

USE OF MODERN TOOLS IN SPORTS AND THEIR EFFECTIVENESS AT UNIVERSITY LEVEL IN PAKISTAN

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How to cite this article: Manzoor, M. (June 2020). Use of modern tools in sports and their effectiveness at university level in Pakistan. Journal of Physical Education Research, Volume 7, Issue II, 49-59.

Received: January 02, 2020

Accepted: June 27, 2020

ABSTRACT

The main purpose behind conducting this research was to find out the players' perception about modern sports equipment. With the help of literature review, the researchers came to know about the use of modern sports equipment and its importance. A quantitative research was conducted, and the research pattern adopted was survey research. The population of the study was players of different universities. Researcher collected data through questionnaire based on 20 close ended questions from 250 players as sample out of which 207 were usable in which 132 male and 75 female players were of age above 18 years via Simple random sampling technique. For the data analysis (SPSS) 22.0 Version was used. Individual Item Analysis (Chi-square test) was used to view the responses against each item of questionnaire. Demographic factors of student players' regarding age and gender were measured and calculated through ANOVA and t test, respectively and found no significant difference among male and female (sig. 0.759) as well as in different age groups (sig. 0.356). Overall results showed that there are positive results of use of modern equipment on players' performance. In concern with future recommendations, players should be allowed and facilitated as well as their familiarity with the use of modern sports equipment increased for better outcomes in their sports performance.

Keywords: Sports, modernization, sports equipment, players.

1. INTRODUCTION

Modernization formerly referred to the disparity and evolution between a “traditional” agricultural culture and the kind of “modern” society that is based on trade and industry (Charlton & Andras, 2005). Modern sport appears to be fundamentally different sports which is vastly more organized, highly structured, and regulated than in the past and at highest level become more specialized and modernized (Keys, 2013). Subjective assessment of games hardware ability has been utilized for a long time by makers and players yet generally few examinations have endeavored to build up a precise way to deal with the estimation of human observations in regards to modernization of games gear (Hocknell et al., 1996) as discernment can be characterized as “our cognizant elucidation of the outside world as made by the mind from an example of nerve driving forces conveyed to it from tactile receptors”. Athletic affiliations and organizations contend that they ought to be allowed to guarantee reasonable rivalry and keep up the uprightness of their separate games by managing hardware (Lazaroff, 1999). On the off chance that hardware turns out to be sophisticated to the point that one can't sufficiently recognize the relative ability levels of the members in their exhibitions, the very idea of the game is unavoidably modified. Although, brandishing experts have an enthusiasm for safeguarding the uprightness of games, not every single mechanical progression has

contrarily affected games. Besides, it is hard to observe how to fittingly build up and actualize rules overseeing the utilization of innovation (Floyd, 2002). In this research, researchers tried to get perception of university student players regarding use of modern sports equipment at university level. So, the main objective of the study was to take the perception of university sports students regarding use of modern sports equipment in sports.

Modernization is a continuous and open-ended process (Hartley & Allison, 2002). Truly, the navigate of time over which it has happened must be evaluated in many years, regardless of the way that there are instances of revived modernization (Kumar, 1999). In either case, modernization isn't a for the last time achievement (Kumar, 1999). There is apparently, a dynamic standard consolidated with the very surface of current social requests that does not empower them to settle, or to achieve balance. Their headway is continually sporadic and uneven (Giddens, 2013). Whatever the degree of progress, there are continually "in turn around" regions and "periphery" social affairs (Giddens, 2013). This is a vigorous wellspring of strain and hardship in present day social requests. Such a condition isn't restricted to the internal improvement of individual states. It tends to be seen on an overall scale, as modernization expands outward from its novel Western base to take in the whole world. The nearness of unevenly and inconsistent made nations displays a foremost part of feebleness into the world course of action of states (Holton, 2011).

