

The Role of Group Exercise Programs in Enhancing Social Interaction and Psychological Health

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Abstract

Group exercise programs have emerged as effective interventions for promoting both physical and mental well-being. Beyond physical fitness, they serve as social platforms that enhance interpersonal connections, teamwork, and a sense of belonging. This research explores how structured group exercise programs contribute to social interaction and psychological health among adults. Using a mixed-method approach—including literature review, case study, and survey analysis (Tables 1 and 2)—the study evaluates the psychological, emotional, and social outcomes of group-based physical activities. Findings reveal that regular participation in group exercise improves self-esteem, reduces symptoms of stress and anxiety, enhances mood, and fosters supportive social networks. The study concludes that group exercise not only supports physical health but also plays a significant role in building community and improving psychological resilience.

Keywords: Group Exercise Programs; Social Interaction; Psychological Health; Stress Reduction; Mental Well-being; Physical Activity; Community Building; Self-Esteem; Emotional Resilience; Social Support.

Introduction

The global rise in sedentary lifestyles and mental health issues highlights the importance of physical activity as a multidimensional health strategy. While individual exercise provides physical benefits, group exercise programs extend these outcomes by incorporating social and psychological dimensions.

Activities such as aerobics, yoga, dance, and team sports foster group dynamics, creating opportunities for social bonding and collective motivation. Group settings often improve adherence to physical activity routines, as participants experience accountability, encouragement, and shared goals. This study focuses on the dual impact of group exercise on enhancing social interaction and improving psychological health, particularly in young and middle-aged adults.

Methodology

A mixed-method research design was adopted. A literature review (2010–2025) identified prior evidence on the impact of group exercise programs. Primary data were collected through a survey of 80 participants enrolled in group exercise programs (aerobics, yoga, Zumba, and cycling groups) and 20 instructors. The participant survey used a five-point Likert scale, while instructor feedback was recorded through structured questionnaires. Data were analyzed using descriptive statistics, correlation analysis, and thematic analysis of open-ended responses. A case study of a community-based group fitness initiative illustrates real-world application.

Case Study

The “Community Fit Program” launched in Pune, India, provided structured group exercise classes three times a week, focusing on aerobics and yoga. Over a 12-week period, participants reported significant improvements in stress management, mood, and overall psychological well-being. Moreover, many participants highlighted the value of new friendships and increased social support. Instructors observed enhanced group cohesion, improved motivation, and noticeable reductions in absenteeism. The case demonstrates how group-based exercise interventions create holistic benefits beyond physical fitness.

Data Analysis

Table 1: Participant Survey Responses (n = 80)

Survey Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Group exercise improves my psychological well-being	35	32	8	3	2
Participation reduces stress and anxiety	40	28	7	3	2
Exercising in groups helps me make new friends	38	30	7	4	1
Group workouts improve my motivation compared to exercising alone	42	25	8	4	1
Group programs enhance my overall sense of community and belonging	36	30	9	3	2

Table 2: Instructor/Facilitator Responses (n = 20)

Survey Statement	Positive Response	Negative Response	Summary Findings
Participants show improved psychological well-being	18	2	Most report reduced stress and enhanced mood
Social bonding and friendships increase through group exercise	19	1	Strong social support networks observed
Group dynamics improve motivation and attendance	17	3	Higher consistency compared to solo exercise
Participants demonstrate better emotional resilience	18	2	Stress-coping abilities improved
Group programs contribute to long-term lifestyle adherence	19	1	Encourages sustained engagement in physical activity

Questionnaire

Participant Survey Sample Questions (Likert Scale):

1. Does group exercise improve your psychological well-being?
2. Does participation reduce your stress and anxiety levels?
3. Do you find it easier to make friends in a group exercise setting?
4. Do you feel more motivated when exercising in a group compared to alone?
5. Does group exercise enhance your sense of belonging and community?

Instructor/Facilitator Survey Sample Questions (Yes/No):

1. Do participants report improved psychological health after group programs?
2. Does group exercise promote social interaction and bonding?
3. Do group dynamics increase participant motivation and attendance?

