24h, 56°C and 60°C for 30 min, 60°C for 60 min, 80°C and 92 °C for 30 min. Then, after concentration and recovery, the sample was transferred to 96-well plates for virus culture, TCID₅₀ assay, and Real-time RT PCR.

Virus precipitation (Concentration)

In this study, polyethylene glycol (PEG) precipitation was utilized for the concentration of the virus, and the elimination of cytotoxic agents of cell culture and/or PCR inhibitors from samples.

Therefore, they were mixed with 1.5 ml of the PEG 6000 stock solutions. The suspensions were agitated on a shaking incubator at 150 rpm for 8 h at 4 °C and the supernatant was centrifuged at $\times 3600$ g for 50 min. The supernatant containing PEG was removed, and the resultant pellet was dissolved in one mL phosphate-buffered saline (PBS) and re-centrifuged at $\times 4000$ g for 40 min. The supernatant was filtered through a 0.2 μm sterile membrane filter and 50 μl of which was added to the 96-well plate wells for virus titration (in triplicate) by TCID₅₀ assay and then incubated at 37 °C 5% CO₂. All the 96-well plates were monitored every 24 h for CPE (Cytopathic effect) and after six days' results were reported. Parallely, these processes were followed in flasks and each sample

was cultured in some cell culture flasks.

Real-time RT-PCR

The supernatant of samples cultured in flasks was directed for Real-time RT-PCR after six days. All reactions were performed in the Rotor-Gene-Q 6000 thermocycler (Corbett, Australia) based on the recommended protocol. The following ingredients were consumed: 0.1 μl RT enzyme, extracted RNA or blank, 4 μl Roche MasterMix, 0.5 μl primer-probe mix, and deionized RNase DNase free water. The heating program was 3 seconds at 55 °C, and 30 seconds at 95 °C (1 cycle); 3 seconds at 95°C, and 12 seconds at 60 °C (45 cycles); and 10 seconds at 40 °C (1 cycle) (Centers for Disease Control and Prevention [CDC], 2019).

STATISTICAL ANALYSIS

Data were analyzed by SPSS software (version 26) with a confidence level of 95%, to recognize any significance between treatments. ANOVA analysis was used to detect significant differences between samples.

RESULTS

Tables 1 and 2 display the results of the effect of TCFs on viability, titer, and RNA copy numbers of SARS-CoV-2. The experiments, as well as measurements, were performed in triplicate. The results of this study show that the paired application of temperature and TCFs can further reduce the infectivity and survival of SARS-CoV-2. For instance, at 56 °C under TCFs, the virus was completely eliminated. Also, as in Table 1, at 4 °C (refrigerator temperature) and 24 °C (room temperature) under TCFs, a significant difference (P value < 0.05) for both types of TCFs (A and B) were reported compared to the control groups which were kept in temperatures 4 °C and 24 °C, without applying TCFs. It reveals that TCFs play the main role in reducing infectivity and survival of the virus at these

temperatures. However, the results of applying TCFs at 60 °C on the virus's survival were similar to the control group. Since the temperature was high enough to eliminate the virus, the effect of TCFs cannot be demonstrated clearly.

DISCUSSION

Considerable efforts have been expended to explain the behavior of viruses in the environment (Sharma et al., 2020). According to a study, humidity and temperature exhibited negative relations with COVID-19, therefore countries with low humidity and temperature should pay more attention (Qi et al., 2020). Similarly, it has been found that the high temperature can increase the decay rate of SARS-CoV-2 on surfaces and can restrain the transmission of the virus (Biryukov et al., 2021). However, Xie and Zhu 2020 have report-

ed that there is no evidence supporting that COVID-19 decreases as the weather warms (Xie et al., 2020).

The results showed that the association of temperature with TCFs can further reduce the infectivity and survival of SARS-CoV-2. In our previous study, the effect of Faradarmani CF on viral growth was evaluated. Several viruses with DNA and RNA as well as enveloped or non-enveloped types were screened under the influence of the Faradarmani CF. It was found that this Field altered the titers of viruses by 0.4 to 1.85 logs compared to the control group. Therefore, the genome type of the viruses and their physical structure may have significant effects on their response to the Faradarmani CF (Taheri et al., 2021a).

In conclusion, it seems that in addition to healthcare, TCFs can be considered as a qualitative intervention to prevent COVID-19 infection.

Table1. SARS-Cov-2 titer in the studied groups.

No.	Temperature/ Exposure time	Initial	Virus titer (TCID50)		
			Control group	TCF(A)	TCF(B)
1	4 °C for 24h	1×10 ⁶	1 × 10 ^{5.7}	1×10 ^{5*}	1×10 ^{4.7*}
2	24 °C for 24h	1×10 ⁶	1×10 ^{5.5}	1×10 ^{4.2*}	1×10 ^{4*}
3	56 °C for 30 min	1×10 ⁶	1×10 ²	ND*	ND*
4	60°C for 30 min	1×10 ⁶	ND/ND ³	ND	ND
6	60°C for 60 min	1×10 ⁶	ND	ND	ND
7	80°C for 30 min	1×10 ⁶	ND	ND	ND
8	92°C for 30 min	1×10 ⁶	ND	ND	ND

The asterisk (*) displays a significant difference (p<0.05) between the TCFs treatment groups compared with control groups. ND: Not detected, ND³: detected in some samples (10³), TCFs: T-Consciousness Fields.

Table2. SARS-Cov-2 titer in the studied groups.

No.	Temperature/ Exposure time	Initial	Virus titer (TCID50)		
			Control group	TCF(A)	TCF(B)
1	4 °C for 24h	4×10 ⁶	3.2 × 10 ⁶	2×10 ^{6*}	2×10 ^{6*}
2	24 °C for 24h	4×10 ⁶	3×10 ⁶	2×10 ^{6*}	1.8×10 ^{6*}
3	56 °C for 30 min	4×10 ⁶	1×10 ³	1×10 ^{2*}	1×10 ^{2*}
4	60°C for 30 min	4×10 ⁶	1×10 ^{2.2}	1×10 ²	1×10 ²
6	60°C for 60 min	4×10 ⁶	1×10 ^{2.5}	1×10 ²	1×10 ²
7	80°C for 30 min	4×10 ⁶	1×10 ²	1×10 ²	1×10 ²
8	92°C for 30 min	4×10 ⁶	1×10 ²	ND	ND

The asterisk (*) displays a significant difference (p<0.05) between the TCFs treatment groups compared with control groups. ND: Not detected, TCF: T-Consciousness Field

However, further research is recommended to investigate the effects of TCFs on different viruses and their variants.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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