There are no less than two noteworthy and related reasons for modernization. One is the development in science that went along (in Europe) with the Enlightenment (Beck, Bonss, & Lau, 2003), the other is the development in accessible innovation. At the point when a nation is pre-present day, its kin for the most part don't have confidence in science. They hold conventional convictions that ordinarily hold that life is influenced by extraordinary powers. They don't trust that life can change in any real ways. In the Enlightenment, individuals came to challenge this thought (Norris & Inglehart, 2011). They came to trust that life is influenced by powers that are justifiable by means of science. When they had this standpoint, they came to trust that life could be progressed. Science could change the way we live, making us (for instance) less perplexed of infection or other regular catastrophes. Science, obviously, causes individuals to create innovation, Innovation drives modernization along, Innovation enables ranchers to develop more nourishment, liberating individuals to go live in urban areas (Landes, 2003). Innovation enables industrial facilities to emerge, therefore giving the new city occupants' employments. Innovation likewise enhances life, giving us activities for stimulation, things that can enhance our wellbeing, and numerous other helpful advancements (Kranzberg, 1990). These things lead our general public to end up noticeably more modernized. Modernization has its great and terrible focuses. On the incredible side, modernization improves our lives from numerous points of view. It is completely progressively secure to live in a world in which we have masters who can fix defilements and in which women are not obligated to kick the basin in labor. It is increasingly useful to encounter an everyday reality with the end goal that we approach various material products to make our lives progressively pleasant and progressively fun. Modernization also helps people who are abused in customary society. Modernization empowers women to have progressively open entryways (Inglehart, 1997). It liberates abused minority social affairs. In these ways, modernization seems like an uncommonly positive thing. On the other hand, it is possible to battle that modernization has negative effects. One negative effect is on our condition. Modernization brings advancement that eats up essentialness and prompts such things as air sullyng and natural change. Another negative effect is (apparently) on our overall population (Barnett, 2003). Modernization isolates the social ties that bound people together in standard social requests. It makes it with the objective that people never again feel as related with one another. This can provoke such issues as bad behavior and the detachment of family social events. Thusly, modernization has clear causes and it has impacts that can make certain and negative (Palmore, 1999).

Technology is altering the expression of modern sports, sports psychology and coaching (Johns & Johns, 2000). Condition of-heart innovations are used to increase execution in games as multidirectional as cycling, speed-skating, swimming, golf, skiing, surfing, football/soccer ball, tennis racket and ball, running, offices and some more. Innovation in game today is found in innumerable structures with every advancement has conceivably hopeful and profitable results (Cashmore, 2000). Understanding the ramifications of game advancements include essential typology utilized in arranging, these are done in six sorts of game advances however not commonly restricted, sometimes same advances could fit into various classifications (Chelladurai & Kerwin, 2017). The classes included; self-advancements, rehabilitative advances, scene advances, development innovations, execute advances and database advances (Omoriegie, 2016). While a portion of the advances are yet to establish a connection on game, comprehension of numerous kinds of game innovations help to acquire a superior perspective on which mechanical choices of competitors at last approach and effect on game achievements.

Game present reality is getting innovative by joining characteristic athletic ability with cutting edge examination and counterfeit wise to create the most ideal results on the playing field of games (Miller, Lawrence, McKay, & Rowe, 2001). Game energize individuals as a triumph of human exertion, expressing that off camera are various things that go into that triumph and at the top is innovation. Mechanical headway has been utilized in wear for quite a while in various structures and expect particularly fundamental part especially for the world class sports. Different undertakings to describe advancement have yielded such an assortment of depictions, to the point that one may gave up to the likelihood that development is basically not quantifiable (Kremer & Moran, 2012). From one perspective, it is synonymous with science and practical thought, including every single gadget anytime held in hands. A couple of investigators express that advancement expect an extending part in helping capable contenders, fledgling sprinters and armchair fans to partake in the games (Shank & Lyberger, 2014). Development is depicted as any significant, connected, or procedural segment of current game and exercise science went for development (Miah, 2004). The versatile definition licenses everything from degrees of progress in running shoes and eyewear to different outlooks about the body as imaginative. Along these lines, early instances of games advances were neck and neck complete, physiological testing equipment, the minute replay screen and first usage of electronic arranging contact pads for swimming (Omoriegie, 2016). Without a doubt, advancement has a basic effect in present day wear, with it being a fundamental bit of a couple of games, (for instance, motorsport), and used as a piece of others to improve execution. The topical usages of advancement join, sports garbs; clothing and wearable's; workplaces; contention intervention and courses of action; media broadcasting and exchanges and execution assessment (Wells, 2014). Subsequently, innovation and game have had something of rough relationship throughout the years (Bass & Eynon, 2009). Turner (2013) opined that to start with games and innovation did not generally appear the most matching. Thinking about the idea of game and hardware use to play and with late union of advancements numerous capacities are combined into one little gadgets. Innovation progressively is assuming a main job in the advancement of game and improves execution in all countenances. In this way, uses of innovation take into consideration increasingly powerful preparing, incitements, the executives and following of competitors, exactness of results, improved onlooker seeing, creating execution and avoiding wounds, among a lot more capacities (Busch, 1998). Innovation in games is a specialized method by which competitors endeavor to improve their preparation and focused surroundings so as to upgrade their generally athletic presentation (Johns & Johns, 2000). It is thought of as a specialized methods or instrument used to seek after picked closes. Henceforth, the paper explores the effect of innovation on game execution.

