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EFFECT OF EXERCISE AND SPORTS ON ADJUSTMENT AND SELF-CONCEPT AMONG SPORTSMAN AND NON-SPORTSMAN OF VARIOUS SPORTS

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Abstract

The aim of the present study to investigate the relationship between exercise and sports with level of adjustment and self-concept among various outdoor game players, by employing a sample of 200 subjects in which 100 subjects were sportsman playing at inter collegiate level. (50 male and 50 female) and 100 were non-sportsman (50 male and 50 female) with age ranging from 18 to 25. Self-concept rating scale was developed by Dr. R. K. Saraswat. NCERT New Delhi, in these research second tools, Bells adjustment inventory by Dr. R. K. Ojha was used. The most important aspect of human life is adjustment. A factorial design was used; since there were two independent variables i.e. types of students and gender. A 2X2 factorial design was used to analyzing the data. It was found that the students from playing any games at inter collegiate level have better self-concept than the non-sportsman students. And adjustment level found more from students playing games regularly than the non-sportsman.

Keywords: Exercise, adjustment, self-concept, sportsman and non-sportsman

1. INTRODUCTION

Participation in sports and regular exercise has long been recognized as a key contributor to both physical and psychological well-being. Beyond physical health benefits, engagement in sports significantly enhances psychological attributes such as emotional stability, stress management, and self-perception (Eime et al., 2013). Sports provide a structured environment that fosters discipline, goal-setting and social interaction critical components in the development of healthy adjustment and a positive self-concept (Bailey et al., 2013).

The ability of a person to remain in balance with their surroundings including the social, emotional, and academic spheres is referred to as adjustment. Athletes often demonstrate higher adjustment levels due to the coping strategies and interpersonal skills developed through sports participation (Singh & Yadav, 2015). Simultaneously, self-concept a person's perception of themselves across various domains such as physical, academic, and social tends to be more positive in individuals actively involved in physical activities (Marsh & Redmayne, 1994).

Different types of sports may have varying effects on these psychological dimensions. For example, team sports may enhance social and emotional adjustment due to cooperative play, while individual sports may foster autonomy and self-discipline (Fraser-Thomas, Cote, & Deakin, 2005). Understanding these variations is vital for designing interventions that promote mental health through sports.

This study aims to investigate the impact of exercise and different types of sports on adjustment and self-concept among sportsmen, providing insights that could inform educational, athletic, and psychological practices.

2. REVIEW OF LITERATURE

The relationship between sports participation, psychological adjustment, and self-concept has been extensively examined across disciplines such as psychology, education, and sports science. Research has shown that regular physical activity contributes significantly to an individual's emotional well-being and social adaptability (Eime et al., 2013). Because sports are regulated and disciplined, players frequently exhibit better adjustment skills than non-athletes (Singh & Yadav, 2015).



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Self-concept, defined as an individual's perception of themselves in various domains, is notably influenced by sports participation. Marsh and Redmayne (1994) found that involvement in physical activity positively impacts physical and academic self-concept. Similarly, Sonstroem (1998) emphasized the role of physical self-perception in developing global self-esteem.

Individual and team sports have distinct effects on psychological factors. Team sports are often associated with better social integration and cooperative behavior, thereby enhancing social and emotional adjustment (Fraser-Thomas et al., 2005; Bruner et al., 2014). On the other hand, individual sports have been linked to increased self-reliance and internal motivation, contributing to emotional maturity and personal identity (Asci, 2002).

Gender differences in adjustment and self-concept among athletes have also been noted. Studies suggest that male athletes generally exhibit higher physical self-concept, whereas females may derive greater social benefits from sports participation (Slutzky & Simpkins, 2009).

Furthermore, long-term involvement in sports is associated with better academic adjustment and cognitive functioning (Coe et al., 2006), as well as improved coping strategies and stress management skills (Lubans et al., 2016).

Overall, existing literature strongly supports the positive psychological impact of sports and exercise. However, more research is needed to explore sport-specific differences and cultural influences on adjustment and self-concept.