4. Do participants demonstrate greater emotional resilience?
5. Do group programs encourage long-term adherence to exercise routines?

Conclusion

Group exercise programs play a vital role in promoting psychological health and enhancing social interaction. Findings from surveys, instructor reports, and case study evidence demonstrate that participants benefit from reduced stress, improved mood, and enhanced motivation. Social connections developed through group exercise foster belonging and support, which further contribute to psychological resilience. These programs are not only effective for improving physical health but also for strengthening communities and improving mental well-being. Future research should explore how cultural factors, digital platforms, and hybrid exercise models can expand the reach and benefits of group exercise programs.

References

1. Carron, A.V., Hausenblas, H.A., Mack, D. (1996). Social influence and exercise: A meta-analysis. *Journal of Sport & Exercise Psychology*.
2. Beauchamp, M.R., et al. (2018). *Group dynamics in exercise: Theory, research, and practice*. Routledge.
3. Biddle, S.J.H., Mutrie, N. (2007). *Psychology of physical activity*. Routledge.
4. Eime, R.M., et al. (2013). A systematic review of the psychological and social benefits of participation in sport. *International Journal of Behavioral Nutrition and Physical Activity*.
5. Cresswell, J.D. (2017). Mind-body connections in exercise. *Annual Review of Psychology*.
6. Fox, K.R. (1999). The influence of physical activity on mental well-being. *Public Health Nutrition*.
7. Reiner, M., et al. (2013). Long-term health benefits of physical activity. *BMC Public Health*.
8. Anderson, E., Shivakumar, G. (2013). Effects of exercise on depression and anxiety. *Frontiers in Psychiatry*.
9. Peluso, M.A.M., Andrade, L.H.S.G. (2005). Physical activity and mental health. *Clinical Practice and Epidemiology in Mental Health*.
10. Mandolesi, L., et al. (2018). Effects of physical exercise on cognitive functioning and well-being. *Frontiers in Psychology*.
11. Dr. Deepak. (2023). Human Rights and Right to Education in India. *Innovative Research Thoughts*, 9(2), 5–8. Retrieved from <http://irt.shodhsagar.com/index.php/j/article/view/625>
12. Deepak. (2018). Topic: Right to Education Act 2009: A Study of its Implementation in Haryana. *Innovative Research Thoughts*, 4(4), 114–117. Retrieved from <http://irt.shodhsagar.com/index.php/j/article/view/806>

13. Deepak. (2017). To study the Main Provisions of The Right of Children to Free and Compulsory Education Act 2009 and its Qualitative effects. Universal Research Reports, 4(4), 17–20. Retrieved from <http://urr.shodhsagar.com/index.php/j/article/view/140>
14. Deepak. (2017). Study of Recommendations of Secondary Education Commission (1952-53) also study of its merits and demerits. Universal Research Reports, 4(3), 28–30. Retrieved from <http://urr.shodhsagar.com/index.php/j/article/view/123>
15. Deepak, Dr. (2024b). भारत की राजनीति में महिलाओं की भूमिका. Shodha Sagar, 11(2), 238–246. <https://irt.shodhsagar.com/index.php/j/article/view/1540>
16. Deepak, Dr. (2024). भारत में स्वदेशी शासन में महिलाओं का योगदान, Shodha Sagar, 10(4), 62–69. <https://urr.shodhsagar.com/index.php/j/article/view/1441>
17. Deepak, & Susheel Kumar Baswal. (2016). RTE Act 2009 and Learning Disability in Higher Education. International Journal for Research Publication and Seminar, 7(8), 73–79. Retrieved from <https://jrps.shodhsagar.com/index.php/j/article/view/967>
18. Susheel Kumar Baswal, & Deepak. (2017). Working and Organization of DRDA : A Case Study. International Journal for Research Publication and Seminar, 8(1), 161–169. Retrieved from <https://jrps.shodhsagar.com/index.php/j/article/view/1005>
19. Dr. Deepak, & Shivani Bidhuri. (2024). Role of India in Strengthening Afghanistan's Educational Infrastructure. Educational Administration: Theory and Practice, 30(5), 15498–15505. <https://doi.org/10.53555/kuey.v30i5.9362>