2. METHODS AND MATERIALS

2.1 Research Design and Population of the Study

The population of this study were the students (male and female) of different government and nongovernment/private universities sited in Lahore. In the language of research, sample is said to be the small portion of the population which is said to be the true representation of whole population for the generalizability or practical implication of research and the sample for this study were male and female student players of eight nongovernmental / private and governmental / public sector with the isolation of each sector sited in Lahore. Total sample size was 207 male and female students of selected eight universities.

2.2 Tool and Procedure of Data Collection

Data collection tool used in this research was close ended questionnaire containing 20 items. Likert type scale was used to rank each item of questionnaire which is comprised of 5 limit / checks as (Strongly disagree to strongly agree).

2.3 Data Analysis

Statistical package for social sciences (SPSS) 20.0 was used to analyze data and statistical test used to analyze data were Chi-square test for individual item analysis and ANOVA for comparison of mean of three different age groups which were as 18-21 Years, 22-25 years and 26 years and above.

4. RESULTS AND DISCUSSION

Table 1: Results of ANOVA

Source of Variance	Sum of Squares	df	Mean Square	F	p
Between Groups	0.739	1	0.387		
Within Groups	64.848	206	.328	1.345	> 0.05
Total	65.467	207			

Table 1 show that there was no statistically difference between the groups as *p*-value is 0.356 which is greater than 0.05 which means that there is no significant difference regarding different statement / perceptions related to this topic in different age groups.

Table 2: Chi square value of player's perception about statement- in my opinion, my performance enhanced with the use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
10	13	12	63	109	185.82	.000

The table 2 shows the response rate regarding first statement of the questionnaire. One hundred nine participants' response was Strongly Agree, 63 was Agree, 12 was Undecided, 13 was Disagree and 10 students were Strongly Disagree. Table also shows that Chi-square value is 185.82 whereas significance i.e. *p* value is .000 which is smaller than .05 which express that there is notable difference among the sample population concerned to this

statement. It can be inferred from the responses that larger group of sample was in agreement that their performance could be enhanced with the use of modern sports equipment.

Table 3: Chi square value of player’s perception about the statement- in my opinion, modern sports equipment is not available to university players

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
13	20	27	75	72	85.44	.000

The table 3 shows the response rate that 72 participants response was Strongly Agree, 75 was Agree, 27 was Undecided, 20 was Disagree and 13 students were strongly disagreeing with the statement. Table also shows that Chi-square value is 85.44 which is significance i.e. *p*-value is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that the modern sports equipment is not available to university players.

Table 4: Chi square value of player’s perception about statement- in my opinion, university provides modern sports equipment to players for preparation of competition

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
11	24	30	86	56	85.97	.000

Table 4 shows the response rate regarding 3rd statement of the questionnaire. Amongst the total, 56 participants’ response was Strongly Agree, 86 was Agree, 30 was Undecided, 24 was Disagree and 11 students were Strongly Disagree. Table also shows that Chi-square value is 85.97 which is significance i.e. *p* value is .000 which is smaller than .05 which express that there is notable difference among the sample population concerned to this statement. It can be inferred from the responses that larger group of sample was in agreement that the university provides modern sports equipment to players for preparation of competition.

Table 5: Chi square value of player’s perception about statement- in my opinion, due to modern sports equipment, enjoyment and interest in sports enhanced among university students/players

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
7	8	24	92	76	153.604	.000

Reading of the Table 5 shows that 76 students response was Strongly Agree, 92 was Agree, 24 was Undecided, 8 was Disagree, and 7 students were strongly Disagree about the above statement. It is also found that the Chi-square value is 153.60 which is significant, which express that there is notable difference among the sample population concerned to statement. Overall result shows that due to modern sports equipment, enjoyment and interest in sports enhanced among university students/players.