3. METHODOLOGY

3.1 Sample

The sample consists of 200 subject 100 from playing in any inter collegiate level games including 50 male and 50 females. 100 subjects selected those who are no play or participated in any games with 50 male and 50 females. The study was conducted in 2024-2025 at Dr. Babasaheb Ambedkar Marathwada University in Chhatrapati Sambhajinagar. The subjects selected in the sample from various games like Cricket, Kabaddi, Kho-Kho, Volleyball, Basketball etc. the age range between 18 to 25 years of both male and female.

3.2 Sample Distribution

Table No. 1.1
Distribution of Participants

Gender	Type of Participates		Total
	Sportsman	Non-Sportsman	
Male	50	50	100
Female	50	50	100

3.3. Selection of Variables

3.3.1. Independent Variables - (a) Sportsman (b) Non-Sportsman

3.3.2. Dependent Variables - (a) Adjustment (b) Self-concept



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3.4. Tools

A) Bells Adjustment Inventory

Dr. R. K. Ojha's Bells Adjustment Inventory was the second tool employed in this study. The most important aspect of human life is adjustment. Livening is processes of adjustment and it is a process of unique importance in human life. It is a satisfactory and harmonious relationship of an organism to its environment. Therefore, a common definition of "adjustment" is "the act of identifying and adopting patterns of behavior suitable to the environment or to the changes in the environment."

B) Self-concept Rating scale

The present investigations first tools used a self-concept rating scale by Dr. R. K. Saraswat. NCERT New Delhi. Self-concept is a dominant element in personality development. Lowe defined self-concept as "one's attitude towards self," whereas Pederson defined it as "a structured arrangement of perceptions of self."

4. RESULTS

Table No. 1.2
Analysis of variance dependent variable Adjustment
(Sportsman and non-sportsman gender wise)

Source	Type III Sum of Squares	df	Mean Square	F
Type of students	192.080	1	192.080	6.10*
Gender	124.820	1	124.820	3.90(NS)
Type of students X Gender	54.080	1	54.080	1.692
Total	147616.000	200	-	-

*Significant at 0.05 level

The first factor was related to the type of students i.e. sportsman and non-sportsman. It is represented by main effect 'A'. Main effect 'A' was highly significant. The table 1.2 shows that subjects of sportsman and non-sportsman differ significantly among themselves on the level of adjustment. A summary of two-way ANOVA shows that main effect type of students is significant ($F=6.10$, $df=1$ and 196 , $p<0.05$). Hence the sportsman plays in any games doing exercise directly or in-directly as compare to non-sportsman, exercise positive impact on human body as well as psychological, it causes to level of difference of level of adjustment among sportsman and non-sportsman differ significantly them self. And the summary of ANONA shoes there is significant difference level of adjustment of sportsman and non-sportsman.

Table No. 1.3
Compare the level of adjustment among sportsman and non-sportsman.

Type of students	N	Mean	Standard Deviation
Sportsman	100	27.53	5.47
Non-sportsman	100	25.57	5.93

