Influenced to Be Fit? How Instagram Fitness Influencers Shape University Students' Lives

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ARTICLE INFO

ABSTRACT

Instagram has transformed into a prominent social media platform that significantly influences body-image perception, mental wellbeing, and lifestyle choices of its followers. The promotion of "fitspiration" on appearance focused channels like Instagram has facilitated fitness influencers to showcase idealize body images and workouts, which are aimed to inspire healthy behaviors but may also encourage toxic self-comparison. Therefore, this study aimed to explore the emotional, behavioral and psychological outcomes of following the Instagram fitness influencers among university students in Pakistan. A qualitative exploratory research design was employed in this study. Data was collected through semi-structured interviews by using a purposive sample of 10 university students (5 men & 5 women) aged between 18-24 years (M=22.3, SD=1.6), all of whom actively followed fitness influencers on Instagram. The data was analyzed by means of thematic analysis to identify codes and themes within the dataset. Eight major themes were identified; inspirational motivational journey, motivational drivers, healthy engagement, emotional and psychological impact, behavioral and lifestyle transformations, perceived body image and self-evaluation, fitness influencers' impressions, and recommendations for body positivity. Although there were reports of improved physical activity and healthier habits among some participants, others were characterized by adverse emotional responses, such as body dissatisfaction and lack of confidence. Therefore, this study highlights the significance of inclusive and diverse body-positive communication as a way of minimizing the effects of unrealistic body ideals. These observations reveal the multifaceted role of the influencers in body image formation and signal the need to conduct additional research on a variety of platforms and demographics.

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1.   Introduction

Instagram has become a key channel due to its amazing reach rates, for all types of content creators and brands. Similarly, Instagram leveraged its consumers for both brand marketing and personal branding (Guarda et al., 2020). By the start of 2024, there were 54.38 million consumers in Pakistan who were above the age of 18 and actively consumed online networking platforms, which indicated 38.9% of the gross population above the age of 18 at that time. Females made up 25.9% while males accounted for 74.1% of Pakistan's online networking sites consumers. In Pakistan, Instagram had 17.30 million users at the start of 2024, according to data made public in Meta's advertising tools. As stated by Data Reportal (2024) 35.9% of Instagram's Pakistani promotion audience was female, while 64.1% was male. This ongoing engagement of consumers with social media provides useful and interesting health information,

which reinforces the perceived value of fitness and thus enhances people's fitness intention towards fitness influencers' content (Gao et al., 2021).

However, this amount of Instagram use may also have a detrimental effect on attitudes toward one's own body image, increase focus on one's appearance, and prevent users from appreciating their bodies (Rousseau, 2024). Instagram celebrities promote fitness, provide material about their exercise, nutrition plans, and online coaching, among other topics. Additionally, they frequently set trends in terms of their fitness and nutrition plans (Vuong et al., 2021). Thereby, fitness channels and markets, along with their brands, practitioners, and community, continue to expand, leaving room for discussions about the mindfulness of the content they promote (Sicilia et al., 2020). According to Tricás-Vidal et al. (2022), social media fitness influencers have a greater impact on individuals' exercise routine than text-only websites. While Sokolova and Perez (2021) discovered that the consumption of video content produced by fitness influencers and the formation of parasocial relationships merely encourages individuals who have already engaged in physical activity. To individuals who do not exercise, the information is more of entertainment and it does not influence their intention to exercise. Although, fitness influencers help their followers to establish healthy activities and eating habits that could prove to be more beneficial for their overall mental and physical health, yet exposure to nutrition, exercise, and appearance on a regular basis leads to anxiety and significant mood swings. A person's actions or everyday events significantly impacted by appearance-related worries since it might reinforce negative self-image views and undermine confidence (Muller, 2020). However, there are gender-based differences in this regard. The impact of repeated exposure to appearance-focused Instagram postings on men's and women's body image was examined by Casale and colleagues in 2021. While this study reported that disclosure to attractive images of people on social media have a pronounced impact on women's body image and led to or exacerbate women measuring their value by their appearance but not significantly in men (Casale et al., 2021). But another study showed that men also have body image concerns although patterns and severity may differ, each of the two cohorts endures troubles with the way they feel and look (Chatmon, 2020). Similarly, another study has also demonstrated a link between men's discontentment with body image and their Instagram viewing habits (Modica, 2020). Male body positivism movement promote embracing one's body to avoid undesirable consequences. Research indicates that consumers should be conscious to the influencers they follow since highly cropped shots may propagate an ideal body image which is not aligned with the essence of the movement to accept all types of bodies (Purvis, 2019).