Table 6: Chi square value of player’s perception about statement- I feel progressive improvement in my sports performance due to use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
5	16	25	85	76	128.91	.000

The Table 6 shows the response rate that 76 students response was Strongly Agree, 85 was Agree, 25 was Undecided, 16 was Disagree and 5 students were strongly disagree about this statement. Table also shows that Chi-square value is 128.918 which is significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that there is progressive improvement in sports performance due to use of modern sports equipment.

Table 7: Chi square value of player’s perception about statement- in my opinion, difficult/complex sports skills can easily learnt by the use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
8	14	37	82	66	99.98	.000

The table 7 shows the response rate that 66 students response was strongly agree, 82 was Agree, 37 was Undecided, 14 was disagree and 8 students were strongly disagreeing about this statement. Table also shows that Chi-square value is 99.98 whereas significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that difficult/complex sports skills can be easily learnt by the use of modern sports equipment.

Table 8: Chi square value of player’s perception about statement- in my opinion, university coaches know very well about use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
10	26	51	63	57	48.91	.000

Table 8 shows the response rate that 57 students response was Strongly Agree, 63 was Agree, 51 was Undecided, 26 was Disagree and 10 students were strongly Disagree about this statement. Table also shows that Chi-square value is 48.91 which is significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that university coaches know very well about use of modern sports equipment.

Table 9: Chi square value of player’s perception about statement- in my opinion, with the modernization of sports equipment, sports become more expensive for players

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
12	21	42	74	56	63.26	.000

Table 9 shows the response rate that 56 students response was Strongly Agree, 74 was Agree, 42 was Undecided, 21 was Disagree and 12 students were strongly Disagree about this statement. Table also shows that Chi-square value is 63.26 which is significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that with the modernization of sports equipment, sports become more expensive for players.

Table 10: Chi square value of player’s perception about statement- In my opinion, it is important that the modern sports equipment is used according to given SOP’s for effective and better outcome

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
9	17	41	91	49	100.56	.000

The table 10 shows the response rate that 49 students response was Strongly Agree, 91 was Agree, 41 was Undecided, 17 was Disagree and 9 students were strongly Disagree about this statement. Table also shows that Chi-square value is 100.56 which is significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that the modern sports equipment is used according to given SOP’s for effective and better outcome.

Table 11: Chi square value of player’s perception about statement- In my opinion, special players get more help with modernization of equipment for better outcomes

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
7	27	38	63	72	67.76	.000

The table 11 shows the response rate that 72 students response was Strongly Agree, 63 was Agree, 38 was Undecided, 27 was Disagree and 7 students were strongly Disagree about this statement. Table also shows that Chi-square value is 67.758 which is significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that special players get more help with modernization of sports equipment for better outcomes.

Table 12: Chi square value of player’s perception about statement- in my opinion, use of modern sports equipment minimizes the injury rate of players

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
13	20	36	75	63	69.79	.000

Table 12 shows the response rate that 63 students response was Strongly Agree, 75 was Agree, 36 was Undecided, 20 was Disagree and 13 students were strongly Disagree about this statement. Table also shows that Chi-square value is 69.79 which is significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that use of modern sports equipment minimizes the injury rate of players.

Table 13: Chi square value of player’s perception about statement- in my opinion, university players get less benefit by the use of modern equipment in comparison to professional players

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
13	27	42	68	60	52.25	.000

The table 13 shows the response rate that 60 students response was Strongly Agree, 68 was Agree, 42 was Undecided, 27 was Disagree and 13 students were strongly Disagree about this statement. Table also shows that Chi-square value is 52.25 which significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that university players get less benefit by the use of modern equipment in comparison to professional players.

Table 14: Chi square value of player’s perception about statement- I feel myself psychologically stronger due to use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
3	15	26	100	63	152.39	.000

The table 14 shows the response rate that 63 students response was Strongly Agree, 100 was Agree, 26 was Undecided, 15 was Disagree and 3 students were strongly Disagree about this statement. Table also shows that Chi-square value is 152.39 which is significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that students/players feel their selves psychologically stronger due to use of modern sports equipment.

