

Flexibility of Children: A Comparative Study of Pastoral and Muncipal Children at Secondary School Level in Khyber Pakhtunkhwa, Pakistan

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Abstract

This study aims to analyze the flexibility of Elementary school children 14 to 16 years of age and compare both urban and rural children of Khyber Pakhtunkhwa (Pakistan). The target population of this study was drawn from High school children (500) through simple random sampling and the schools were selected through a convenience sample. The test used in the current study to measure the flexibility of children is Forward-bending (FB). The data was collected and analyzed by using SPSS version 22. Both inferential and descriptive statistics had been used for the analysis of data. The data analysis reflects that the students of the rural area had comparatively significantly superior flexibility than their counterparts living in urban areas.

Keywords: Flexibility, Children, Forward Bending (FB), Rural / Urban

Introduction

In the last forty years, studies uncovered an upsurge in rotund and fatness (Hussain, 2018) triggering a decline in bodily strength of individuals that is a major prominent matter and multi-faceted (Mukherjee, Nayek, & Chatterjee, 2016). The deterioration in the corporeal condition is being observed not only among some factions but the entire culture and environment have deleterious influences on the wellbeing and mentality of the individuals. Bodily strength is deemed crucial for healthiness and well-being (Jeng et al., 2017). Strong cohorts are the properties of a nation while bad physical condition raises expenditure on wellbeing and lessens operating throughput. Hence bodily strength is a trigger of worry for all. Bodily strength is a multi-faceted notion of which skill-associated suitability factor Flexibility enjoys an influential position.

Flexibility is a powerful bravado and forceful system organizing aptitude which performs motorized movements in a specified moment and location /situation (McArdle, Katch, & Katch, 2010). The dormant ability or vigor in a part of the body to continue an action in the smallest period over shrinkage and slackening of strengths in the light of coordinative spirited signs/urges is named as Flexibility (Karim & Halim, 2013).

It is believed that the central nervous system (CNS) and peripheral neuromuscular forms and roles have a major influence on Flexibility and that it is a function of mental processing. Within the flexibility network, it operates under limited and free circulation with stringent moment management (Hohmann, Lames and Letzelter, 2007). Structural and functional components such as intra-muscular harmonization, tension, laziness, and muscle disorder encode the nature of Flexibility (Maltais et al., 2014). Besides, Flexibility and the concept that determines it are applied and employed in sports events and related theories to provide a drive in which standards are achieved and the response point in time is endured in the shortest feasible time (Schnabel, Harre, and Borde, 1997). When a recurring best Flexibility is reached with the capability to withstand the smallest opposition, it is called pace Flexibility, such as sprint, jump, tap, etc. Sensitivity can mean that you can react immediately to a stimulus or riot. The adequate response of nerve shrinkage is considered a quantifiable component of velocity grit when an impetus is produced to find the retort (Gratton, Coles & Donchin, 1992). The

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velocity movement is the fastest movement achieved in the shortest time at the least obstacle/resistance. Force, Flexibility, and explosive force are forces exerted at such a low resistance (Karim and Halim, 2013)

The CNS, in adolescents between 14 and 16 years of age, appears to be expressive and has maximum flexibility. On the one hand, there is a high sensitivity of the nerve manipulation mechanism, and on the other hand, there is a weakened differentiation constraint. This high aptitude is the reason of quick retort, topical frequency affordability, and desired motor learning. The ages of adolescents, in addition to the above, such as (14-16 years), also demonstrate like results (Hollmann & Hettinger, 1980). Therefore, the crucial findings for the age of 14 to 16 years in adolescents reach a stage of decent response feeling, improvement of Flexibility and high-level rate of recurrence to learn a motorized method to build faster movement skills, as well as plain complex (Grosser & Zintl, 1991). In a Norwegian research paper, Rosvold (2019) found that pastoral adolescents have a higher VO2 score than municipal adolescents.