Moreover, research has revealed that general wellness information with the objective of strengthening general health and mental well-being can encourage positive health behaviors (Merchant et al., 2021). However, literature has also shown that body-focused content usually produces negative impacts on the mental health of individuals, including to their mood and body image (Nuss et al., 2024). Such as, a study conducted on youth reported that engagement with digital communities is accompanied by unhealthy eating patterns, partly because its promotion of the social comparison that made them noxious about their own body image which further leads to unhealthy eating habits (Kucharczuk et al., 2022). Zeib and Shahzad (2023) conducted study in Pakistan, established that Instagram did not contribute to social anxiety, but it had an indirect effect on it via social comparison and self-esteem as mediators. Moreover, the factors of gender and age did not play a crucial role. Additionally, Taylor and Armes's (2024) experimental study focused on social comparison on Instagram showed that downward comparisons increased both self-esteem and body-esteem, upward comparisons decreased body-esteem whereas self-esteem scores did not change. Consequently, undesirable perception of body, prejudiced by socio-cultural factors including societal norms, family, and friends, are common, leading individuals to extreme anxieties and inferiority complexes about their looks. Among all factors, how one perceives their body or appearance is one of the most disconcerting for women in particular (Xie, 2024).

Social Learning Theory by Bandura and Walters (1977) states that behavior is learned from observation of role models, and on Instagram, influencers are virtual role models. Whereas imitating healthy routines and self-care behaviors is positive, increased social comparison or the cultivation of body dissatisfaction can occur with idealized or unrealistic body images. Thus, the theory explains both positive and negative outcomes of following influencers. Furthermore, according to social comparison theory, individuals compare themselves to others to assess their own abilities, appearance and progress. Especially, for women the social comparison theory has

shown, that the exposure of idealized images of female models in advertising results in upward comparison which results in body dissatisfaction (Festinger, 1954). Festinger's notion of cognitive dissonance also suggests getting acquainted with fitness details on online networking sites brings about a gap between actual and ideal fitness that pushes behavior transformation. Expanding on the social comparison theory, lifespan theory is also instrumental as a lens in examining the relationship between social comparison behavior to social media images and body satisfaction. According to this theory, body image and social comparison change across developmental stages (Baltes et al., 1999). Adolescents and young adults whose identity and self-worth are in the process of development, are highly susceptible to idealize images on Instagram which led to body dissatisfaction. Although earlier studies on following influencers on Instagram and other social media platforms have provided useful information, most of the studies are based on samples that are mainly or all-female (Baker et al., 2019; Barnes et al., 2023; Fioravanti et al., 2021; Glaser et al., 2024; Prichard et al., 2020). Only a few international studies (Gültzow et al., 2020; Tiggemann & Anderberg, 2020) and local studies (Abdullah, 2023; Pasha, 2021; Zeib & Shahzad, 2023) have explored the impact of Instagram fitness influencers on male body image. Therefore, this study incorporates both males and females to offer a more holistic idea of the effects of following Instagram fitness influencers. Also, the qualitative approach helps to fill a gap in the literature as most of the studies in the field are quantitative. The following research questions were addressed in the current study:

- What motivates university students to follow fitness influencers on Instagram?
- How does fitness influencer's content affect students' emotional well-being?
- What behavioral changes do students experience through following fitness influencers?
- How does following fitness influencers impact students' self-esteem and confidence?
- How do students perceive and interpret fitness influencers' content?
- What are students' suggestions for promoting body positivity and mental health through fitness accounts?