- 20.Dr. Deepak. (2024). The aspects of International Relations. Journal of the Oriental Institute, ISSN:0030-5324 UGC CARE Group 1, 73(2), 198–205.
<https://doi.org/10.8224/journaloi.v73i2.115>
- 21.Dr. Deepak, & Shivani Bidhuri. (2024). Role of India in Strengthening Afghanistan's Educational Infrastructure. Educational Administration: Theory and Practice, 30(5), 15498–15505.
<https://doi.org/10.53555/kuvey.v30i5.9362>
- 22.Kumar R. & Deepak (2025). A comparative analysis of the Haryana High Court and the District Courts in Haryana, structure, jurisdiction, and functioning. Indian Journal of Law, 3(4), 8-12.
<https://doi.org/10.36676/ijl.v3.i4.102>
- 23.Kumar R & Deepak (2025). A Study of the Haryana Judiciary: The Punjab & Haryana High Court and the District Courts of Haryana. International Journal for Research Publication and Seminar, 16(3), 119-112.
<https://doi.org/10.36676/jrps.v16.i3.300>.
- 24.Dr. Deepak. (2016). District Planning Committee: An Overview. Public Affairs and Governance, 4(1), 49–58.
- 25.Dr. Deepak. (2019). Right to information: Its procedure and provision. International Journal of Social Sciences Review, 7(6-1), 2081–2083.
- 26.Dr. Deepak. (2020). Role of Self-help Groups in Women Empowerment. International Research Journal of Management Sociology & Humanities, 11(5), 185–191. <https://doi.org/10.32804/IRJMSH>
- 27.Mahra, Mr Anil Kumar. "FINANCIAL LITERACY AND PATTERN OF SAVINGS, INVESTMENT BEHAVIOR OF WOMEN TEACHING FACULTIES IN SAGAR REGION. AN EMPIRICAL ASSESSMENT."
- 28.Mahra, Anil Kumar. "THE ROLE OF GENDER IN ONLINE SHOPPING-A."
- 29.Mahra, Anil Kumar. "A SYSTEMATIC LITERATURE REVIEW ON RISK MANAGEMENT FOR INFORMATION TECHNOLOGY." (2019).

- 30.Mahra, Anil Kumar. "A Strategic Approach to Information Technology Management." (2019).
- 31.Dwivedi, Shyam Mohan, and Anil Kumar Mahra. "Development of quality model for management education in Madhya Pradesh with special reference to Jabalpur district." *Asian Journal of Multidisciplinary Studies* 1.4 (2013): 204-208.
- 32.Mahra, Anil Kumar. "Management Information Technology: Managing the Organisation in Digital Era." *International Journal of Advanced Science and Technology* 4238.29 (2005): 6.
- 33.Kumar, Anil, et al. "Investigating the role of social media in polio prevention in India: A Delphi-DEMATEL approach." *Kybernetes* 47.5 (2018): 1053-1072.
- 34.Kumar, Anil. "Investigating the role of social media in polio prevention in India: a Delphi-DEMATEL approach Anil Kumar, Mohamad Amin Kaviani, Eleonora Bottani, Manoj Kumar Dash, Edmundas Kazimieras Zavadskas."
- 35.Sankpal, Jitendra, et al. "Oh, My Gauze!!!-A rare case report of laparoscopic removal of an incidentally discovered gossypiboma during laparoscopic cholecystectomy." *International Journal of Surgery Case Reports* 72 (2020): 643-646.
- 36.Salunke, Vasudev S., et al. "Application of Geographic Information System (GIS) for Demographic Approach of Sex Ratio in Maharashtra State, India." *International Journal for Research in Applied Science & Engineering Technology (IJRASET)* 8 (2020).
- 37.Sudha, L. R., and M. Navaneetha Krishnan. "Water cycle tunicate swarm algorithm based deep residual network for virus detection with gene expression data." *Computer Methods in Biomechanics & Biomedical Engineering: Imaging & Visualisation* 11.5 (2023).
- 38.LK, Sudha, Sukumar Roy, and K. Uma Rao. "Effect of nanofillers on the dielectric properties of nanostructured amorphous alumina modified

