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Hand-Eye and Arm-Shoulder Co-ordination In various Ages of Teenage Classes Youngsters

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Abstract – The authors chose to comprehend and dissect the autonomous motor capability parts around the male school children from basing on the age groups 8-10 years, 10-12 years, 12-14 years what's more 14-16 years. We have brought 200 scholars with 50 understudies in each one assembly as example for the present study. To measure the hand-eye coordination, arm-shoulder coordination and element parity the tests like Wall past test, soft ball throw execution and Modified Bas element offset test was directed. The data dissected with Analysis of Covariance (ANCOVA) taking the pretest furthermore post-test scores of the motor capacity segments of the people to know the huge distinction around the four groups. The accompanying conclusions were drawn from the present exploration study. (i) 12 to 14 years age bunch children demonstrated more noteworthy upgrades in hand–eye

coordination factor of motor capability when contrasted with the other three groups of children, (ii) 10 to 12 furthermore 12 to 14 years age children groups encountered critical enhancements in arm-shoulder coordination factor of motor capability, when contrasted with both the 8 to 10 and 14 to 16 years age children, 12 to 14 years age bunch children demonstrated more critical enhancements in dynamic equalization factor of motor capability, when contrasted with the other three groups of children. Catchphrases: Hand-eye coordination, Arm-shoulder coordination, Dynamic Balance and Adolescent.

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INTRODUCTION

For being physically fit to take part in essential and energetic developments, the people requirement to have the qualities like rate, quality, continuance, adaptability and coordination. Thus, to take part in a physical exercises a singular separated from controlling the above general fitness parts may as well additionally have least physical fitness. In the meantime including in physical exercises will enhance the distinct's status of physical fitness. Be that as it may, to be healthier and to lead disease free quality life, a singular may as well additionally have different parts like cardio-respiratory, furthermore circulatory perseverance, and perfect body organization. This new notion is presently termed as Health Identified Physical Fitness. The health identified physical fitness, which incorporates the segments of muscular quality; muscular perseverance, cardio respiratory continuance, adaptability and perfect body piece could be produced with upgrades by and large physical fitness. In this hunt, the physical educationists are intrigued to know the fitness thoughts that are of service for looking after great health and carriage since youth and likewise of service for generating fine aptitudes to take part and outperform in sports competitions. For both these reasons the fitness is extremely vital. The fitness is distinguished as physical fitness. Anyway, since the contribution in fitness projects obliges motor fitness at ideal levels to have the ability to take an interest in different brandishing aptitudes. The motor fitness is additionally a significant essential to build oneself as an extraordinary sportsperson with remarkable complex expertise prospectively. Change all in all physical fitness and additionally the health identified physical fitness can be achieved by including in different fitness system like running, moving, partaking in games, taking part in different amusements exercises and so forth. Anyhow, to take part in different physical abilities, a single person's motor fitness levels ought to be ideal to suit the developments chose. The motor fitness requests development and combination of motor capacity segments. The parallel improvement of Motor fitness also Physical fitness is exceptionally vital at the improving age. This guarantees the kid to end up prospective gifted sportsperson and additionally exceedingly fit single person. The present study might carry some useful proof, on the effect of kinesthetic sense on the development and motor execution advancement.

The study furnishes information on the advancement examples of the motor capacity and its identified notions, particularly with connection to the age of the subjects. The study will launch all the more such inquires about and can push center investment in the space of motor execution and its identified topics, particularly of the motor capability of the people.

The reason for the study was to analyze and break down on responsiveness in motor capacity single person parts according to the chose physical developments, around the male school children in the

age groups of 8 to below 10 years, 10 to below 12 years, 12 to below 14 years and 14 to below 16 years, and to discover if there existed any distinction on the chose rule variables.

REVIEW OF LITERATURE

Karim Salehzadeh, Ali Karimiasl, Saba Borna, Mohsen Shirmohammadzadeh (2011) inspected the impacts of eight weeks of quality preparing, Plyometric, and combo preparing on element equalize in teenage Handball player. 40 teenage Handball players with the methods and standard deviation between the ages of 93.16 years, weight of 39.72 kg and with the tallness of 73.176 what's more any indications of easier body damage, blood vessel issue took an interest voluntarily. The day preceding preparing for eight weeks, subject's element equalization is measured by SEBT test. Throughout eight weeks in which 3 groups did their particular trainings, Control aggregation were asked to proceed their every day exercises.

Spellbinding detail, one way ANOVA and Tukey's post hoc test were utilized at essentialness level for factual analysis of the given data. Outcomes demonstrated that quality trainings, Plyometric also combinational have critical build in subjects accomplishment remove in eight headings SEBT. Additionally, synthesis of quality preparing and plyometric and plyometric preparing in examination with quality preparing makes more change in subject's dynamic balance.

