

THE ROLE OF INSTAGRAM FITNESS INFLUENCERS IN PROMOTING SPORTS NUTRITION SUPPLEMENTS. A Study Among Gym Enthusiasts in Vijayawada, NTR District

Dr. R. Pradeep Kumar Patnaik¹, Mahipal Singh²

¹Assistant Professor, Department of BBA, Koneru Lakshmaiah Education Foundation (KLEF) Pkpradeep143@gmail.com

²Research Scholar, BBA, Koneru Lakshmaiah Education Foundation (KLEF) mahipalsinghps123@gmail.com

Abstract

This study evaluates the role of Instagram fitness influencers in promoting sports-nutrition supplements among gym enthusiasts in Vijayawada, NTR District. Instagram has become an important source of workout, nutrition, fitness and supplement recommendations. The study focuses on influencer credibility, trust, fitness-content exposure, supplement-related exposure, brand discovery and purchase intention. Primary data were collected through a Google Forms-based structured questionnaire, and 77 responses were analysed. Of these, 61 respondents identified themselves as current gym members in Vijayawada, NTR District. Descriptive findings show that 57 respondents 74.0% discovered a supplement brand through Instagram, while 41 respondents 53.2% reported purchasing a supplement after seeing it promoted or recommended on Instagram. Spearman rank correlation results show significant positive relationships between influencer credibility and purchase intention, trust and purchase intention, influencer reviews/demonstrations and purchase intention, follower-count importance and trust, and supplement-related exposure and purchase intention. General fitness-content exposure alone was not statistically significant at the 5% level. The findings indicate that credibility, trust and the quality of influencer communication are more important than simple exposure.

Keywords: Instagram, Fitness Influencers, Sports-Nutrition Supplements, Purchase Intention, Gym Enthusiasts, Influencer Marketing, Vijayawada.

1. Introduction of the Study

Social media has changed the way consumers seek information about fitness, nutrition and products. Instagram is particularly relevant because it combines images, Reels, short-form videos, reviews and creator-to-consumer communication. For gym-goers and fitness enthusiasts, the platform can become part of the process of finding workout ideas, diet information and product recommendations.

Fitness influencers act as a bridge between brands and consumers. Instead of depending only on traditional advertising, supplement companies can use influencers to communicate with a highly targeted fitness audience. Influencers may present products through demonstrations, personal experiences, reviews and recommendations, making promotional communication appear more personal and relatable.

Sports-nutrition supplements are an important part of the marketing environment studied here. The current research does not attempt to judge whether a particular supplement is appropriate or safe for an individual. Instead, it examines how Instagram-based communication shapes awareness, trust, comparison and purchase-related attitudes among the surveyed respondents.

The central issue is credibility. When an influencer recommends a supplement, followers may not always be able to distinguish between an independent opinion and paid promotional communication. Therefore, reliability, expertise, trustworthiness, disclosure of sponsorship and the quality of reviews are important considerations.

The study focuses specifically on gym enthusiasts and fitness-oriented Instagram users associated with Vijayawada, NTR District. It brings together social-media usage, influencer characteristics and consumer behaviour in the context of sports-nutrition supplements.

2. Review of Literature

Aguilar and Arbaiza (2021) examined fitness influencers and brand credibility through Instagram imagery. Their work highlighted credibility, expertise and attractiveness as important elements of perceived trustworthiness. Durau, Diehl and Terlutter (2022) examined trustworthiness, expertise and attractiveness in relation to exercise intentions, showing why the characteristics of the influencer can affect audience responses.

Baig, Elahib and Hashmi (2023) studied the impact of social-media fitness content on health and fitness motivation. De Freitas (2023) examined Instagram fitness influencers and followers' fitness goals, with expertise emerging as an important predictor. These studies support the broader idea that fitness-related social-media content can influence perceptions and behaviour. Rekhi and Wani (2025) examined the rise of fitness supplements and safety perceptions in an Indian context. Their study identified social media, fitness influencers, trainers and peers as sources of supplement information. This is relevant because it connects social-media exposure with supplement-related behaviour, while also highlighting the importance of information quality. Rbii (2026) examined social-media marketing and gym-supplement consumption among youth, including influencer credibility, exposure, transformation content, trust, misinformation and sponsorship disclosure. Arora and Verma (2026) examined influencer marketing and demand across fitness-product categories in an emerging Indian urban market and reported a positive relationship between influencer marketing and buying intention.

3. Research Gap

The literature indicates a progression from studies of influencer credibility, imagery and exercise motivation towards studies of supplement use, safety and influencer-driven demand. However, the existing studies do not fully combine Instagram fitness influencers, sports-nutrition supplement purchase behaviour, credibility, trust, reviews, follower count and sponsorship concerns within a single local study.

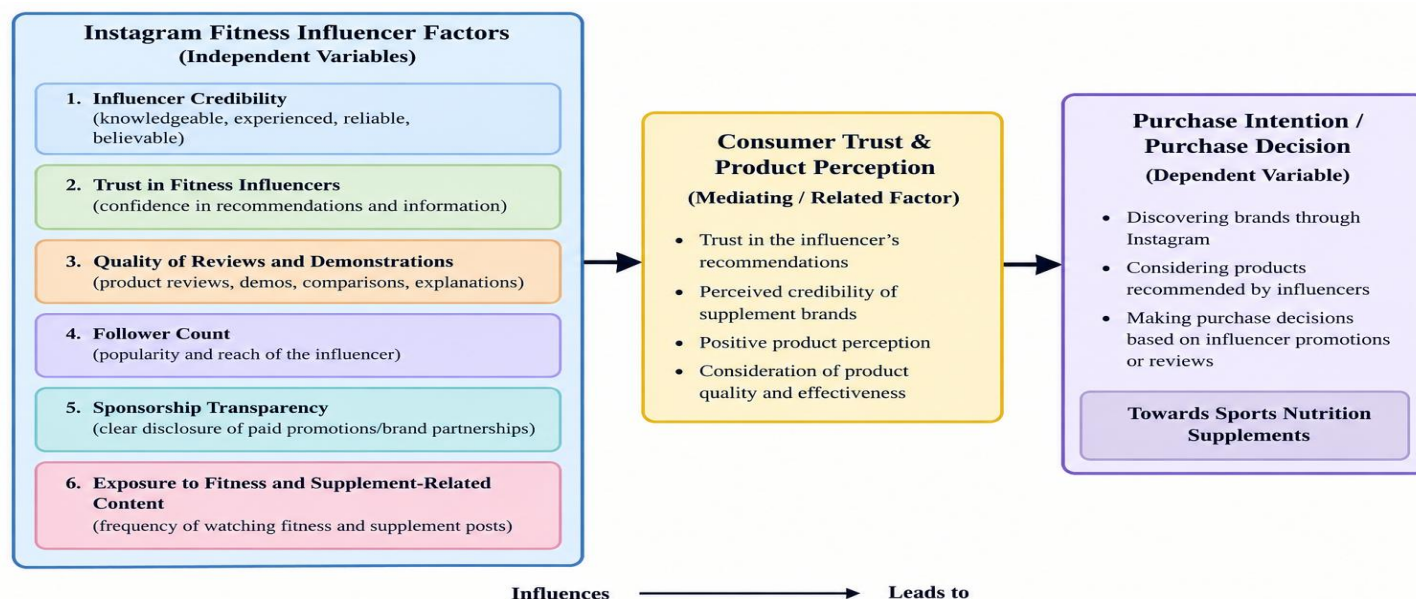
Some studies examine influencer credibility and fitness imagery without directly studying supplement purchase behaviour.