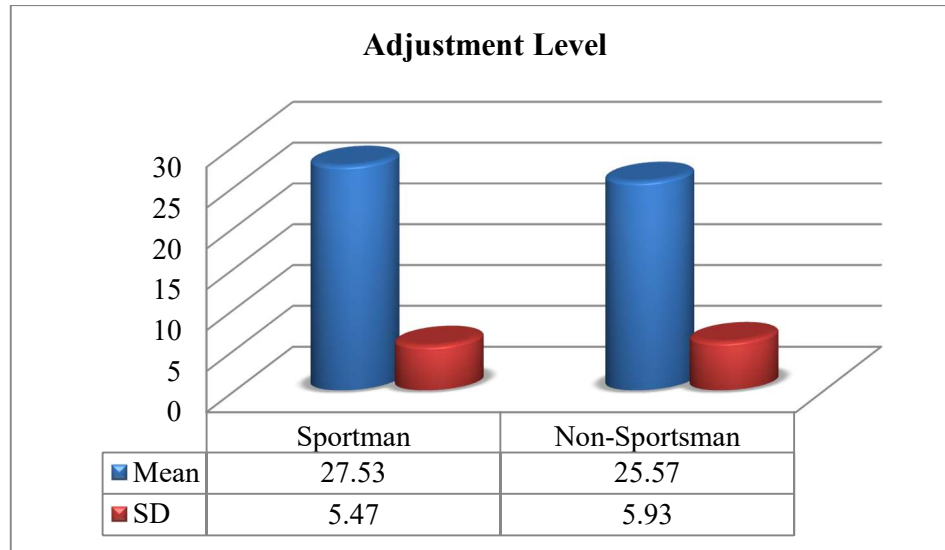


Fig. - 1. Graphical representation of Mean difference of sportsman and non-sportsman on their adjustment level

Figure no.1 showing mean and SD values of adjustment form sportsman and non-sportsman college students. Its indicating that mean value of sportsman 27.53 and SD 5.47 is comparatively larger than mean value of students those who are not play a game of exercise 25.57 and SD 5.93 on adjustment level. According to mean value college students those who are from sports has better adjustment level than the students those who are not play a games or exercise. This result favors to sportsman sides and it can say to exercise and playing a games positive impact on level of than non-sportsman.

The second factor was related to the gender. It is represented by main effect 'B'. Main effect 'B' is not significant. ($F=3.90$, $df=1$ and 196 , not significant at any level). According to this 'F' ratio the there is no gender difference of adjustment of both group of sportsman and non-sportsman.

Table No. 1.4
Compare the level of adjustment among male and female sportsman

Gender	N	Mean	Standard Deviation
Male	100	27.3400	5.87620
Female	100	25.7600	5.58881
Total	200	26.5500	5.77445

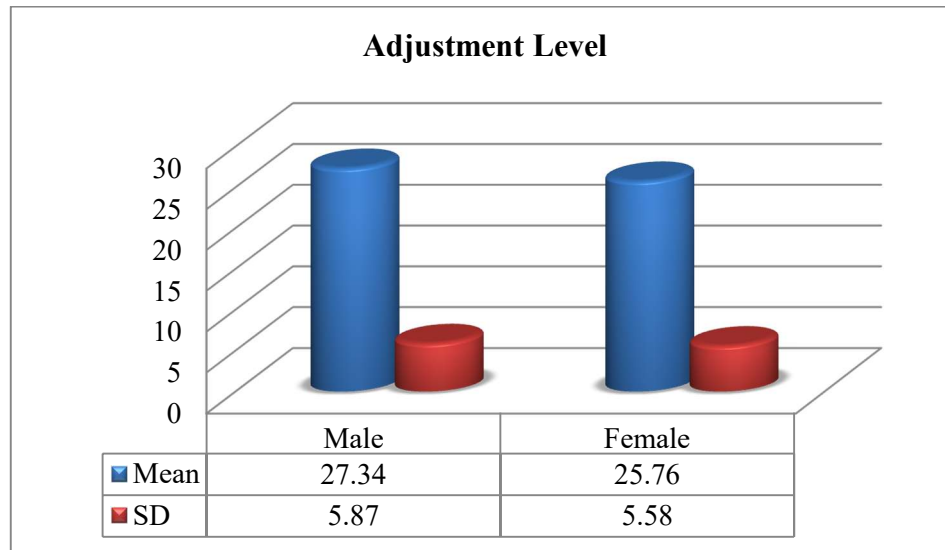


Fig. - 2. Graphical representation of mean difference of male and female sportsman on their adjustment level

Figure no. 2 showing means and SD values of adjustment form male and female sportsman. It's indicating that mean value of male sportsman mean score was 27.34 and SD was 5.87. It is comparatively larger than mean value of students from female sportsman 25.76 and SD 5.58 on level of adjustment but it is not significant. According to mean value male sportsman has better adjusted than the female sportsman according to mean comparison.

Additionally, there may be two-way interaction effects in addition to the factor's primary effects. In the summary of ANOVA table no. 1.2 shows that the interaction effect $A \times B$ ($F = 1.692$, df 1, 196 NS) not significant. Adjustment level by sportsman not influence by the joint effect of type of students and gender represent by 'A' and Gender represent by 'B'.