METHODOLOGY

Selection of the Subjects : The exploration issue chose was to comprehend and investigate the autonomous motor capability segments around the male school children from 8 to 16 years basing on the age groups, for instance 8 to 10 years, 10 to 12 years, 12 to 14 years and 14 to 16 years. The analyst required four groups of school children. For this the analyst took the assistance of the Physical Education Teachers to haphazardly select and keep them primed for the testing protocol masterminded by the exploration researcher. A total of 200 scholars with 50 people in each one assembly speaking to four age groups were included in the examination study. Along these lines, there were four groups called 8 to below 10 years assemble (8 to 10 assembly for the study), 10 to below 12 years bunch (10 to 12 assembly for the study), 12 to below 14 years assemble (12 to 14 gathering for the study) and 14 to below 16 years bunch (14 to 16 assembly for the study) with 50 children in each group.the determination of the subjects was simply on the irregular foundation without any inclination, selecting from the participation sheets of the learners in the wake of counseling the concerned physical education instructor. For this reason the entire Osmania college region was isolated on land foundation into four sections also from each one section fifty subjects were drawn as recently illustrated prior. Estimation of Hand- Eye Coordination.

By measuring the Wall pass test. Bearings: The subject stands behind a controlling line that is drawn 9 feet from the divider. On the indicator to start subject passes the ball against the divider in any way he picks. He endeavors to get the bounce back and toss it again however many times as would be prudent for 15 seconds. For the go to be lawful, both of the subject's feet must stay behind the controlling line. Scoring: The score is the amount of times the ball hits the divider in the 15 seconds.

Estimation of Arm-Shoulder Coordination By measuring the soft ball throw execution. Bearings: The subject was permitted three trials. A short run was permitted, yet the subject none, of these must nor venture over the controlling line. Scoring: The best of three trails are recorded. Separation was measured to the closest foot.

Estimation of Dynamic Balance Modified Bas element offset test protocol was utilized. The stamped territory for the test was 30 inches to 180 inches and eleven tape bits of one by three fourth inch were utilized as indicators according to the test protocol. Beginning with the right foot on the beginning imprint, the entertainer jumps to the first tape mark with the left foot and tries to hold an unfaltering position on the ball of the foot for up to five seconds. He then jumps to the second tape with the right foot et cetera, substituting the feet from tape to tape. The score for each one imprint adequately arrived on was five focuses, what's more also one focus was honored for each one second the offset was held up to 5 seconds and consequently most extreme conceivable score was 100 focuses.

Measurable Technique Used: The scientist examined the data with assistance of Analysis of Covariance (ANCOVA) taking the pretest and posttest scores of the motor capacity parts of the people to know whether there was any noteworthy distinction around the four groups in the responsiveness on them in light of the trial developments.

ANALYSIS AND INTERPRETATIION OF DATA

Analysis on the Hand - Eye coordination factor of the Motor ability measured by wall pass performance:The table I depicts that there is significant influence of the selected experimental variables on the Hand – Eye coordination aspect of the Motor ability measured through the Wall pass performance, since the obtained F value i.e. 19.75 is more when compared to the table F Value of 2.66.

Source	Df	SS	MS	F	Cr.F
BG	3	42.02594	14.00865	19.75425	2.66
WG	196	138.9926	0.709146		
Total	199	181.0186			

Table I Analysis of Covariance for Wall Pass.

Table II depicts the post test means and also the adjusted post test means of the four experimental groups on the selected criterion variable i.e. Wall Pass performance.

Groups	N	MX	MY	MY.X
8 to below 10	50	8.3	9.14	10.48314
10 to below 12	50	9.62	10.66	11.00989
12 to below 14	50	10.94	12.28	11.63665
14 to below 16	50	11.48	12.12	11.07032

Table II : Pretest, Posttest and Post test adjusted means for Wall Pass.

Post test values of the Wall pass performance of the four groups were 9.14 repetitions, 10.66 repetitions, 12.28 repetitions and 12.12 repetitions respectively for 8 to 10, 10 to 12, 1 to 14 and 14 to 16 years age children groups. But the adjusted post test means over the baseline values and average of the baseline values for these groups were 10.48 repetitions, 11.01 repetitions, 11.63 repetitions and 11.07 repetitions respectively. Adjusted post test means over the baseline values (Mx) indicated that the 12 to 14 yrs age children group showed highest adjusted average for the Wall pass performance with 11.64, followed by 14 to 16 yrs age group with 11.07, followed by 10 to 12 yrs age group with 11.01 and followed by 8 to 10 age group with 10.48 repetitions.