Some studies focus on exercise motivation or fitness goals rather than supplement discovery and purchase.

Indian studies have examined supplement behaviour in locations such as Nashik and broader markets such as NCR Delhi rather than Vijayawada, NTR District.

The present study combines influencer credibility, trust, reviews, follower count, sponsorship concerns and purchase intention in the context of gym-oriented respondents.

4. Conceptual framework



5. Objectives of the Study

To study whether influencer recommendations are related to consumers' interest in and purchase of supplements.

To identify the role of influencer credibility and trust in sports-nutrition supplement recommendations.

To examine the role of Instagram in discovering sports-nutrition supplement brands.

To examine the role of influencer reviews, demonstrations and follower count in consumer perceptions.

To investigate exposure to Instagram fitness influencers and fitness-related content.

To assess the overall role of Instagram fitness influencers in sports-nutrition supplement purchase decisions.

To understand consumer concerns about paid promotions and sponsored supplement content.

6. Research Questions

- How often do gym enthusiasts use Instagram and view fitness-related content?
- How often are gym enthusiasts exposed to supplement-related posts and Reels by fitness influencers?
- Do respondents trust supplement recommendations made by fitness influencers?
- Is there a relationship between influencer credibility and willingness to buy a recommended supplement?
- Can Instagram assist respondents in discovering new supplement brands?
- Are influencer reviews and recommendations factors influencing comparison and purchasing decisions?
- Can concerns about paid promotion influence perceptions of influencer recommendations?

7. Hypotheses

- H1: Influencer credibility is positively associated with sports-nutrition supplement purchase intention.
- H2: Exposure to fitness-related Instagram content is positively associated with supplement purchase intention.
- H3: Trust in fitness influencers is positively associated with supplement purchase intention.
- H4: Influencer reviews and demonstrations are positively associated with supplement purchase intention.
- H5: The perceived importance of an influencer's follower count is positively associated with trust in recommendations.
- H6: Exposure to supplement-related Instagram posts/Reels is positively associated with supplement purchase intention.

8. Research Methodology

Research Design. The study uses a quantitative, descriptive and cross-sectional research design. Information was collected at one point in time through a structured questionnaire. The design is suitable for describing Instagram usage, exposure to fitness influencers and supplement-related attitudes and for testing associations among measured variables.

Study Area and Population. The study is centred on gym enthusiasts and fitness-oriented Instagram users associated with Vijayawada, NTR District, Andhra Pradesh.

Sample and Sampling. The dataset contains 77 respondents. Of these, 61 indicated that they were current gym members in Vijayawada, NTR District, while 16 selected No. Convenience sampling was used because the researcher accessed the target audience through contacts and an online form.

Data Collection and Questionnaire. Primary data were collected through Google Forms. The questionnaire contained 30 questions covering respondent profile, gym habits, Instagram usage, fitness-influencer exposure, supplement behaviour and influencer-related purchase attitudes. Questions 13–20 and 25–30 used five-point Likert responses. **Data Analysis.** Frequency and percentage analysis were used for categorical responses. Mean scores were calculated for the Likert-scale items. Spearman rank correlation was used to test the six proposed hypotheses because the main explanatory variables were measured using ordered response categories and Likert-scale statements.

8.1 Variables of the Study

The study examines influencer credibility, trust, general fitness-content exposure, influencer reviews and demonstrations, perceived importance of follower count, supplement-related exposure and purchase intention. The analysis links these factors to respondents' Instagram-based supplement discovery and purchase-related behaviour.

8.2 Measurement Scale

The Likert items were measured on a five-point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Scale	Meaning
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

8.3 Ethical Considerations

The survey was conducted for academic purposes. Respondents were informed about the purpose of the questionnaire, and the study did not require unnecessary personally identifiable information. The analysis uses the collected responses in aggregate form.

9. Data Analysis and Interpretation

A total of 77 responses were analysed. Percentages reported below use the full response count of 77. The following sections present respondent characteristics, gym participation, Instagram usage, fitness-content preferences, supplement exposure, brand discovery, purchase behaviour, Likert means and hypothesis testing.