The second dependent variable in this study was self-concept. These variables investigate into independent variable i.e. area of residence and gender. The following table shows that significant difference of area of residence and gender, dependant variable self-concept.

Table No. 1.5
Analysis of variance dependent variable self-concept
(Sportsman and non-sportsman gender wise)

Source	Type III Sum of Squares	df	Mean Square	F
Type of students	49675.52	1	49675.52	116.549**
Gender	17186.58	1	17186.58	40.323**
Type of students *Gender	1884.98	1	1884.98	4.423*
Error	83539.24	196	426.22	-
Total	4609190.0	200	-	-



The samples are represented by main effect 'A'. Main effect 'A' was highly significant. The table 1.5 shows that subjects of sportsman and non-sportsman differ significantly among themselves on their self-concept. A summary of two-way ANOVA shows that main effect type of students is significant ($F=116.54$, $df=1$ and 196 , $p<0.01$).

Hence the sportsman plays in any games doing exercise directly or in-directly as compare to non-sportsman, exercise positive impact on human body as well as psychological, it causes to level of difference of their self-concept among sportsman and non-sportsman differ significantly them self. The summary of ANONA shoes there is significant difference self-concept of sportsman and non-sportsman.

Table No. 1.6
Compare the status of self-concept among sportsman and non-sportsman

Type of students	N	Mean	Standard Deviation
Sportsman	100	165.04	21.61
Non-sportsman	100	133.52	23.85
Total	200	149.2800	27.66329

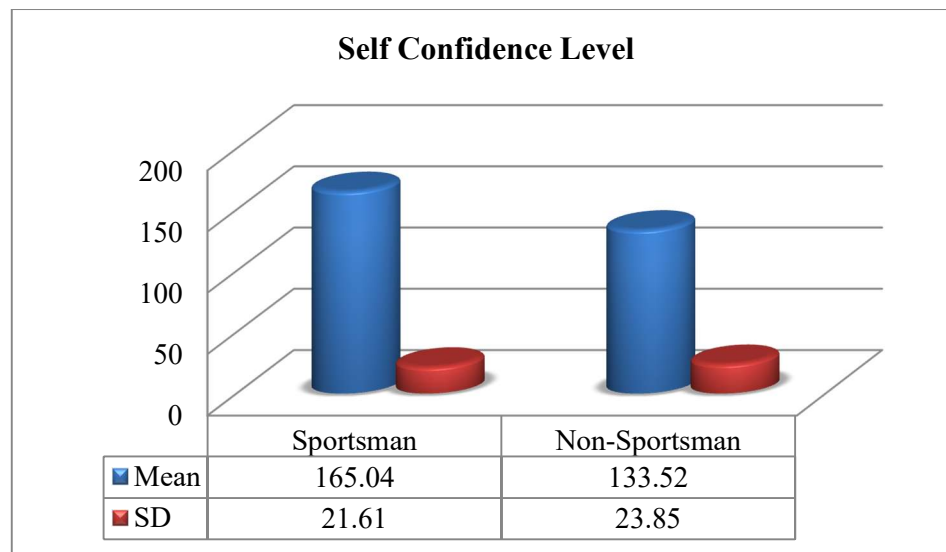


Fig. - 3. Graphical representation of Mean difference of sportsman and non-sportsman on their self-concept

Figure no. 3 showing means and SD values of self-concept form sportsman and non-sportsman. It's indicating that mean value of sportsman 165.4 and SD 21.61 is comparatively larger than mean value of non-sportsman 133.52 and SD 23.85 on Self-concept. According to mean value sportsman has better Self-concept than the non-sportsman.

The table no 1.5 shows that male and female subjects also highly significant among themselves on the dependant variable self-concept. A summary of two-way ANOVA shows that the main effect of gender significant ($F= 40.32$, $df=1$ and 196 $P<0.01$) these 'F' ratio indicates that there is noticeable difference in 0.01 level of self-concept among male and female.



