

Extended Abstract

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Research paper

The Effectiveness of Handicraft Training on Self-Esteem of Mentally Retarded Adolescents

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Introduction

Individuals with intellectual disabilities face various social and emotional challenges. One prevalent issue among this population is low self-esteem (Ung et al., 2022). Employment difficulties, financial concerns, repeated experiences of failure, and lack of adequate social support are significant risk factors for psychological distress. Furthermore, being labeled and stigmatized as having an intellectual disability, along with the consequent lack of positive social experiences, increases their vulnerability to low self-worth (Nezo & Nezo, 1994). Art therapy, a non-verbal therapeutic approach, is recognized as a powerful tool for improving brain- and nervous system-related disorders. This method is especially effective when brain impairments cause cognitive, emotional, or behavioral difficulties. By activating various brain regions, particularly those associated with creativity, memory, and emotional regulation, art therapy can enhance cognitive functioning and reduce symptoms of conditions such as anxiety, depression, and brain injuries (Malchiodi, 2020).

Multiple studies (Fraser & Keating, 2014; Shukla et al., 2022) have demonstrated that art therapy positively impacts self-esteem, hope, social support, and mental health. Given the critical role of self-esteem in promoting growth and well-being among individuals with intellectual disabilities, employing creative and engaging interventions to improve self-esteem is essential. Therefore, the present study aims to examine the effectiveness of an intervention program involving pottery and jewelry-making training to enhance the self-esteem of adolescents with intellectual disabilities.

Method

The present study employed a quasi-experimental design with a pre-test, post-test, and control group. The statistical population consisted of all female students with intellectual disabilities

enrolled in vocational high schools (both lower and upper secondary levels) across various cities in Tehran province during the 2018–2019 academic year. Using convenience sampling, two schools from the cities of Baharestan and Islamshahr were selected.

From these schools, 30 students were purposefully selected based on a review of their academic records and eligibility criteria. The participants were then randomly assigned into three groups of ten each: a pottery-making training group from Masoomin School, a jewelry-making training group also from Masoomin School, and a control group from Mohadethe School. The participants' ages ranged from 18 to 23 years. Parental consent forms were obtained for all students before participation. The research instrument was the [Cooper Smith Self-Esteem Inventory](#) (1967). The intervention programs consisted of pottery-making and jewelry-making training, each conducted over 12 sessions. Both programs were held twice weekly, with each session lasting 90 minutes. Data collected were analyzed using SPSS software.

Results

The results of the ANCOVA test indicate that training in jewelry making and pottery significantly improved the self-esteem of educable students with intellectual disabilities ($p < 0.001$). Moreover, the effect size of 0.63 suggests that 63% of the variance in self-esteem differences between the groups can be attributed to these training programs. In other words, 63% of the observed improvement in self-esteem among the participants was due to the jewelry making and pottery interventions.

The obtained statistical power for the analysis (power = 1) confirms the adequacy of the sample size, indicating that if this study were repeated 100 times, the same result would be expected in all instances. The Bonferroni post hoc test results (Table 1) show a significant difference in self-esteem between each of the two experimental groups and the control group ($p < 0.05$). However, there was no significant difference between the two experimental groups themselves ($p > 0.05$). This suggests that both training methods had a significant positive effect on the self-esteem of educable students with intellectual disabilities compared to the control group, leading to increased self-esteem among participants.

Table 1: The results of the pairwise comparison of differences in the experimental and control groups

Dependent variable	Group		Mean difference	Standard error	Sig
Self-esteem	Jewelry training	Pottery training	16.2	1	0.35
		Control	17.75	18	0.001
	Pottery training	Jewelry training	0.45	1	0.89
		Control	27.11	18	0.001

Discussion and Conclusion

The present study aimed to investigate the effect of handicraft training on improving the self-esteem of adolescents with intellectual disabilities. The findings indicate that pottery and jewelry-making training significantly improved the self-esteem of these students. These results align with the findings of [Abedi \(2007\)](#) and [Fraser & Keating \(2014\)](#). In explaining these findings, it can be suggested that engaging in artistic activities and showcasing their artwork to others helps these adolescents develop a sense of self-worth, thereby enhancing their self-esteem. Moreover, active participation in artistic activities, combined with discussion and feedback on each other's work,

fosters better social interaction and the formation of positive relationships among participants (Arslan, 2014). Finally, it is recommended that future research explore the effects of other handicraft disciplines on various developmental aspects of children and adolescents with intellectual disabilities.

Ethical Considerations

Ethical Code

This study adhered to ethical principles, including obtaining informed consent from all participants and ensuring the confidentiality and privacy of their information. The research was registered with the Educational and Graduate Studies Office of the Faculty of Psychology and Educational Sciences, University of Tehran.

Financial Support

This study did not receive any financial support.

Authors' Contributions

First Author: Supervised the research, prepared the initial manuscript draft, designed the methodology, and conducted statistical analyses. Second Author: Provided supervision and training. Third Author: Managed implementation, training, and data collection. Fourth Author: Edited and revised the manuscript.

Conflicts of Interest

This research is part of a doctoral dissertation supported by the Sanandaj Branch of Islamic Azad University. The authors declare no conflicts of interest.

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