2. Method
2.1. Study Design
This study was carried out using a qualitative exploratory research design to explore the consequences of following Instagram fitness influencers among university students. As qualitative inquiry was uniquely fitted for the investigation of the topics that are highly personal such as body image, mental health, and the influence of social media fields (Popat & Tarrant, 2023).

2.2. Participants and Setting
For the current study, a total of 10 university students (men; *n* = 5, women; *n* = 5) were selected as a sample, as this range aligns with accepted norms in qualitative research, where smaller sample sizes are often enough to reach data saturation, meaning that interviews no longer reveal new information or themes (Ahmad, 2025; Saini & Majumdar, 2025). Participants aged between 18-24 years (*M* = 22.3, *SD* = 1.6) were selected using purposive sampling technique from four different universities of Pakistan (University of Okara, University of Sahiwal, University of Lahore, University of Faisalabad). This technique allowed the researcher to focus on students who fulfill the screening criteria—that is, regular Instagram users who also follow fitness influencers. All participants reported that they were using Instagram for about three years and spending an average of 1-2 hours per day on Instagram and were willing to take part in 30-45 minutes interview. This particular age group was chosen because they are among the most active social media consumers, peculiarly the platforms like Instagram, and are more likely to face problems like body image concerns and mental health challenges (Openr, 2022, November 24). The study excluded individuals who were under the age of 18 or over the age of 24, as well as those who were not regular users of Instagram or did not have following of any fitness influencer on Instagram.

2.3. Data Collection
The study underwent an ethical approval by Independent Departmental Research Review Board that is responsible for the assessing the ethical considerations and methodology of research intended to carried out. After getting approval, a series of interrelated measures were formulated to collect data. Initially, a bio data form was developed to explore the social cultural demographics of the participants (see Table 2). Then a screening form was also designed to

assess the inclusion and exclusion criteria. An interview guide was constructed in accordance with the Interview Protocol Refinement (IPR) framework by Castillo-Montoya (2016), including a four-phase process: (a) ensuring interview questions align with research questions; (b) constructing inquiry-based conversation; (c) receiving feedback on the interview protocol; and (d) piloting the interview protocol. The researcher consulted the experts (*n* = 2; Assistant Prof., Department of Applied Psychology), who provided insight and practical tips on interview guide. Then, in the final phase interview protocol was tested with the two pilot participants who shared the similar characteristics with the actual sample to evaluate both the clarity and emotional safety and theoretical fit of each question. The completed protocol was then utilized in carrying out interviews on the main sample of ten participants. Ethical requirements of the American Psychological Association were closely followed (Levitt et al., 2017).

Before data collection, a consent form ensuring all ethical considerations was duly signed stating that the collected data would be used exclusively for research purpose. Pseudonyms were used to establish anonymity. Each session lasted approximately 30–45 minutes. Interview were conducted as per participants' preferences for either video call or in person to foster an environment conducive to thoughtful and genuine involvement. All interviews were audio-recorded with explicit participant consent and subsequently transcribed verbatim, supporting robust thematic analysis. The researcher also kept a reflective journal during the study, and record observations, emotional cues and the emerging themes, which were also helpful in interpreting the data findings. The researcher reviewed the journal entries periodically and used them to adjust interview prompts in future sessions to increase reflexivity. Such an iterative process enabled to trace some patterns of emotions and experiences of the participants, without overtly raising sensitive areas. Researcher did not conduct any further interviews, because the information became saturated in the first round of the interviews.

2.4. Data Analysis

Braun and Clarke (2006) six steps thematic analysis was used; familiarization, initial coding, theme development, reviewing of all themes, defining and labeling the themes, report writing. Researcher worked reflexively throughout the process of collecting and analyzing data, to ensure that her personal usage of Instagram did not effect the outcomes of the study or introduce bias.

