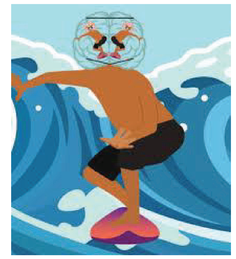
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Experimental Evidence of Taheri Consciousness Fields (TCFs) Reducing Randomness in Quantum Systems

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Introduction

Taheri Consciousness Fields (TCFs) : introduced by Mohammad Ali Taheri in the 1980s, are proposed as non-material and non-energetic phenomena with distinct functions. Within this framework, the universe comprises matter, energy, and T-Consciousness, with T-Consciousness proposed as the source of information governing the informational or “software” aspect of physical systems. (Taheri, 2013).

TCFs are not proposed to be directly measurable by conventional instruments. Their effects can instead be investigated through controlled, repeatable experiments by measuring changes in physical systems exposed to TCFs and comparing them with appropriate controls.

Previous studies have investigated TCF effects in pseudo-random number generation, Monte Carlo simulations, and biological and physical systems. The present study extends this approach to true random number generation based on physical quantum processes.

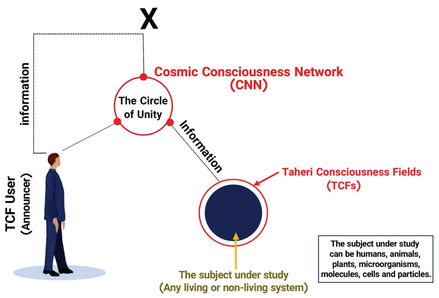


Figure 1. Schematic picture of the application of Taheri Consciousness Fields (TCFs).

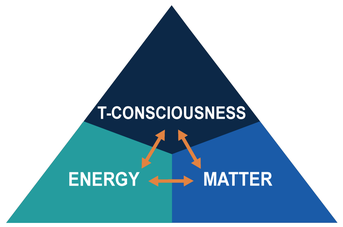


Figure 2. The relationship between T-Consciousness, matter, and energy in the theory of T-consciousness according to Taheri.

Objective

To investigate whether exposure to different types of T-Consciousness Fields (TCFs) produces measurable changes in the statistical properties and entropy of quantum-generated random numbers.

Experimental Design

Two independent physical random-number-generation systems were investigated:

1. Laser -based QRNG: A gain-switched laser system generates spontaneous-emission pulses below threshold. Quantum phase fluctuations are converted into intensity fluctuations through an interferometric phase-conversion stage and recorded as random output values.

2. LED -based QRNG: A physical random-number generator based on fluctuations associated with spontaneous emission from an LED was used as an independent experimental system.

TCF Conditions : Control (no TCF exposure); TCF1; TCF2-E (TCF2 with the specific intention of reducing entropy); TCF2-I (TCF2 with the specific intention of increasing output voltage); TCF2-D (TCF2 with the specific intention of decreasing output voltage); TCF3;

Experimental Design

Data Acquisition and Analysis:

For the laser-based QRNG, 15,000 random values were collected for each control and experimental population. Data were recorded sequentially, with each acquisition lasting approximately 18 minutes.

For temporal analysis, each 15,000-value population was divided into six sequential subpopulations of 2,500 values, corresponding to approximately 3-minute intervals.

The LED-based system generated 10 million 12-bit binary random values for each experimental sample. Data were analyzed both as complete populations and as sequential temporal subpopulations.

Shannon entropy was used as a measure of the information distribution, while Min-entropy was used as an indicator of the degree of randomness associated with the generated values.

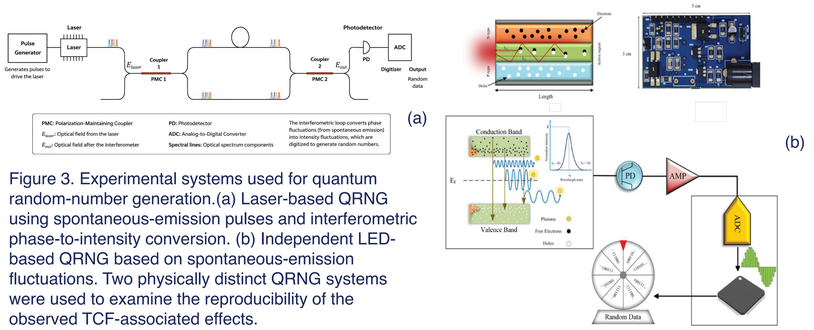


Figure 3. Experimental systems used for quantum random-number generation.(a) Laser-based QRNG using spontaneous-emission pulses and interferometric phase-to-intensity conversion. (b) Independent LED-based QRNG based on spontaneous-emission fluctuations. Two physically distinct QRNG systems were used to examine the reproducibility of the observed TCF-associated effects.