For the measurement of Flexibility German Motor Test (GMT) Bös, Schlenker, and Seidel (2009) with a 20-meter sprint they are widely recognized. In this process, the bodies are exposed to a test with a mandatory remoteness of 20 meters between points A and B. Therefore, an adolescent, who tries two times, must have a space between the two points in the smallest row feasible point in time. According to the rules, an adolescent must remain at the back of the beginning position. A device is employed to observe the start and end signals. When you reach the finish line, the stopwatch indicates a pause/rest. The 1/10 pause track record the execution point in time in seconds. The identical line-up is employed for both the start time and the end time. Besides, two denoting shafts indicate both delineated line-ups (Karim and Halim, 2013). They added that the house or family unit is the basic component of the societal building to examine the connection with promoter skills. Also, Kretschmer and Wirszing (2007) also indicated some places such as parks and other recreation areas where capacity is strongly affected or positively affected. Thus, the objective of the current study is to investigate the level of skill-related fitness component Flexibility of Primary school Children and draw a comparison of Flexibility ability between municipal and pastoral Children.

Method

The German engine test (GMT) developed by Bös, Schlenker, and Seidel (2009) is employed to measure the Flexibility of children. All adolescents in municipal and pastoral areas of the Khyber Pakhtunkhwa era, studying at the high school level, make up the population of this study between the ages of 14 and 16. To prepare a sample of children, Krejcie and Morgan (1970) followed a standard sample definition table, and accordingly, 500 adolescents from the looked-for age group was randomly chosen as a sample from the accessible population. The sample was taken from ten government High schools in the municipal and pastoral areas. Information received from the Ministry of Education – elementary and Primary was employed to categorize pastoral and municipal institutions. Adolescents from five municipal and five pastoral schools were chosen to take the GMT test. Fifty adolescents from each school participated in the work: ten from each of the stipulated age groups, i.e. ,9 and ten. These adolescents were randomly chosen from grades 9, and 10 from the school attendance registers.

Instruments and Procedures

The Forward Bending (FB) test for Flexibility measurement was taken from the test item (GMT) of Bös et al. (2009) Measurement of the Flexibility ability of adolescents aged 6 to 18 years. This test drive delivers intelligence to quantify the Flexibility of children using lawn field, white residue, mark funnel/cover head.

The child stands and bends his upper body forward with his hands parallel to each other. The subject should not bend the knees. The best position is held for 2 seconds. The scale value is to read off from the deepest point that the fingertips touch in centimeters on a vertical scale. Recovery time is allowed between the two attempts. The reached scale value (per attempt) was recorded. It was to be noticed that when the scale is under the “sole level” it is positive and over negative. The zero (0) point is the sole level. The measurement value is the better value concerning the sole level.

The exactness of the hand-stop was effectively tested in this research work. The initiator observed the onset of movement. In the event of an error, execution was stopped immediately and repeated. The collected data were analyzed using version 22 of the Social Scientific Statistical

Package (SPSS). Quantitative analytical tools were employed to analyze the data. An independent sample test was employed to assess the average abilities of pastoral and municipal adolescents.

Results

An examination of the group figures for the Forward bending (Table 1.1) shows that the average time value for municipal and pastoral adolescents is 5.84 cm and the standard deviation is 3.94. Municipal adolescents appear to be relatively longer (average = 7.67 cm and SD = 3.76) than pastoral adolescents (average = 4.00 cm and SD = 3.19). Anticipated shift 3.68 (SE = 0.31). Here again, we are 95% confident that the actual average variation will remain between 3.0625 and 4.2895 (Table 1.2).

An independent sample test was employed to assess the average of FB in municipal and pastoral adolescents between 14 and 16 years of age. The p-value is calculated as 0.00 (Table 1.2), which is <0.05. Therefore, the variation between the averages of municipal and pastoral residents with 5% confidence is significant. The 1.1. The graph also shows the variation in the average performance of subjects in municipal and pastoral areas in FB.

According to the analysis, the average time per Forward bending for pastoral adolescents is relatively better (less) than for municipal adolescents, as the variation is analytically substantial. Pastoral adolescents are more compatible with FB associated to municipal adolescents. From the data, it can be deduced that pastoral adolescents are relatively improved in terms of Flexibility.