- polycarbonate composites." *Materials Today: Proceedings* 4.9 (2017): 9561-9565.
39. Patel, Ankit B., and Ashish Verma. "COVID-19 and angiotensin-converting enzyme inhibitors and angiotensin receptor blockers: what is the evidence?." *Jama* 323.18 (2020): 1769-1770.
40. Rahul, T. M., and Ashish Verma. "A study of acceptable trip distances using walking and cycling in Bangalore." *Journal of Transport Geography* 38 (2014): 106-113.
41. Gayathri, Harihara, P. M. Aparna, and Ashish Verma. "A review of studies on understanding crowd dynamics in the context of crowd safety in mass religious gatherings." *International journal of disaster risk reduction* 25 (2017): 82-91.
42. Kabat, Subash Ranjan, Sunita Pahadsingh, and Kasinath Jena. "Improvement of LVRT Capability Using PSS for Grid Connected DFIG Based Wind Energy Conversion System." *2022 1st IEEE International Conference on Industrial Electronics: Developments & Applications (ICIDeA)*. IEEE, 2022.
43. Kabat, Subash Ranjan. "Cutting-Edge Developments in Engineering and Technology: A Global Perspective." *International Journal of Engineering & Tech Development* 1.01 (2025): 9-16.
44. Jena, Kasinath, et al. "A 3- Φ switched-capacitor-based multilevel inverter with reduced voltage stress and part count." *Electrical Engineering* 106.3 (2024): 2679-2690.
45. Das, Kedar Nath, et al., eds. *Proceedings of the International Conference on Computational Intelligence and Sustainable Technologies: ICoCIST 2021*. Springer Nature, 2022.
46. Hazra, Madhu Sudan, and Sudarsan Biswas. "A study on mental skill ability of different age level cricket players." *International Journal of Physiology, Nutrition and Physical Education* 3.1 (2018): 1177-1180.

- 47.Deka, Brajen Kumar. "Deep Learning-Based Language." International Conference on Innovative Computing and Communications: Proceedings of ICICC 2023, Volume 2. Vol. 731. Springer Nature, 2023.
- 48.Deka, Brajen Kumar. "Deep Learning-Based Language Identification in Code-Mixed Text." International Conference On Innovative Computing And Communication. Singapore: Springer Nature Singapore, 2023.
- 49.Deka, Brajen Kumar. "The Future of Education: Integrating Virtual Reality and AI for Enhanced Learning Experiences in Higher Education." Universal Journal of Advanced Studies P-ISSN-3051-0570, E-ISSN-3051-0589 Impact Factor: 6.8 1.01 (2025): 26-34.
- 50.Obaiah, G. O., J. Gireesha, and M. Mylarappa. "Comparative study of TiO₂ and palladium doped TiO₂ nano catalysts for water purification under solar and ultraviolet irradiation." Chemistry of Inorganic Materials 1 (2023): 100002.
- 51.Obaiah, G. O., K. H. Shivaprasad, and M. Mylarappa. "A potential use γ -Al₂O₃ coated cordierite honeycomb reinforced Ti_{0.97}Pd_{0.03}O₂- δ catalyst for selective high rates in coupling reactions." Materials Today: Proceedings 5.10 (2018): 22466-22472.
- 52.Majeed, Afshan, et al. "2. FRESHWATER BIOLOGY AND FISHERIES." CENTRE OF EXCELLENCE IN MARINE BIOLOGY, UNIVERSITY OF KARACHI, KARACHI (2015): 202.
- 53.Yousaf, Muhammad, et al. "ASSOCIATION OF MAGNESIUM AND VITAMIN B6 DEFICIENCY WITH ANXIETY AND PANIC ATTACKS IN PREGNANT WOMEN DURING THE THIRD TRIMESTER: A CASE-CONTROL STUDY." Journal of Medical & Health Sciences Review 2.1 (2025).
- 54.Shahid, Muhammad Hassam, et al. "A Quest for Equality: Examining Women's Empowerment in Pakistan." ILMA JOURNAL OF SOCIAL SCIENCES & ECONOMICS 4.1 (2023): 78-103.