Results - Laser -based QRNG

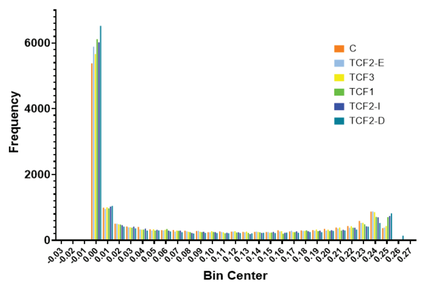


Figure 4. Distribution of laser-based QRNG output values under control and TCF conditions.

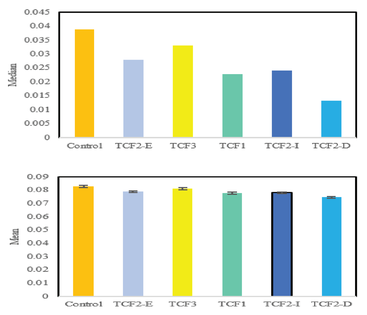


Figure 5. Mean and median values of laser-based QRNG outputs.

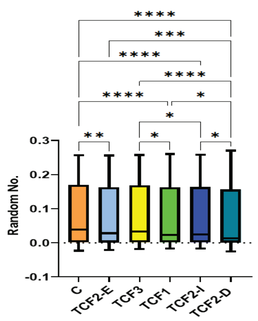


Figure 6. Statistical comparison of laser-based QRNG output distributions. ns: Not significant, *: p-value<0.05.

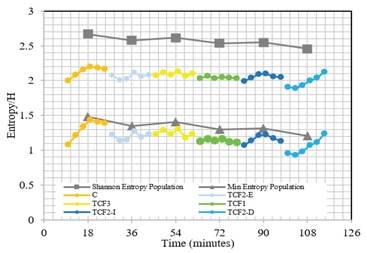


Figure 7. Temporal variation of Shannon entropy and Min-entropy in the laser-based QRNG.

Results - LED -Based QRNG

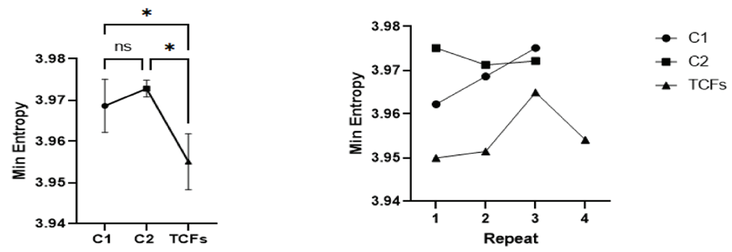


Figure 8. Min-entropy of LED-based QRNG outputs under TCF conditions.

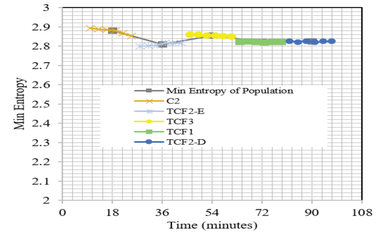


Figure 9. Temporal variation of Min-entropy in the LED-based QRNG.

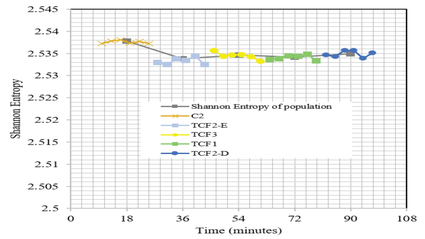


Figure 10. Temporal variation of Shannon entropy in the LED-based QRNG.

Conclusion

- TCF exposure was associated with reduced randomness and entropy in quantum-generated random numbers.
- Laser QRNG outputs showed 2–10% lower means and 15–66% lower medians under TCF conditions.
- TCF2-D showed the strongest effect : Shannon entropy decreased 7.9% and Min-entropy 18.8% relative to control.
- Statistical analysis showed significant differences for most TCF conditions , with TCF2-D significantly different from all other populations.
- Distributional shifts were observed in the laser QRNG, with reduced frequencies in intermediate values and increased frequencies toward the extremes.
- Temporal analysis revealed distinct response patterns between control and TCF-treated populations, indicating changes beyond overall population averages.
- Independent LED -based QRNG measurements reproduced the principal pattern , supporting the repeatability of the observed effects.

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