

ABSTRACT

Background: Today, making utilize of recreation has turned into a life style. Individuals make use of various recreational activities in different areas and places. Taking part in recreational activities, especially outdoors, can greatly improve physical health. People, who take part in park activities such as walking, hiking, or skiing, schedule fewer office visits, maintain lower body fat percentages and have lower blood pressure and cholesterol levels. Although recreational games was proven to be a useful physical activity to stimulate some health benefits, we do not know if there are significant benefits of recreational games played on a smaller area with fewer players in the adult population. Because exercise is known to increase blood flow and oxygen to the skeletal muscles and the brain, it was inferred that exercise would also affect an individual's reaction time. The recreational games intervention was empowering, as participants perceived themselves as having done what they had originally thought was unimaginable These positive changes may affect their behaviors, therefore it may have the management's work and contributions to their normal life with a positive experience to anticipate is equally as enjoyable as the activity itself when performed two to three times per week. **Aims:** The present study aimed to determine whether recreational games could improve Psy-Neuro-Physiological components among adult tribals after 16 weeks of training. **Methodology:** To accomplish the purpose of the study, forty healthy adult tribals from Village Pandri, Bankura district, West Bengal, India were randomly selected as subjects and their ages ranged from 50 to 55 years (52.4 ± 2.48). The subjects were classified into two experimental groups (male and female), each group was constituted with twenty subjects. Introduced to the both experimental group (n=20) for the period of sixteen weeks recreational games training programme was given thrice alternation day in a week in each session for duration of approximately 35 to 65 minutes (Include Warm up, Warm Down and Recovery periods). Pre training, mid training (after eight weeks) and after training (end of Sixteen weeks) the intervention period, Psycho-Neuro-Physiological variables were assessed. The simple random sampling and single group repeated measure design was adopted in this study and the obtained data were evaluated statistically at ($p < 0.05$) level.

Results: Results from a repeated measure ANOVA indicated a time interaction (pre training, mid training and after training) for Psychological variables (Self Esteem, Life satisfaction, Locus of control and Self efficacy) were significantly improved ($p < 0.05$) in both experimental groups, with no significant changes were observed in both groups for Neuropsychological variables (Illusion, Tactile Sense, Hand Eye Co-ordination, Gross movement of hands, finger and arms, Depth Perception and Reaction time) and Physiological variables (Resting Heart rate, Systolic blood pressure and Diastolic blood pressure). The results concluded that Recreational games can be an effective training modality to stimulate a decrease in Neuropsychological and Physiological variables with small improvements.

Conclusion: Participating in weekly recreational games the participants perceived an improved Psycho-Neuro-Physiological variables (Self esteem, Life satisfaction, Locus of control and Self efficacy). Recreational games based training is an effective modality to gain positive psychological benefits, such as a sense of optimism, happiness, affirmative moods and feelings of adult tribals. Engagement in recreational games experienced health promotion fostered positive social interactions and optimistic views of their own health, which is a critical predictor of psychological well-being and survival in later life. However, participating in recreational activities helps improve some health and performance benefits teach new techniques to enjoy familiar activities and well into later life should increase the frequency of recreational games.

Keywords: recreational games; recreational activities; adult tribals; psycho-neuro-physiological variables, leisure time activity