

VALIDATION OF VIRTUAL REALITY EXPOSURE THERAPY - COGNITIVE RESTRUCTURING MODUL IN REDUCING SYMPTOMS OF ACROPHOBIA

ABSTRACT

Acrophobia is one type of specific phobic disorder that is commonly treated using exposure therapy. The presence of virtual reality technology is one alternative that can minimize security risks for clients by presenting a virtual three-dimensional stimulus. This study aimed to produce a valid virtual reality exposure therapy-cognitive restructuring (VRET-CR) module in reducing acrophobia symptoms. A pretest-posttest control group desing was used. 27 participants were randomly assigned to experimental (n=13) and control (n=14) group. Independent sample t-test showed a significant difference in the gain score of the acrophobia questionnaire (AQ) 1 [$t(17.08) = -6,173$; $p < 0.05$] and AQ 2 [$t(25) = -4,250$; $p < 0.05$] between the experimental and control groups. This is supported by the decreasing score of state-trait anxiety inventory (STAI) and autonomic perception questionnaire (APQ) between six exposure sessions. However, significant changes in physiological reactions occur only in the heart rate indicator; while there were no significant changes in the respiratory rate and skin conductance indicators. The results showed that the VRET-CR module in reducing symptom acrophobia were valid.

Keywords: acrophobia, virtual reality exposure therapy, cognitive restructuring, physiological responses

VALIDASI MODUL *VIRTUAL REALITY EXPOSURE THERAPY - COGNITIVE RESTRUCTURING* UNTUK MENURUNKAN SIMTOM ACROPHOBIA

ABSTRAK

Acrophobia merupakan salah satu tipe gangguan fobia spesifik yang umumnya ditangani menggunakan terapi eksposur. Hadirnya teknologi *virtual reality* menjadi salah satu alternatif yang dapat meminimalisir risiko keamanan bagi klien dengan menyajikan stimulus tiga dimensi secara virtual. Penelitian ini bertujuan untuk menghasilkan modul *virtual reality exposure therapy-cognitive restructuring* (VRET-CR) yang valid dalam menurunkan simtom *acrophobia*. Penelitian menggunakan *pretest-posttest control group design* dengan melibatkan 27 partisipan dengan simtom *acrophobia* yang dibagi secara acak (13 kelompok eksperimen dan 14 kelompok kontrol). Hasil uji *independent sampel t-test* menunjukkan adanya perbedaan *gain score acrophobia questionnaire* (AQ) 1 [$t(17,08) = -6,173$; $p < 0,05$] dan AQ 2 [$t(25) = -4,250$; $p < 0,05$] yang signifikan antara kelompok eksperimen dan kontrol. Hal ini didukung dengan menurunnya skor *state-trait anxiety inventory* (STAI) dan *autonomic perception questionnaire* (APQ) dalam enam sesi paparan. Akan tetapi, perubahan respons fisiologis yang signifikan hanya terjadi pada indikator *heart rate*, sementara tidak dihasilkan perubahan signifikan pada indikator *respiratory rate* dan *skin conductance*. Hasil penelitian menunjukkan bahwa modul VRET-CR dalam menurunkan simtom *acrophobia* terbukti valid.

Kata kunci: *acrophobia, virtual reality exposure therapy, cognitive restructuring, respons fisiologis*