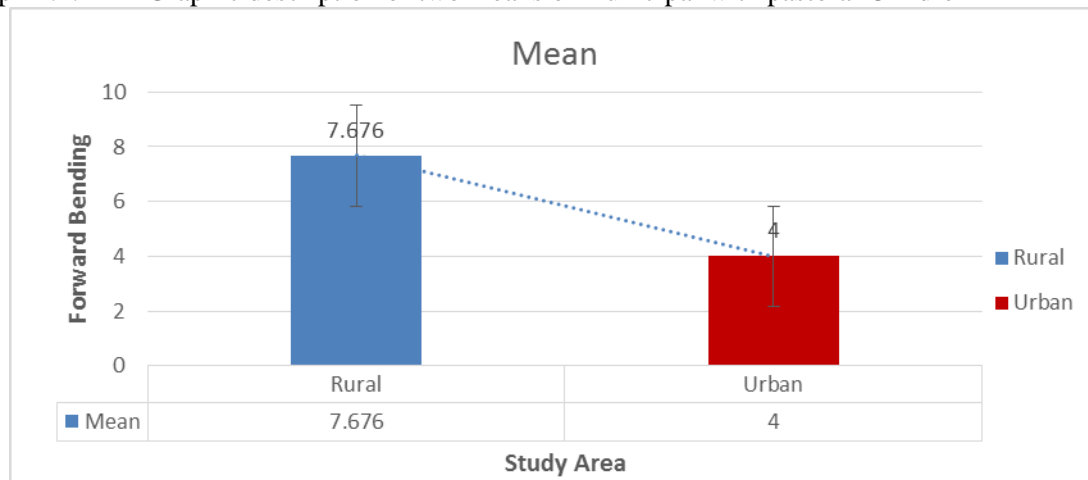
Table 1.1 Group Statistics regarding Flexibility

Total / Group	N	Mean	Std. Deviation	c.v
FB Total	500	5.838	3.9429	67.53%
Postoral	250	7.676	3.7677	49.08%
Municipal	250	4.000	3.1901	79.75%

Table 1.2 Independent sample t-test for Forward Bending

T	df	Sig. (2-tailed)	Mean Variation	Std. Error Variation	95% Confidence Interval of the Variation	
					Lower	Upper
11.773	498	.000	3.6760	.3122	3.0625	4.2895

Graph 1.1: Graphic description of two means of municipal with pastoral Children



Discussion

It is reflected by this investigational work that the Flexibility disparity between municipal and pastoral teens is substantial. Pastoral teens aged 14–16 was faster than municipal teens. The situation reflects the relatively higher Flexibility of pastoral teens as well as the consistency of Flexibility, which was also better among their pastoral than municipal counterparts. The remarkable characteristics of municipal and pastoral environments and lifestyles have a positive influence on the Flexibility of educating children (de Barros, Frago, Oliveira, Cabral Filho, & Castro, 2003). According to Karim and Halim (2013), the environmental conditions at home or in the family as well as Hussain (2018) are related to the adolescent’s abilities in which the adolescent grows. Kretschmer and Wirszing (2007) include places such as parks and other recreational areas, as well as vast areas to facilitate the

abilities of children. The ability to Flexibility in the present study reflects the impact of the home/family/environment/leisure areas in which the adolescent was raised. According to Rosvold (2019), pastoral teens have a higher VO₂ peak than municipal teens. It also supports the dominance of pastoral teens and the weakness of municipal teens.

These factors could be listed as a standard of living as well as a lifestyle for people living in municipal and pastoral areas. The standard of living consists of nutrition and habits applied in the certain natural setting of the crowds. It is understood that the norm of living in metropolises is typically luxurious, flavored with fast food, rice, meat, and stew. Besides, municipal adolescents do not discover many opportunities to spend their excess dynamism, which can damage their associations, growing their load and bulk. The paucity of leisure places in Khyber Pakhtunkhwa tends to limit their movement, which can act as an unfavorable element of Flexibility ability. Huge fields and a pleasant environment also promote the healthy fitness and Flexibility of pastoral children. So, all of these factors together support the foundation for low fitness and Flexibility in municipal children. However, Flexibility, as a component of skill-related fitness, can cause deficiencies in adolescents' motor skills.

Conclusion

The mean distance value for municipal and pastoral teens is 5.84 cm and the std is 3.94. The study concluded that the Flexibility ability of pastoral teens appears to be better than that of their municipal peers of the same age. Pastoral children appear to outperform in their socio-cultural relationships and in the amount and quality of physical activity that children do inside or outside school. Municipal children deteriorate their bodily strength due to local conditions and practices.

Declaration of Conflicting Interests

The researcher proclaimed no prospective disagreements of concern relating to the investigational work, authorship, and publication.

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