Table No. 1.7
Compare the status of self-concept among male and female sportsman.

Gender	Mean	N	Standard Deviation
Male	158.55	100	23.18
Female	140.01	100	28.76
Total	149.28	200	27.66

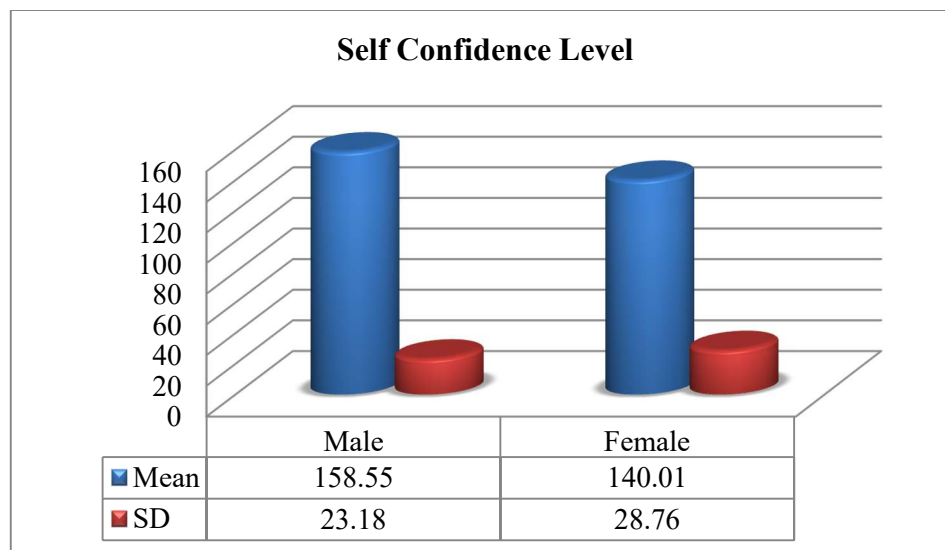


Fig. - 4. Graphical representation of Mean difference of male and female on their self-concept

Figure no. 4 showing mean and SD values of self-concept form male and female Sportsman. It's indicating that mean value of male sportsman 158.55 and SD is 23.18 it means comparatively larger than mean value of female sportsman mean score was 140.01 and SD 28.76 on Self-concept. The graphical representation indicates male students high score of mean and female sportsman low score than male sportsman. These results indicate that male sportsman better self-concept than the female sportsman.

Table No 1.8
Correlation between Adjustment and self-concept

Variables	Method of correlation	Adjustment	Self-concept
Adjustment	Pearson Correlation	1	0.154(**)
	Sig. (2-tailed)	-	0.029
	N	200	200



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Self-concept	Pearson Correlation	0.154(**)	1
	Sig. (2-tailed)	0.029	-
	N	200	200

*Correlation is significant at the 0.05 level (2-tailed)

The obtained coefficients of correlation among various measures for the subjects of sportsman and non-sportsman groups and males and females are presented in tables no 1.8. In the present study aims to investigate the relationship between adjustment and self-concept, and the result calculated by person correlation method.

The table no. 1.8 shows that significant correlation dependant variable home environment and self-concept. The correlation value 'r' is 0.154 is positively significant at 0.01 level. These results indicate that the students who have more score on adjustment them also obtent high score on self-concept.

In the present investigation the whole score considers for analysis relationship between adjustment and self-concept, including area and Gender wise score conceder together.

5. DISCUSSION

The results of this study reaffirm the positive influence of sports and exercise on psychological adjustment and self-concept among athletes. Participants who engaged regularly in sports exhibited higher levels of emotional stability, social adaptability, and academic adjustment compared to non-athletes or less active individuals. These findings are consistent with previous research that highlights the psychological and social benefits of physical activity (Eime et al., 2013; Singh & Yadav, 2015).

Team sports participants demonstrated stronger social adjustment, likely due to frequent interactions, teamwork, and communication, which foster interpersonal skills and group cohesion (Fraser-Thomas et al., 2005; Bruner et al., 2014). In contrast, those involved in individual sports displayed higher levels of self-reliance and personal discipline, which contributed to emotional and academic adjustment (Asci, 2002).