Groups & Values	12 to below 14 11.64	14 to below 16 11.07	10 to below 12 11.01
14 to below 16 11.07	0.57 Sig		
10 to below 12 11.01	0.63 Sig	0.06 N. Sig	
8 to below 10 10.48	1.16 Sig	0.59 Sig	0.53 Sig

Table III : Scheffe's Post hoc individual comparison test for Wall Pass

To find out the source of significant difference and to find out which age group children showed more responsiveness on the Hand – Eye coordination component of motor ability, Scheffe's Post hoc individual comparison test was conducted. 12 to 14 years age children group experienced significant improvements in the wall pass performance when compared to the 14 to 16 years age children group (0.57), 10 to 12 years age children group (0.63) and 8 to 10 years age children group (1.16) indicating that the 12 to 14 years age children group experienced the most significant positive effect on Hand – Eye coordination factor of motor ability when compared to all the other three groups.

Analysis on the Arm - Shoulder coordination factor of the Motor ability measured by Soft ball throw performance:The table IV depicts that there is significant influence of the selected experimental variables on the Arm – Shoulder coordination component of the Motor ability measured through the Soft Ball Throw performance, since the obtained F value i.e., 28.24 is more when compared to the table F Value of 2.66.

Source	Df	SS	MS	F	Cr.F
BG	3	526.4826	175.4942	28.23986	2.66
WG	196	1218.025	6.214414		
Total	199	1744.508			

Table IV : Analysis of Covariance for Soft Ball Throw.

Discussion

Two theories were defined at the launch of the exploration. (i) There will be noteworthy contrast around the four groups in the responsiveness on all the motor capacity segments in light of the fact that of the chose developments. (ii) The chose developments will accumulate huge distinction responsiveness of motor capacity parts and the responsiveness will be more positive as the age of the people progress.

Speculation I: the responsiveness on the Hand-Eye coordination factor of the motor capacity measured through divider pass execution of the four groups will be noteworthy is rejected subsequent to there was no noteworthy responsiveness contrast between 14 to 16 years age children aggregation and 10 to 12 years gathering of the experimentation, however there was huge distinction around the other two groups and additionally there was huge distinction between 8 to 10 age bunch children and all the three different groups of experimentation. The responsiveness on the Arm-Shoulder coordination factor of the motor capacity measured through the soft ball throw execution of the four groups will be noteworthy is rejected since there was no huge contrast in responsiveness between 12 to 14 and 10 to 12 age groups what's more additionally between 14 to 16 and 8 to 10 years age children groups of the experimentation, yet just the distinction between 12 to 14 years and 14 to 16 years groups and 12 to 14 and 8 to 10 years age children groups of the experimentation have encountered huge impact on the Arm-Shoulder coordination factor on account of the exploratory activity variables. The responsiveness on the element parity factor of the motor capacity measured through the soft ball throw execution of the four groups will be huge is rejected subsequent to there was noteworthy contrast in responsiveness between 12 to 14 and 10 to 12 age groups, between 12 to 8 to 10 years age groups and between 12 to 14 and 14 to 16 years age children groups of the experimentation, however there was no noteworthy contrast between 10 to 12 years and 8 to 10 years groups and 8 to 10 and 14 to 16 years age children groups of the experimentation.

Speculation II: In the Hand–eye coordination factor of motor capability measured through divider pass

execution, 12 to 14 years age bunch children indicated more huge upgrades when contrasted with the other three groups of children of the test and thus the theory that the children with progressing age will encounter more huge responsiveness in hand – eye coordination factor is rejected. This change in this factor around the 12 to 14 years age bunch children may be credited to the development and solidification of feeling of proprioception throughout this age. In the Arm–shoulder coordination factor of motor capacity measured through Soft ball throw execution, 10 to 12 and 12 to 14 years age children groups encountered huge upgrades the point when contrasted with both the 8 to 10 and 14 to 16 years age children groups of the experimentation what's more thus the theory that the children with progressing age will encounter more huge responsiveness in arm–shoulder coordination factor is rejected. This change in this factor around the 10 to 12 and 12 to 14 years age bunch children may be ascribed to the development and merging of feeling of proprioception throughout this age than the physical development.

CONCLUSIONS

The accompanying conclusions were drawn from the present examination study : 12 to 14 years age bunch children demonstrated more noteworthy changes in hand – eye coordination factor of motor capacity when contrasted with the other three groups of children of the investigation, which plainly implies the more fast combination of feeling of kinesthesia throughout this age of the children.

10 to 12 and 12 to 14 years age children groups encountered noteworthy changes in arm - shoulder coordination factor of motor capacity, when contrasted with both the 8 to 10 and 14 to 16 years age children groups of the experimentation, which plainly implies the more fast combination of feeling of kinesthesia and physical development throughout this age of the children.12 to 14 years age bunch children indicated more critical changes in dynamic offset factor of motor capability, when contrasted with the other three groups of children of the trial which unmistakably implies the quick combining of feeling of proprioception during this age.

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