3. Findings

A total of 10 university students (5 men & 5 women) were interviewed. The demographic information of all the participants illustrated in table 1. While table 2 is indicative of the themes and subthemes generated from the codes of the interview by using the thematic analysis. Six themes emerged from the data.

Table 1: Demographic Information of Participants

Participants	Age	Gender	Religion	Residence Location	Relationship Status	Living Arrangements	Instagram User	Fitness Influencers Follow	Influence on Fitness Habits	Content Viewing Frequency
1	18	Women	Islam	Urban	Single	Nuclear Family	Yes	Yes	Yes	2 hrs 20 min
2	19	Men	Islam	Urban	Single	Hostel	Yes	Yes	Yes	3 hrs
3	20	Women	Islam	Urban	Single	Nuclear Family	Yes	Yes	Yes	2 hrs
4	21	Women	Islam	Sub-urban	Single	Joint Family	Yes	Yes	Yes	2 hrs
5	22	Men	Islam	Urban	Single	Hostel	Yes	Yes	Yes	3 hrs
6	20	Women	Islam	Urban	Single	Nuclear Family	Yes	Yes	Yes	2 hrs 30 min
7	21	Men	Islam	Urban	Single	Hostel	Yes	Yes	Yes	2 hrs
8	23	Women	Islam	Sub-urban	Single	Joint Family	Yes	Yes	Yes	2 hrs 20 min
9	24	Women	Islam	Urban	Single	Nuclear Family	Yes	Yes	Yes	3 hrs 30 min
10	18	Men	Islam	Urban	Single	Hostel	Yes	Yes	Yes	2 hrs

Table 2: Main Themes, Sub-themes and Codes

Main Themes	Sub-Themes	Codes
Inspirational Fitness Journey	Source of Inspiration and Aspiration	Inspiring consistent and dedicated routines Consistency inspired lifestyle transitions
		Feeling Motivated

Motivational Drivers	Motivated for Adopting a Healthy Lifestyle Social influence	Excitement to learn more about fitness Boosting of Self-esteem and confidence Due to peer pressure Due to social group participation and involvement Recommended by social group
Healthy Engagement	Practical Convenient Routines	Easy and no equipment home workouts No worry about gym Easy-to-follow routines even for busy schedule
	Seeking Information and leaning	Seeking information about the latest new fitness trends Learning new fitness exercises Learning about easy diet and meal plans
Emotional and Psychological Impact	Positive Impact	Motivational Feelings Feeling Excited to learn more Boosting of self-confidence and self-esteem Serve as a reminder to stay consistent
	Negative Impact	Feeling of insecurity and inadequacy Negatively Impacting on Self-esteem Developing a sense of body comparison that negatively impacting on self-esteem Fluctuating self-confidence and self-esteem
Behavioral and Lifestyle Transformations	Modifications of Daily Dietary Habits	Adopting healthy eating habits Adding proteins intake in daily diet Skipping junk food habits Monitoring of daily calorie intake
	Formation of Regular Physical Activity	Starting morning walk Getting enrollment in gym for fitness classes Started yoga and binger friendly workout Upgrading workout by learning new
Perceived Body image and Self-Evaluation	Positive and Non-comparative Self-view	Focus on personal goals Celebration of small achievements Not comparing with the influencers
	Negative and Comparative Self-view	Feeling of dissatisfaction with one's body Feeling pressurized to meet idealistic body shapes
Fitness Influencers Impression	Favorable Point of View	Useful and helpful information about health Valuable impact on mental and physical health Beginner-Friendly
	Critical Point of View	Portraying of unrealistic fitness standards Overly-editing of fitness content Emphasize on perfectionism rather than progress
	Mixed Point of View	Both motivational and pressurizing factors exist Showcasing the real progress Focusing on both success and failure
Improvement Suggestions For Fitness Influencers	Encourage inclusiveness and body positivity	Celebrate all type of body Online session for open dialogue Support Self-acceptance and love
	Promotion of Authenticity and Transparency	Focus on holistic health over looks Focus on small and achievable goals

3.1. Inspirational Fitness Journey

For many participants, influencers' consistency and dedication to their work, served as an aspiration for their followers' lifestyle transition that helped them to take initiative for maintaining a healthier lifestyle.