9.1 Respondent Profile

Age Distribution of Respondents

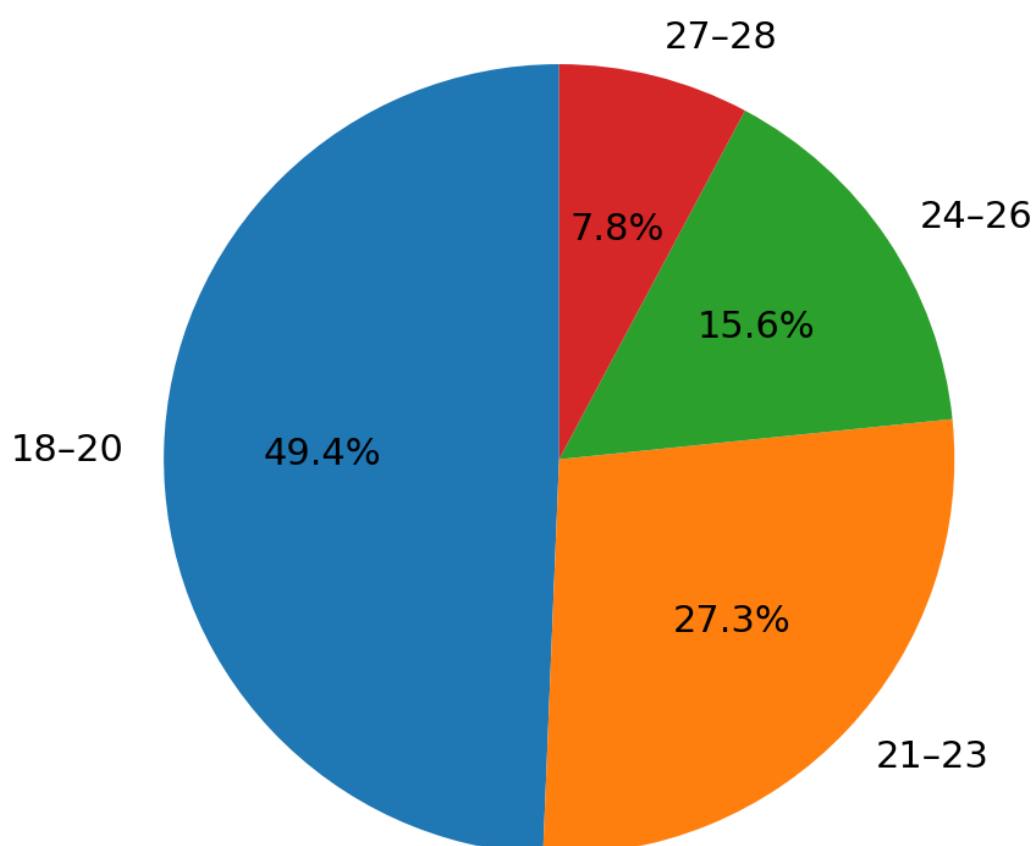


Figure 1. Age distribution of respondents (n = 77)

The largest age group was 18–20 years, with 38 respondents. The 21–23 group accounted for 21 respondents, followed by 24–26 years with 12 respondents and 27–28 years with 6 respondents.

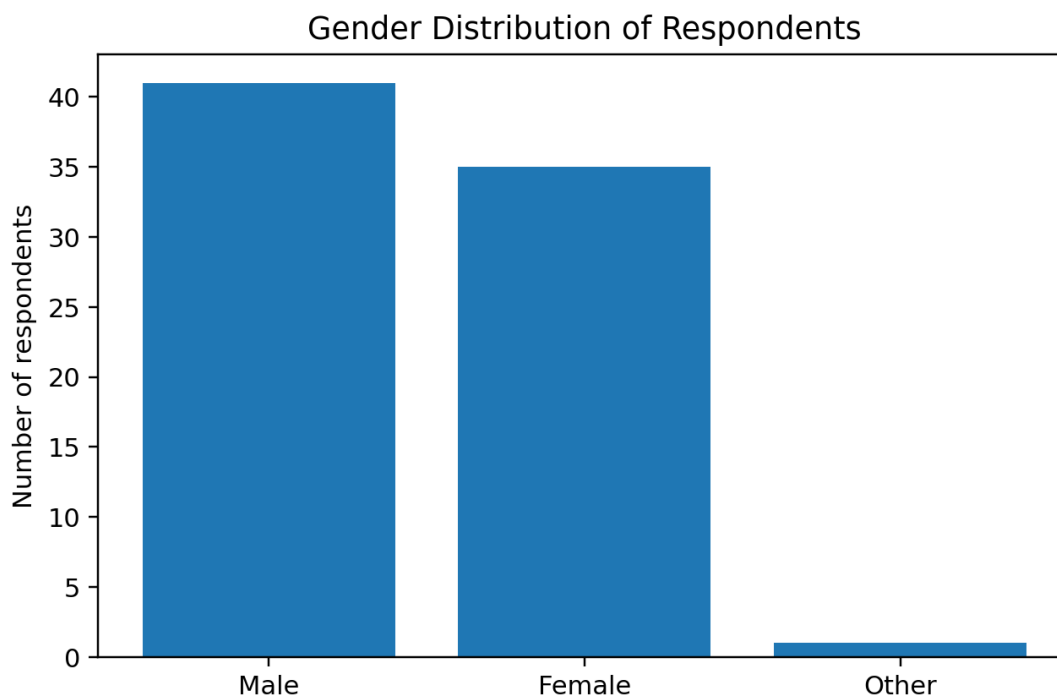


Figure 2. Gender distribution of respondents (n = 77)

The sample included 41 male respondents ,35 female respondents and 1 other . The distribution is reasonably mixed, although males formed a small majority.

9.2 Gym Participation

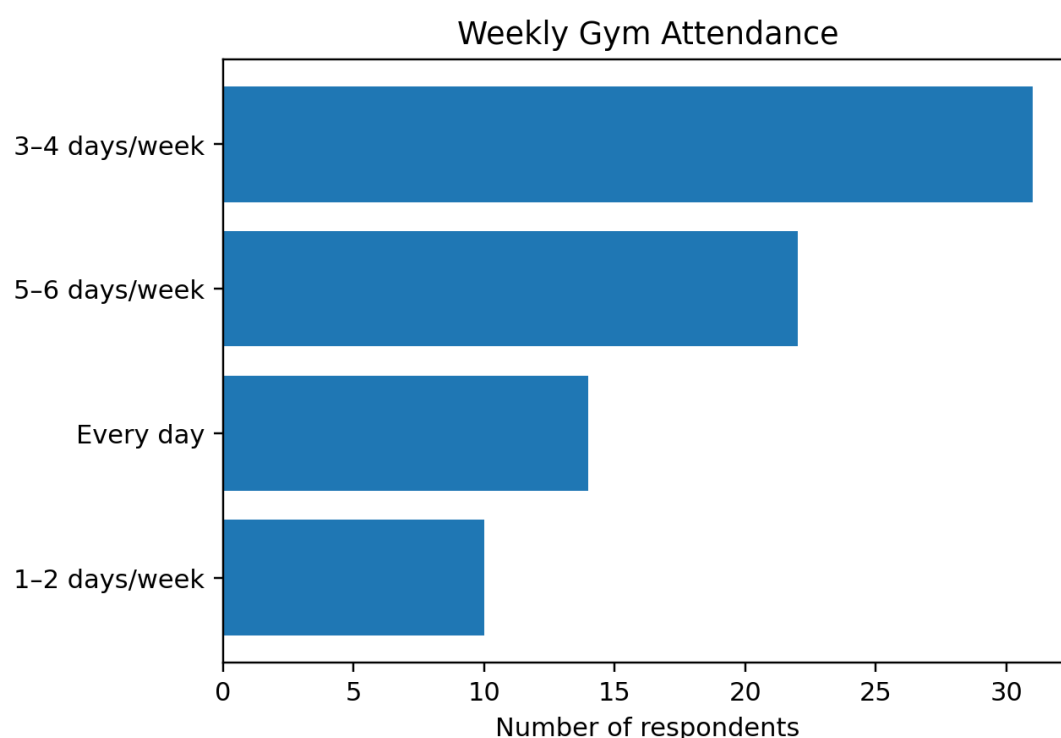


Figure 3. Weekly gym attendance (n = 77)

The largest group, 31 respondents reported attending the gym 3–4 days per week. Another 22 respondents attended 5–6 days, 14 attended every day, and 10 attended 1–2 days per week. The distribution indicates regular contact with fitness activities for a substantial portion of the sample.

