Protocol study and Statistical analysis plan

Effect of Parenting Training on Quality of Life and Parenting in Parents Who Have Children with Intellectual Disabilities

20 December 2024

Design

This study used a quasi-experimental design, which was conducted based on a pretest-posttest control group.

Samples

One hundred and forty-one mothers with ID children attending special schools in East Java, Indonesia, were recruited and divided into intervention (N=71) and control group (N = 70) according to a special school using a convenience sampling method. We estimated that a minimum of 60 participants in each group would be required using the G.power 3.1.9.7 application, with an effect size of 0.335, and a power of the test (1-β) = 80%. The inclusion criteria were

- having a child aged 7-18 years who has mild and moderate intellectual disabilities
- living in the same house as a child with intellectual disabilities,
- being able to communicate fluently

The exclusion criteria were

- having disabilities
- having a child with intellectual disabilities who has a chronic disease
- having a child with intellectual disabilities and other disabilities

Instrument

Parenting quality was evaluated using the Parenting Sense of Competence (PSOC) developed by Gibaud-Wallston and Wandersman, adapted from Johnston and Marsh (Cronbach Alpha=0.79) (Johnston & Mash, 1989). Quality of life was evaluated using the World Health Organization Quality of Life (WHOQOL-BREF) (Cronbach Alpha= 0.66-0.8) developed by the WHO (Group, 1994). The WHOQOL-BREF consists of four domains (physical health, psychological, social relationships, and environment) with 26 questions. The total score for each domain is transformed to a scale of 0-100 according to the scoring guidelines. The PSOC consists of the domains of satisfaction and self-efficacy with parenting, which are assessed with 16 questions, with a satisfaction score ranging from 9 to 54 and a self-efficacy score from 7 to 42.

Intervention

The control and intervention groups were given a parenting guidebook for children with ID. The intervention group received approximately three hours of parenting training once a week for 5 weeks. The intervention group received parenting training focused on understanding children with ID in the first week, practical parenting skills in the second week, and how to provide emotional support and regulate parental emotions in the third week. Knowledge and skills were reinforced in the fourth and fifth weeks. The intervention group received training in small groups, each consisting of only 10 participants. The training involved experts in mental health counseling, pediatric nurses, special school teachers, and a motivator.

Data Collection

The PSOC and WHOQOL scores were measured by a researcher who was not blinded to the study from January to August 2025 at the school.

Data analysis*;*

SPSS version 23 was used to analyze the data. Categorical variables were reported as frequencies and percentages. Continuous variables were reported as median and standard deviation (SD). The Kolmogorov-Smirnov test was used to confirm normal distribution. The Wilcoxon and Mann-Whitney U tests were used for continuous variables with non-normal distributions, as well as the Chi-squared test for qualitative variables. The Wilcoxon and Mann-Whitney U tests were used for continuous variables with non-normal distributions. A p-value of less than 0.05 was considered statistically significant. The point-biserial correlation test was used to evaluate the effect size. SPSS version 23 was used to analyze the data. Categorical variables were reported as frequencies and percentages. Continuous variables were reported as median and standard deviation (SD). The Kolmogorov-Smirnov test was used to confirm normal distribution. The Wilcoxon and Mann-Whitney U tests were used for continuous variables with non-normal distributions, as well as the Chi-squared test for qualitative variables. The Wilcoxon and Mann-Whitney U tests were used for continuous variables with non-normal distributions. A p-value of less than 0.05 was considered statistically significant. The point-biserial correlation test was used to evaluate the effect size.