3.1.1. Source of Inspiration and Aspiration

One subtheme reflected that students getting inspiration and aspiration by watching and following fitness influencers on Instagram.

"Yes, I feel connected when they share easy and simple dieting meal plans and workout tips that completely home base or convenient for everyone to practice at their home. Mostly the

latest new fitness trends motivated me to learn new exercises and fitness tips to keep myself healthy and fit." (Interview 1)

3.2. Motivational Drivers

Some participants reported that the fitness influencers content on Instagram serves as a source of motivation for their fitness journey and gave them reminder to stay healthy and fit. Two subthemes were identified; motivated for adopting a healthy lifestyle and social influence.

3.2.1. Motivated for Adopting a Healthy Lifestyle

Some participants indicated that following fitness influencers on Instagram encouraged them to adopt and maintain a healthier lifestyle.

"When I watched their consistent routines about their healthy lifestyle, it really inspired me a lot and motivated me to take steps for my own fitness journey. It helped me developed a better habit and a healthier lifestyle. Also, it made me careful about my daily routines, from what I ate to how I do exercise." (Interview 7)

3.2.2. Social influence

Some students reported that they had no personal motivation for following fitness influencers on Instagram and only did so because recommended by their social groups.

"Honestly, I had not watched the fitness influencers content on Instagram. I started following them mainly because people around me like my friends and family members encourage me to follow the fitness influencers on Instagram." (Interview 3)

3.3. Healthy Engagement

Two subthemes were identified; Practical convenient routines and seeking information and learning showed students' healthy engagement with fitness influencers content on Instagram.

3.3.1. Practical Convenient Routines

Some participants found it easy and accessible, as they did not have to worry about joining any physical fitness facility to keep them fit and healthy.

"Yes, I feel connected when they share easy and simple dieting meal plans and workout tips that completely home base or convenient for everyone to practice at their home. It helps me to get started with my own routine at my home place, without needing any expert or equipment." (Interview 2)

3.3.2. Seeking Information and learning

Some participants shared new ideas in their fitness journey that they have learned from fitness influencers. This includes everything from new ways to work out to adopting a healthier eating pattern.

"I have also learned about different new equipment and techniques that are used by them, which encouraged me to practice new training methods. It made my workout more engaging as I have started using equipment and exercises that I have never tried before." (Interview 5)

3.4. Emotional and Psychological Impact

Participants reported a variety of emotional shifts that were mainly divided into two subthemes: positive impact and negative impact. This revealed how fitness influencers can both motivate and challenge university students' emotional and psychological well-being.

3.4.1. Positive Impact

Many students stated that getting engaged with the fitness influencers' content boosted their emotional state, especially in the form of increased motivation, excitement, and self-esteem. Participants also reported an increase in their self-confidence. This showed that the fitness content shared by the fitness influencers on Instagram tends to have a direct impact on the emotional and psychological well-being of university students.

"It has increased my self-confidence especially when I achieve my fitness goals this gives me more confident about my body and fitness journey." (Interview 5)

"Yes, it has a positive effect on my self-esteem as watching fitness related content motivated me to stay committed to my fitness journey and also make me consistent with my fitness journey in managing my weight." (Interview 9)

3.4.2. Negative Impact

On the other hand, several participants reported experiencing severe emotional discomfort following their interaction with fitness influencers' content. Some participants reported that perfect bodies of fitness influencers developed feelings of insecurity about one's own appearance, inadequacy and negatively impacted self-esteem and confidence level. These emotions led the participants towards body image comparison.