9.3 Instagram Usage

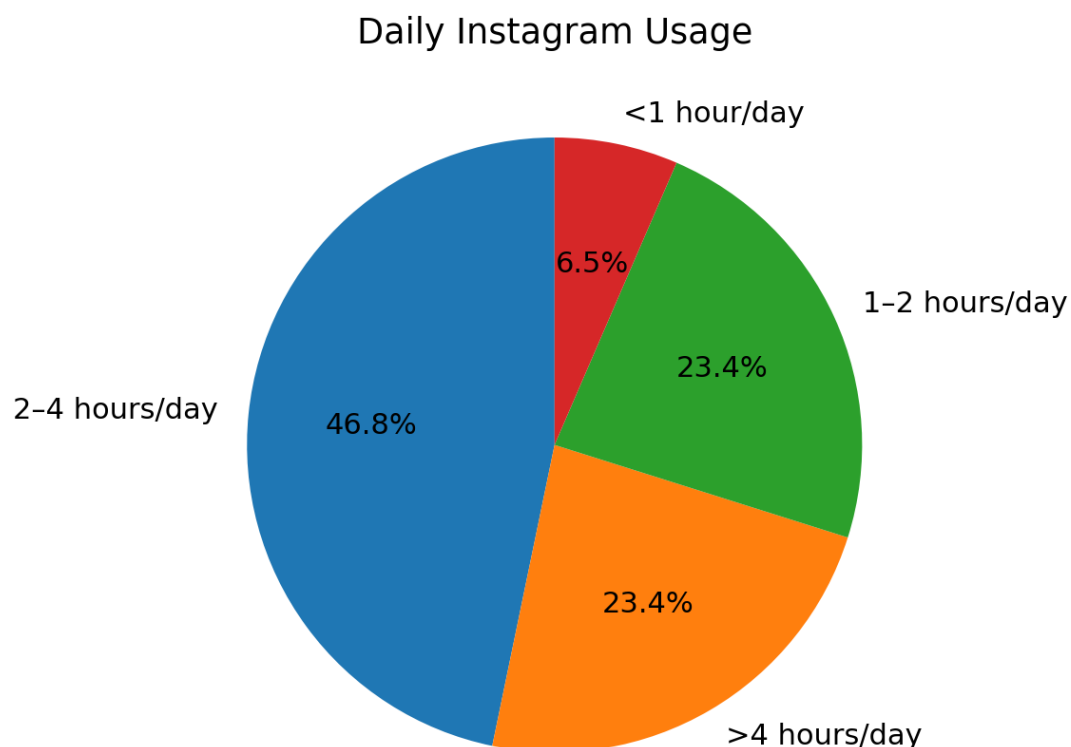


Figure 4. Daily Instagram usage (n = 77)

The most common daily usage category was 2–4 hours, reported by 36 respondents. Eighteen respondents used Instagram for more than four hours, and another 18 used it for 1–2 hours. Only 5 respondents reported less than one hour per day.

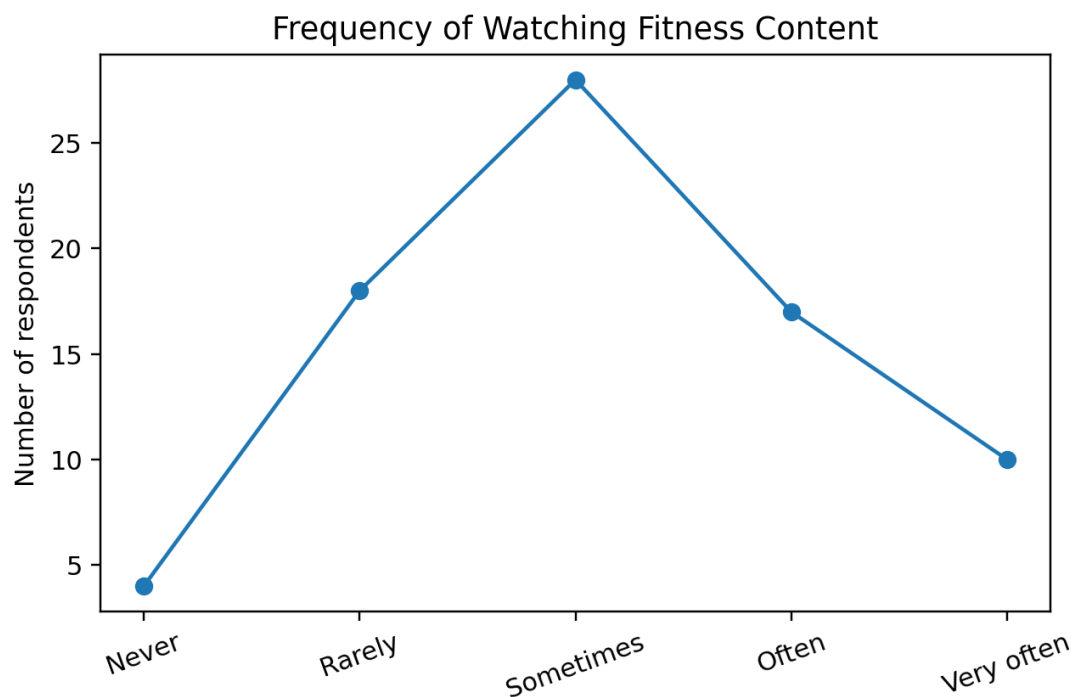


Figure 5. Frequency of watching fitness-related content (n = 77)

The most common response was Sometimes, selected by 28 respondents. Rarely was selected by 18, Often by 17, Very often by 10 and Never by 4. This indicates that fitness content forms a regular part of the Instagram experience for most respondents, although it is not consumed at the same frequency by everyone.

