

## **P-377 - FACTORS GOVERNING COGNITIVE FUNCTION OF PRIMARY SCHOOL CHILDREN IN PAKISTAN**

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**Objectives:** The primary objective of this study was to identify the factors governing cognitive function of primary school children in Pakistan.

**Design:** This was a prospective observational study conducted in 2 governments and 2 low class private public schools in a small district of Pakistan.

**Method:** Two hundred children (90 male,110 female), age 7-12 years class 3, 4 and 5 were assessed using McCarthy scale of child cognition. Child health, immunization status/immunization compliance, play facilities, parental education, parental income, child parenting (mother/father/both/relatives), parent-child interaction time, family system (single/extended), family income were assessed against child cognitive function.Data was analysed using SPSS 18.

**Results:** Girls demonstrated better mathematical ability and memory ( $p < 0.05$ ). 5.5% children may have missed / poor compliance with immunization. 1.5 % children were parented by single mother, 3 % with fathers and 0.5 % were parented by with relatives. Better play facilities, compliance with immunization, parental education, parental income, a minimum of 3 hours interaction time had a positive impact on child cognitive function (all  $p < 0.05$ ). Single family system was observed in 62 %, extended family system 38% children. Extended family system was not associated with adverse child cognition ( $p > 0.05$ )

**Conclusion:** Better health, play facilities, immunization, parental education, parental income, a minimum of 3 hours interaction time has a positive impact on child cognitive function. Overall girls demonstrated better cognitive skills compared to boys. Family system (single/extended) does not effect the child cognition and development in rural areas of Pakistan.