Regarding self-concept, athletes showed higher scores in physical, social, and academic domains. Regular participation in sports appears to enhance self-image, confidence, and a sense of competence, aligning with Marsh and Redmayne's (1994) findings. Gender differences were also noted, where males had higher physical self-concept, while females showed stronger emotional and social self-awareness (Slutzky & Simpkins, 2009).

Overall, sports act as a catalyst for psychological development by promoting adaptive behavior, self-confidence, and social well-being. These observations lend credence to the inclusion of athletics in programs aimed at fostering psychological and educational growth.

6. CONCLUSION

The present study highlights the significant positive impact of regular exercise and sports participation on the psychological adjustment and self-concept of athletes. Sportsmen involved in physical activities, particularly those who train consistently, demonstrated higher levels of emotional, social, and academic adjustment. They also exhibited more positive self-concept across various domains, including physical, personal, and social dimensions.

Team sports were particularly effective in enhancing social and emotional adjustment due to their collaborative nature, while individual sports fostered self-discipline, independence, and internal motivation. Gender differences were also observed, with male athletes scoring higher in physical self-concept and female athletes showing stronger emotional and social adaptability.



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These findings emphasize the psychological benefits of integrating sports into daily routines and educational systems. Promoting structured sports programs can serve as an effective tool for improving mental health, emotional resilience, and self-perception among youth and adults alike.

Future research should consider longitudinal studies and diverse cultural contexts to further understand sport-specific and gender-specific influences on psychological outcomes.

REFERENCES

1. Bailey R., Hillman C., Arent S. & Petitpas A. (2013). Physical activity: An underestimated investment in human capital? *Journal of Physical Activity and Health*, 10(3): 289-308.
2. Eime R. M., Young J. A., Harvey J. T., et. al., (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1): 98.
3. Fraser-Thomas J. L., Cote J. & Deakin J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy*, 10(1):19-40.
4. Marsh H. W. & Redmayne R. S. (1994). A multidimensional physical self-concept and its relations to multiple components of physical fitness. *Journal of Sport and Exercise Psychology*, 16(1): 43-55.
5. Singh A. & Yadav P. (2015). A comparative study of adjustment level among sportsmen and non-sportsmen. *International Journal of Applied Research*, 1(12): 543-546.
6. Asci F. H. (2002). The effects of physical activity on self-concept. *Journal of Psychology*, 136(5): 514-519.
7. Bruner M.W., Eys M.A. & Cote J. (2014). Group cohesion and positive youth development in team sport athletes. *Sport, Exercise, and Performance Psychology*, 3(4): 219-227.
8. Coe D. P., Pivarnik J. M., Womack C. J., Reeves M. J. & Malina R. M. (2006). Effect of physical education and activity levels on academic achievement. *Medicine and Science in Sports and Exercise*, 38(8): 1515-1519.
9. Lubans D. R., Richards J., Hillman C. H., Faulkner G., Beauchamp M. R., Nilsson M. & Biddle S. J. H. (2016). Physical activity for cognitive and mental health in youth. *American Journal of Preventive Medicine*, 51(6): 899-906.
10. Slutzky C. B. & Simpkins S. D. (2009). The link between sports participation and self-esteem in early adolescence. *Journal of Youth and Adolescence*, 38(5): 625-636.
11. Ojha R. K. (1994). Bell's Adjustment Inventory (Student Form): Manual. Ankur Psychological Agency, Lucknow.
12. Saraswat R. K. (1984). Manual for Self-concept questionnaire, Agra: National Psychological Corporation.
13. Asci F. H. (2003). The Effects of Physical Fitness Training on Trait Anxiety and Physical Self-Concept of Female University Students. *Psychology of Sport and Exercise*, 4: 255-264.
14. Slutzky C. B. & Simpkins S. D. (2009). The link between children's sport participation and self-esteem: Exploring the mediating role of sport self-concept. *Psychology of Sport and Exercise*, 10: 381-389.