ASSESSMENT OF DIFFERENT METHODS OF TEACHING SCHOOL CHILDREN MATHEMATICAL OPERATIONS OF TWO FOUR-DIGIT NUMBERS USING ONE WAY MULTIVARIATE ANALYSIS OF VARIANCE

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Man is made through learning since child's brain is a tabular laser from birth. It grows through nature, nurture and controversy which when properly guided and directed produces an icon. Mathematics/Statistics mothers all other information obtained since it guides human activities unto usefulness of purpose; thus the topic of this research aimed at investigating if any of the methods is more understood than the other. Different methods applied in teaching a child the basis of mathematics go a long way in the impartation of the course which so many viewed as being an insurmountable mountain though not true\real. MANOVA assumptions were checked using first the Box's Test which tests the equality of covariance matrix. With the significant level of 0.585 which is greater than the α-level of 0.05, we accept the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. Bartlett's test of sphericity was used to examine whether a variance-covariance matrix is proportional to the identity matrix. It is an effective test to check whether diagonal elements of the variance-covariance matrix are equal {ie group variances are the same} and also if the off-diagonal elements are approximately zero {ie the dependent variables are uncorrelated. With significant level of 0.000, we reject the null hypothesis of independence and conclude that the variables are correlated. Levene's Test is used to test for equality of variance. With the significance values greater than the α-level of 0.05, we conclude the homogeneity of variance. Four multivariate tests which include Pillai's trace, Wilks' Lambada, Lawley Hotelling's Trace and Roy's largest Root which is used to test for the equality of the mean vectors of the three methods were employed to test the performance of three independent groups{three methods} using one way multivariate analysis of variance {MANOVA}. The result of the analysis indicates that each played different role on the child's understanding and that all be applied. Post Hoc test were conducted using multiple comparison test which showed story method with higher mean difference than the other two in addition while concrete method has higher mean difference in subtraction than the other two methods