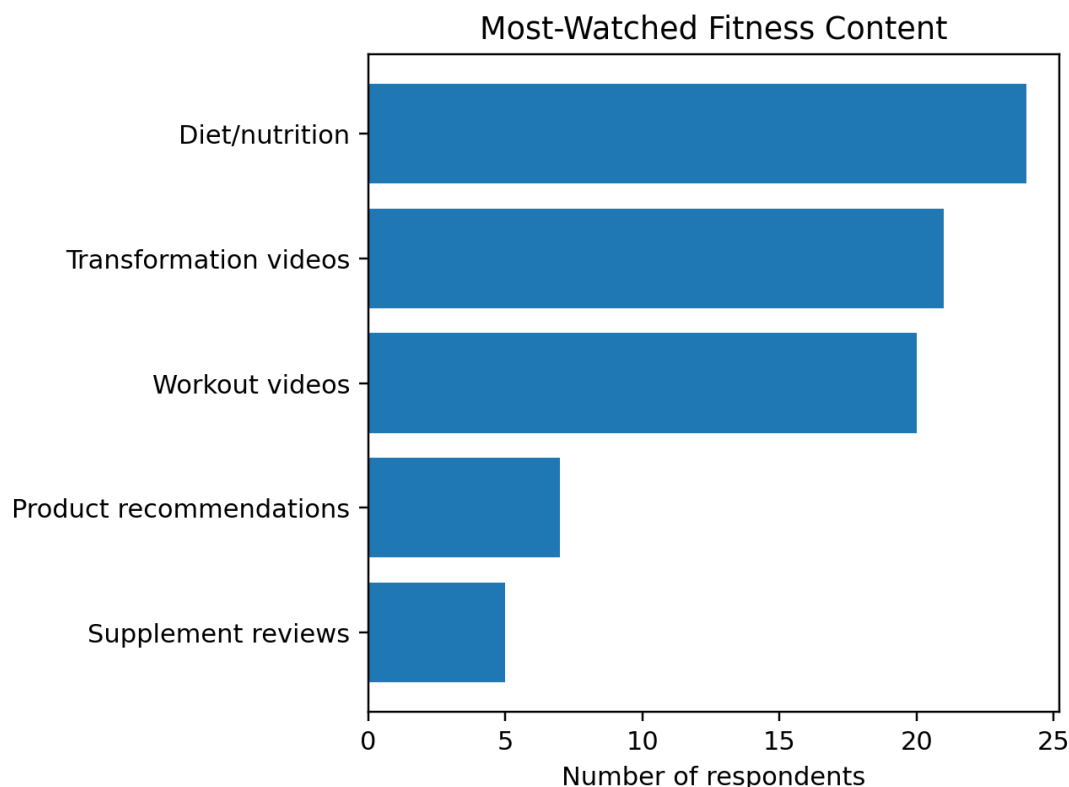


Figure 6. Most-watched fitness content (n = 77)

Diet/nutrition content was the most-watched category with 24 respondents, followed by transformation videos with 21 and workout videos with 20. Product recommendations accounted for 7 respondents, while supplement reviews accounted for 5. This suggests that supplement influence may occur within broader fitness and nutrition content rather than only through direct product reviews.

9.4 Supplement Exposure and use

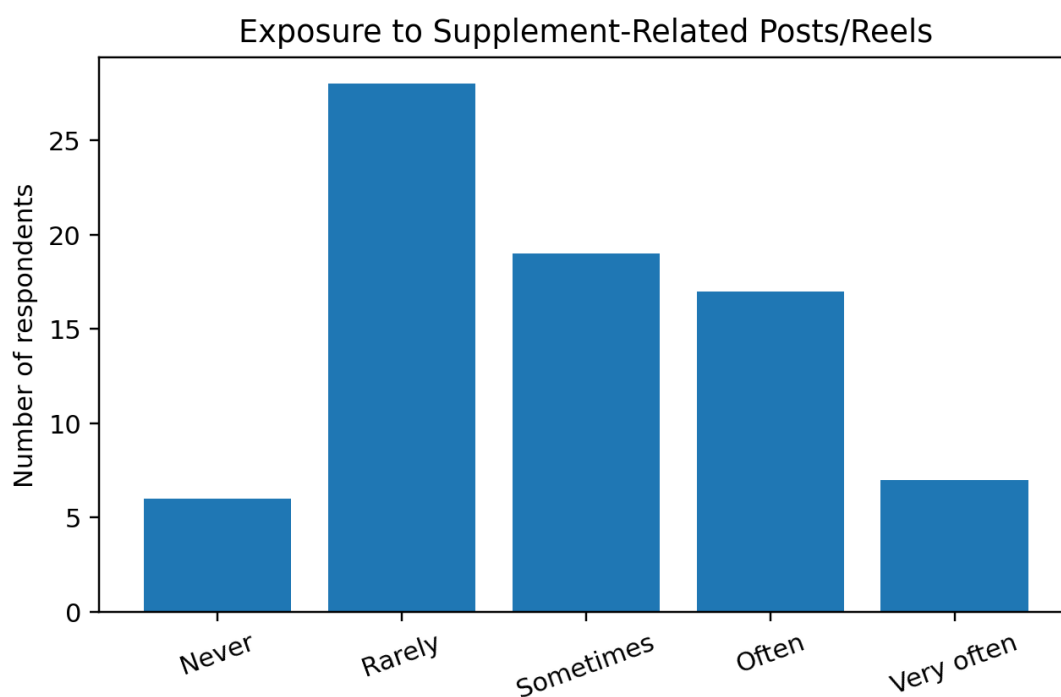


Figure 7. Exposure to supplement-related posts/Reels (n = 77)

Rarely was the most common exposure category, with 28 respondents, followed by Sometimes at 19 and Often at 17. Seven respondents selected Very often and six selected Never. The results show that supplement-related Instagram content reaches a considerable part of the sample.

