

---

## **Pilot design and validation of a deliberate self-harm inhibitory control training application**

Parisa Pedram<sup>1</sup>

Seyedeh Monavar Yazdi<sup>\*2</sup>

ShokoohSadat Banijamali<sup>3</sup>

Shaghayegh Zahraei<sup>4</sup>

---

### **Abstract**

**Aim.** The purpose of this study was to design and evaluate the validity and reliability of a smartphone application for inhibitory control of deliberate self-harm behaviors among adolescents. **Methods.** The study was a descriptive research of correlational type. The population consisted of all girls admitted to Roozbeh Psychiatric Hospital who had deliberate self-harm behaviors during the past year. Using purposeful sampling method, a sample of 15 adolescent girls (aged 14-18) admitted to Roozbeh Psychiatric Hospital, who had deliberate self-harm behaviors were selected and evaluated using semi-structured clinical interview, Raven IQ Test, Deliberate Self-Harm Survey, and Go-NoGo Test. Test-retest reliability, internal consistency and concurrent validity of inhibitory control training and Go-NoGo Test were evaluated using Pearson correlation analysis. **Results.** The results indicated that the correlation coefficients of internal consistency reliability, and test-retest reliability were significant ( $P < 0.001$ ). Correlation coefficient of concurrent validity for reaction time and error ratios were significant ( $P < 0.001$ ). Statistical analysis indicated the reliability and validity of this application. **Conclusion.** It seems that this application can be used as an intervention to increase response inhibition, especially in those who deliberately harm themselves.

### **Keywords**

*Inhibitory control training, validation, deliberate self-harm.*

---

1. Ph.D. student, Department of Psychology, Faculty of Educational Science and Psychology, Alzahra University, Tehran, Iran.

2. Corresponding Author: Professor, Department of Psychology, Faculty of Educational Science and Psychology, Alzahra University, Tehran, Iran. [sm.yazdi@alzahra.ac.ir](mailto:sm.yazdi@alzahra.ac.ir)

3. Associate Professor, Department of Psychology, Faculty of Educational Science and Psychology, Alzahra University, Tehran, Iran.

4. Assistant Professor, Department of Psychology, Faculty of Educational Science and Psychology, Alzahra University, Tehran, Iran.