Table 15: Chi square value of player’s perception about statement- in my opinion, modernization of sports equipment reduced use of human resources in sports activities

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
2	16	41	89	59	115.30	.000

The table 15 shows the response rate that 59 students response was Strongly Agree, 89 was Agree, 41 was Undecided, 16 was Disagree and 2 students were strongly Disagree about this statement. Table also shows that Chi-square value is 115.295 which is significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that modernization of sports equipment reduced use of human resources in sports activities.

Table 16: Chi square value of player’s perception about statement- in my opinion, modern sports equipment help to attain health related and skill related fitness in short period of time

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
6	19	26	98	58	132.16	.000

The table 16 shows the response rate that 58 students response was Strongly Agree, 98 was Agree, 26 was Undecided, 19 was Disagree and 6 students were strongly Disagree about this statement. Table also shows that Chi-square value is 132.155 whereas significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that modern sports equipment help to attain health related and skill related fitness in short period of time.

Table 17: Chi square value of player’s perception about statement- in my opinion, use of modern prosthetic devices help in rehabilitation of injury

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
6	24	37	80	60	82.40	.000

The table 17 shows the response rate that 60 students response was Strongly Agree, 80 was Agree, 37 was Undecided, 24 was Disagree and 6 students were strongly Disagree about this statement. Table also shows that Chi-square value is 82.396 whereas significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that use of modern prosthetic devices help in rehabilitation of injury.

Table 18: Chi square value of player’s perception about statement- in my opinion, results of competitions are more clear and without ambiguity due to use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
3	17	40	81	66	102.54	.000

The table 18 shows the response rate that 66 students response was Strongly Agree, 81 was Agree, 40 was Undecided, 17 was Disagree and 3 students were strongly Disagree about this statement. Table also shows that Chi-square value is 102.541 whereas significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that results of competitions are more clearly and without ambiguity due to use of modern sports equipment.

Table 19: Chi square value of player’s perception about statement- in my opinion, technical faults of sports skills can be easily eradicated by the use of modern sports equipment

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
8	14	47	73	65	83.41	.000

The table 19 shows the response rate that 65 students response was Strongly Agree, 73 was Agree, 47 was Undecided, 14 was Disagree and 8 students were strongly Disagree about this statement. Table also shows that Chi-square value is 83.41 whereas significance i.e. p -value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that technical faults of sports skills can be easily eradicated by the use of modern sports equipment.

Table 20: Chi square value of player’s perception about statement- in my opinion, inappropriate use of modern sports equipment can cause injury

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
9	20	47	83	48	80.03	.000

The table 20 shows the response rate that 48 students response was Strongly Agree, 83 was Agree, 47 was Undecided, 20 was Disagree and 9 students were strongly Disagree about this statement. Table also shows that Chi-square value is 80.03 whereas significance i.e. *p*-value is .00 which is smaller than .05 which express that there is notable difference among the sample population concerned to statement. Overall result shows that inappropriate use of modern sports equipment can cause injury.

Table 21: Chi square value of player’s perception about statement- in my opinion, use of modern equipment, put the players away from learning of basic skills

Observed Frequency					Chi-square	Sig.
Strongly Agree	Disagree	Undecided	Agree	Strongly Agree		
11	30	22	86	58	89.26	.000

Examination of the above Table 21 shows that 58 students’ responded strongly agree on the above statement whereas, 86 students’ responded agree, 22 students’ were undecided, 30 was disagree and 11 students were strongly disagreeing about this statement. Table also shows that Chi-square value (89.26) which is significant at 0.05 level of significance. This significance express that there is notable difference among the sample population on concerned statement. Overall result shows that use of modern equipment, put the players away from learning of basic skills.

5. CONCLUSION

After going through the whole research, the researcher has reached to the following conclusions that the data has empirically proved in support of that there is positive role of modern sports equipment to enhanced sports performance of players. The fact is players who use modern sports equipment in their sports activities, have higher self-esteem, better sports skills, better performance, motivation, confidence and they can easily achieve success and better performance level. All modern sports equipment helps to perform well without injuries. So, through this research, it is concluded that players’ perception about sports equipment is positive with reference to their good performance outcome in their sports activities. Modern sports equipment is good in development of sports field.

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