Previous Sports-Nutrition Supplement Use

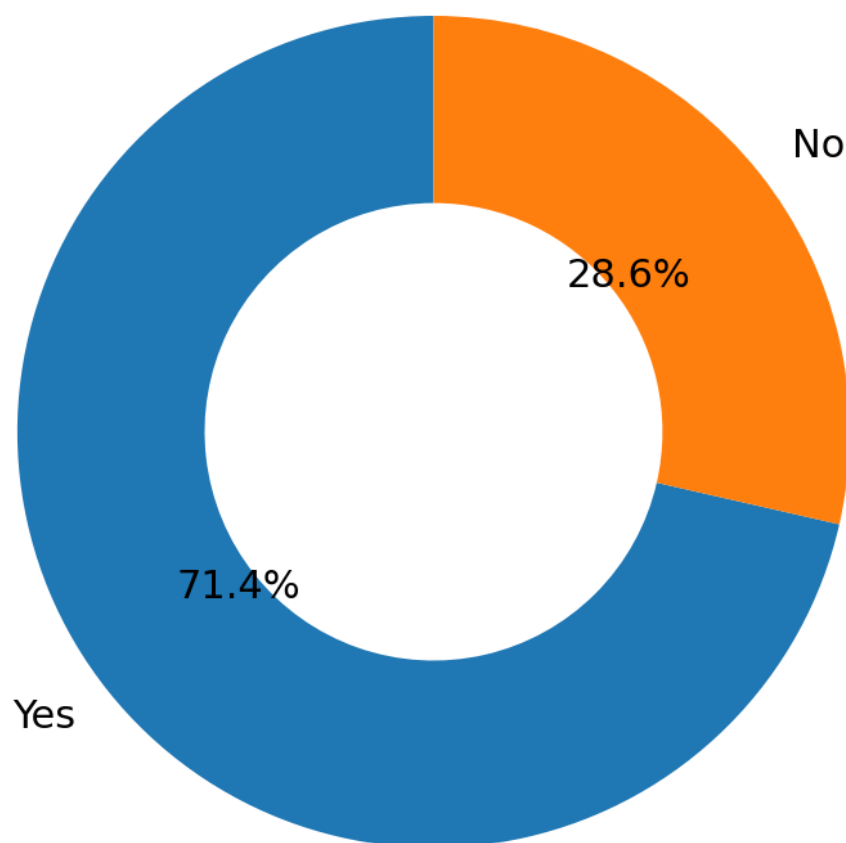


Figure 8. Previous sports-nutrition supplement use (n = 77)

Fifty-five respondents reported previous sports-nutrition supplement use, while 22 reported no previous use. Therefore, supplement-related questions were relevant to a majority of the respondents.

9.5 Instagram and Supplement Discovery

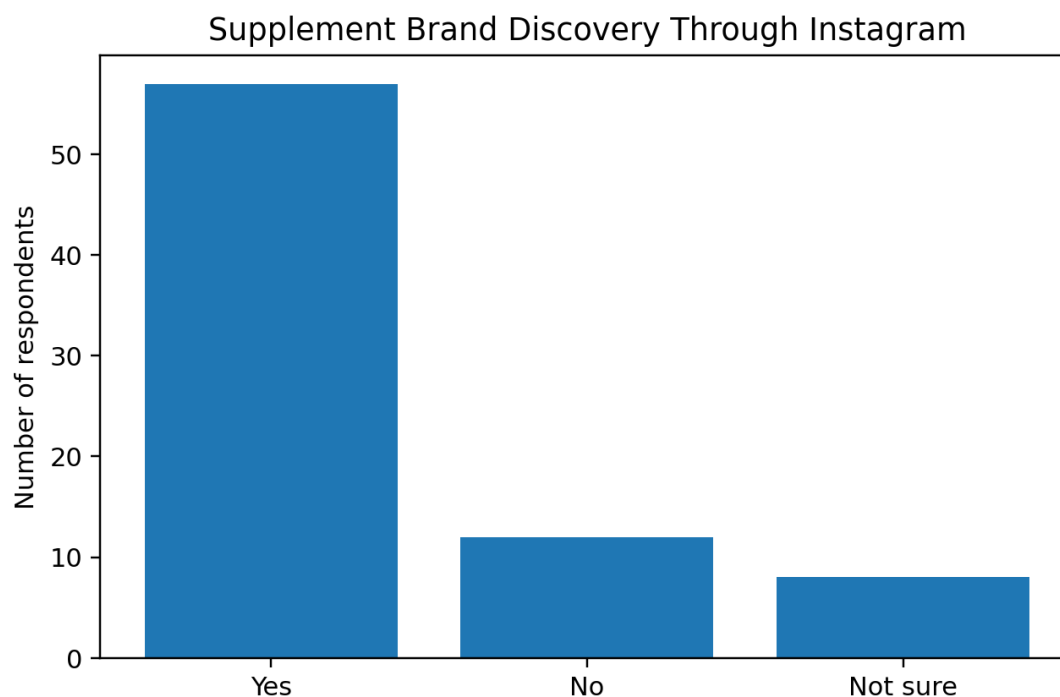


Figure 9. Supplement brand discovery through Instagram (n = 77)

Fifty-seven respondents said they had discovered a supplement brand through Instagram. Twelve said no, and eight were not sure. This is a strong descriptive indicator that Instagram functions as a product-discovery channel in the surveyed sample.

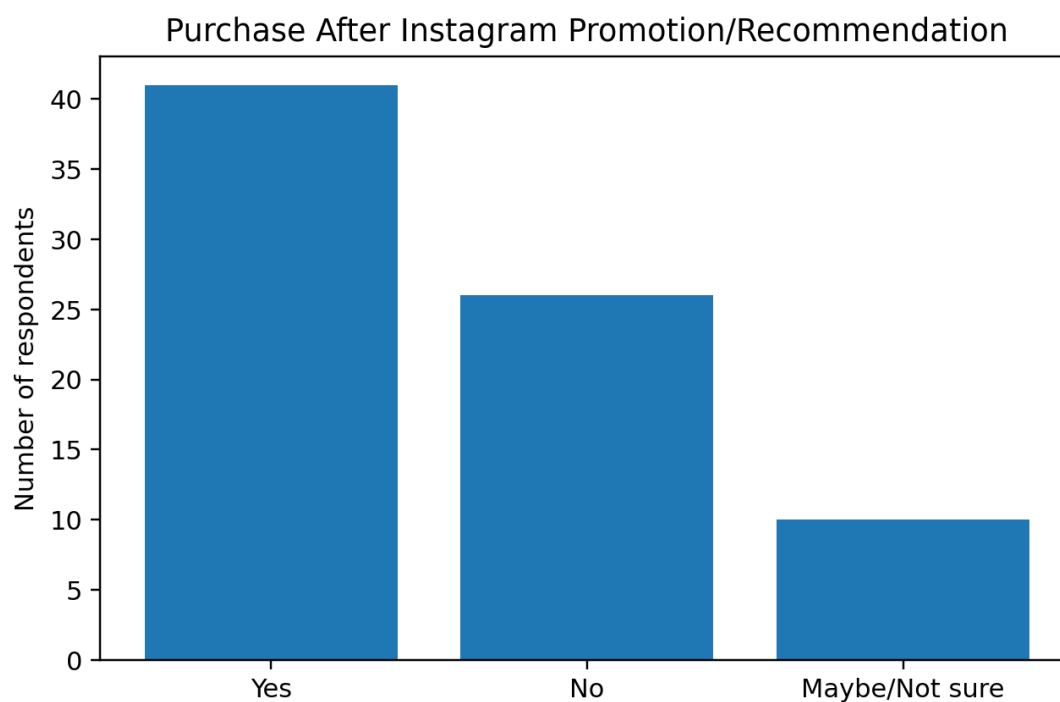


Figure 10. Purchase after Instagram promotion/recommendation (n = 77)

Forty-one respondents reported purchasing a supplement after seeing it promoted or recommended on Instagram. Twenty-six reported No, and 10 selected Maybe/Not sure. The result indicates that Instagram exposure is connected not only with awareness but also with purchase-related behaviour for a substantial share of respondents.

9.6 Likert-Scale Analysis

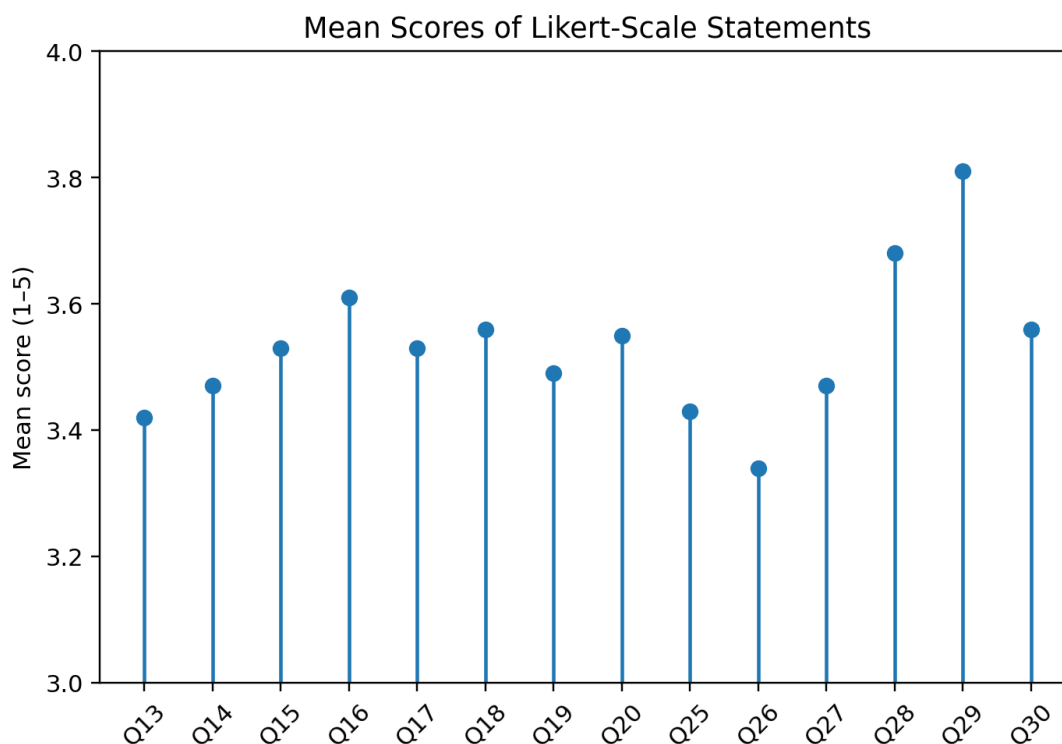


Figure 11. Mean scores for Likert-scale statements (n = 77)

The mean scores ranged from 3.34 to 3.81 on the five-point scale. The highest mean was Q29 (3.81), showing concern that some influencers promote supplements mainly because they are paid by brands. Q28 recorded 3.68, indicating that Instagram reviews and recommendations encourage comparison of supplement brands. Q16 recorded 3.61 for the convincing nature of influencer recommendations, while Q30 recorded 3.56 for the overall influence of Instagram fitness influencers on supplement purchase decisions. The results suggest that respondents recognise the influence of Instagram while remaining cautious about commercial motives. The relatively high score for sponsorship concern is important because it indicates that transparency can affect how followers evaluate influencer communication.

9.7 Hypothesis Testing

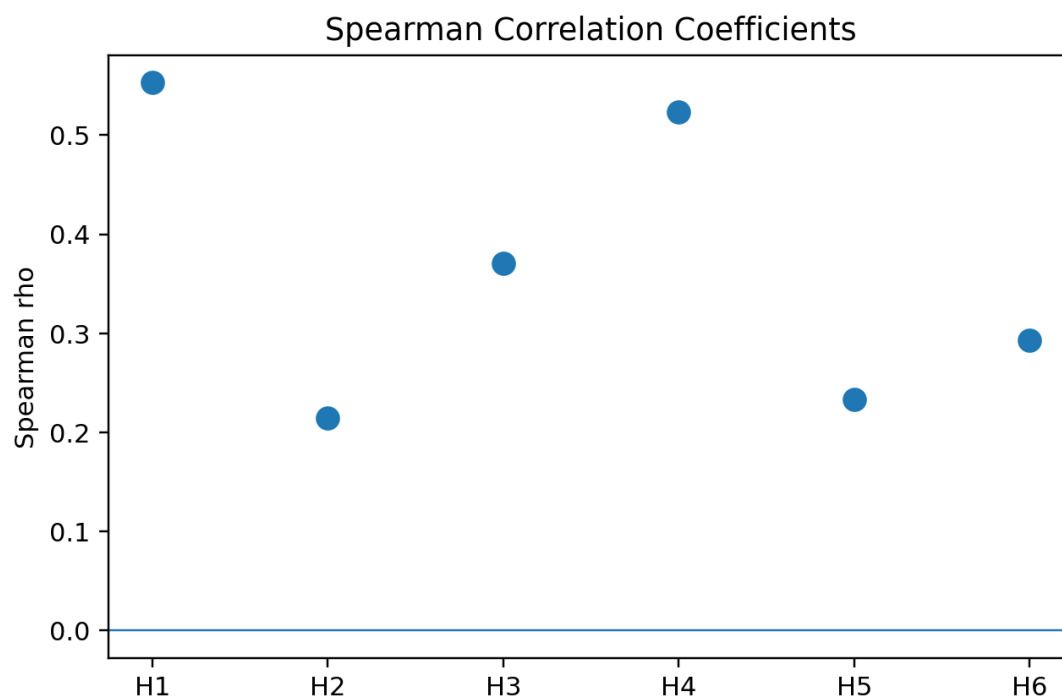


Figure 12. Spearman correlation coefficients for the proposed hypotheses

Hypothesis	Spearman rho	p-value	Decision
H1	0.553	0.0000	Supported
H2	0.214	0.0613	Not supported
H3	0.371	0.0009	Supported
H4	0.523	0.0000	Supported
H5	0.233	0.0418	Supported
H6	0.293	0.0096	Supported

H1: Influencer credibility and purchase intention showed a positive and statistically significant relationship (Spearman rho = 0.553, $p = 0.0000$). H1 is supported.

H2: Exposure to general fitness-related Instagram content showed a positive but statistically non-significant relationship with purchase intention at the 5% level (rho = 0.214, $p = 0.0613$). H2 is not supported.

H3: Trust in fitness influencers was positively and significantly associated with purchase intention (rho = 0.371, $p = 0.0009$). H3 is supported.

H4: Influencer reviews and demonstrations were positively and significantly associated with purchase intention (rho = 0.523, $p = 0.0000$). H4 is supported.

H5: The perceived importance of follower count was positively and significantly associated with trust in recommendations (rho = 0.233, $p = 0.0418$). H5 is supported.

H6: Exposure to supplement-related Instagram posts/Reels was positively and significantly associated with purchase intention (rho = 0.293, $p = 0.0096$). H6 is supported.

10. Findings of the Study

The study analysed 77 responses, with 61 respondents identifying as current gym members in Vijayawada, NTR District.

The sample was predominantly young, with 38 respondents in the 18–20 age group.

Fifty-four respondents reported using Instagram for at least two hours per day.

Diet/nutrition, transformation videos and workout videos were the three most common fitness-content categories.

Fifty-five respondents had previously used a sports-nutrition supplement.

Fifty-seven respondents discovered a supplement brand through Instagram.

Forty-one respondents reported purchasing a supplement after seeing it promoted or recommended on Instagram.

Respondents showed generally positive attitudes towards influencer recommendations but also expressed concern about paid promotions.

Influencer credibility and trust were significantly and positively related to purchase intention.

General fitness-content exposure alone was not statistically significant at the 5% level, suggesting that credibility and trust may matter more than simple exposure.

Instagram reviews and recommendations appear to encourage brand comparison before purchase.

11. Suggestions and Recommendations

Supplement brands should focus on influencer credibility, expertise and relevance to the target audience rather than follower count alone.

Fitness influencers should clearly disclose partnerships and sponsored posts involving supplement brands.

Influencers should avoid exaggerated or misleading product claims and distinguish personal experiences from professional advice.

Reviews and testimonials should present information clearly so consumers can compare brands and claims.

Consumers should cross-check supplement information with reliable professional sources rather than relying only on promotional content.

Supplement companies can consider longer-term influencer relationships that support consistent and transparent communication.

Future studies can examine other Indian cities, larger samples and different age groups to compare results and improve generalisability.

12. Practical and Theoretical Implications

Practical Implications. The findings are relevant to supplement brands, fitness influencers and digital marketers. The strongest relationship in the analysis was between influencer credibility and purchase intention. Therefore, marketing strategies should

prioritise trustworthy communication, relevant expertise, transparent sponsorship and useful demonstrations instead of relying only on audience size.

Theoretical Implications. The study adds local evidence to the literature on influencer marketing, social-media communication and consumer purchase intention in the sports-nutrition context. It brings together credibility, trust, exposure, reviews, follower count and purchase intention within one empirical framework focused on Vijayawada.

13. Future Research Directions

Future research can extend the study to other Indian cities and use larger, more representative samples. Longitudinal research could examine whether exposure to influencer content leads to changes in purchase behaviour over time. Further studies could also compare different content formats such as Reels, Stories, reviews and demonstrations and examine how sponsorship disclosure and perceived authenticity affect trust.

14. Conclusion

The study provides local evidence on the role of Instagram fitness influencers in sports-nutrition supplement awareness and purchase-related behaviour among gym-oriented respondents in Vijayawada, NTR District. Instagram appears to be an important discovery channel: 57 of the 77 respondents reported discovering a supplement brand through the platform, and 41 reported purchasing a supplement after seeing it promoted or recommended on Instagram.

The correlation analysis indicates that influence is not explained by exposure alone. Influencer credibility, trust, reviews and demonstrations showed significant positive associations with purchase intention, whereas general fitness-content exposure did not reach statistical significance at the 5% level. This suggests that the quality and credibility of communication may be more important than simply seeing fitness content frequently.

The findings also highlight a clear concern about paid promotion. Q29 recorded the highest mean score of 3.81, indicating that respondents are aware that some influencers may promote supplements because they are paid by brands. Transparent sponsorship disclosure and responsible communication are therefore important for maintaining consumer trust.

Overall, the study concludes that Instagram fitness influencers can play an important role in supplement discovery and purchase-related decisions, but their effectiveness is closely connected with credibility, trust and transparent communication. The study is limited to 77 respondents and convenience sampling, so the findings should be interpreted as evidence from the surveyed sample rather than as conclusive evidence for all gym enthusiasts.

15. References

- Aguilar, D., & Arbaiza, F. (2021). The Role of Fitness Influencers in Building Brand Credibility through Distorted Imagery of Healthy Living on Instagram. Universidad Peruana de Ciencias Aplicadas.
- Durau, J., Diehl, S., & Terlutter, R. (2022). Motivate me to exercise with you: The effects of social media fitness influencers on users' intentions to engage in physical activity and the role of user gender. *Digital Health*, 8. <https://doi.org/10.1177/20552076221102769>
- Baig, W. S., Elahib, H., & Hashmi, N. U. (2023). Impact of Social Media Fitness Content on Health and Fitness Motivation of the Users.
- de Freitas, C. M. (2023). The Impact of Instagram Fitness Influencers on Followers' Fitness Goals. NOVA Information Management School, Universidade Nova de Lisboa.
- Rekhi, M. S. S., & Wani, S. (2025). Short Survey: The Rise of Fitness Supplements – Are They Really Safe? *The Academic: International Journal of Multidisciplinary Research*, 3(11).
- Rbii, J. (2026). The Influence of Social Media Marketing on Gym Supplements Consumption Among Youth. *International Journal for Research Trends and Innovation (IJRTI)*, 11(6).
- Arora, M., & Verma, J. (2026). Influencer Marketing Effects on Demand Across Fitness Product Categories in an Emerging Urban Market. *International Journal of Computer Information Systems and Industrial Management Applications*, 18(4s), 647–657. <https://doi.org/10.70917/ijcisim-2026-2540>

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