"After getting engaged with their content, I personally feel insecure about my own figure while seeing their perfect body. Because I find myself comparing with their body which affect my self-esteem and also makes me feel less confident about my own figure. It is producing a negative impact on me as I am feeling inferior complex about my appearance." (Interview 3)

"Yes, it negatively affects my self-esteem sometimes when I see their six packs and perfect physiques, I think, "Why don't I have that?" (Interview 7)

3.5. Behavioral and Lifestyle Transformations

Interaction with the Instagram fitness influencers content resulted in clearly observable and measurable behavioral and lifestyle transformations among university students. Two sub-themes identified; modification of daily dietary habits and the formation of regular physical habits.

3.5.1. Modification of Daily Dietary Habits

Many participants exhibited that after engaging with the fitness influencers content they started to adjust their eating habits, switching from processed food to healthier ones. Participants expressed that they have reduced the intake of their junk food, increased the intake of fruits and vegetables, tracked their calorie intake and included high-protein food because of fitness influencers emphasis on healthy, accessible, simple and easy to implement meal plans.

"I used to eat a lot of processed food in my daily routine, but after getting connected with the fitness influencers, I not only cut down on my processed food but also learned how to make healthy meals at home and started tracking my calories. Also, I have started to regulate my diet by adding proteins intake into my diet plan and removing excessive oil usage in my food. This gives me confidence about my fitness and makes me more energetic to stay consistent with this healthy lifestyle." (Interview 10)

3.5.2. Formation of Regular Physical Habits

Additionally, participants stated that in addition to their dietary modifications, they also altered their physical activity patterns in a consistent and modified manner. It was reported by the students that they had begun upgrading their fitness routines by acquiring awareness from the fitness influencers' content.

"Yes, I have added many new and upgraded training methods in my daily workout program, such as rope battling in which I have added slamming and waves. This has helped me in building strength and also boosted my energy level." (Interview 5)

3.6. Perceived Body Image and Self-Evaluation

The data revealed that following fitness influencers on Instagram had divergent effects on the self-esteem and confidence level of university students, depending on the degree of how they received and internalized the content. Two sub-themes were identified; positive and non-comparative self-view and negative and comparative self-view.

3.6.1. Positive and Non-Comparative Self-view

Several participants expressed a self-assurance by acknowledging their small progress and emphasized personal growth over self-comparison. Fitness influencers' content served as a source of support and inspiration rather than pressure for their audience.

"I think it has increased my self-confidence, especially when I achieve my fitness goals. This gives me more confidence about my body and fitness journey. Watching their success stories serves as a reminder for me that fitness is achievable only with compassion, passion and to be consistent with your journey." (Interview 5)

3.6.2. Negative and Comparative Self-View

In contrast with the positive and non-comparative self-view, some participants reported that the same content produced negative and comparative self-view, that unfavorably affected their self-esteem and confidence.

"After watching their perfect bodies, I started to compare myself with them and it made me insecure about my own body. This made me feel less confident as I have started finding the flaws in my body." (Interview 3)

3.7. Fitness Influencers Impression

University Students shared diverse experiences that are categorized into three subthemes: those with the favorable point of view; then, those expressing critical point of view; and finally, those who experienced a mix of both appreciation and concern.

3.7.1. Favorable Point of View

Positive experiences with the fitness content were mentioned by many participants. They categorized the fitness content as motivating, helpful, and practically valuable. These participants regarded influencers as a source of information that was accessible and presented the beginner-level advice in addition to recommendations appropriate for their routine. Influencers' content was perceived positively, as it played an active role in motivating and promoting healthy habits and overall mental and physical wellness.

"My impression is overall positive about their content. As they are providing motivation and inspiration because not everyone has access to gym membership or fitness classes. They are providing fitness knowledge that anyone can access easily, which I find both valuable and helpful." (Interview 2)

3.7.2. Critical Point of View

In contrast to the positive and favorable experiences, some participants shared their critical perspectives and concerns regarding fitness influencers' content particularly for the presentation of unrealistic body trends and highly edited content.

"I personally felt that their content is all about fake fitness trends that had a negative impact on their followers overall mental health." (Interview 3)

"Fitness is about overall wellbeing. The content should focus on efficiency and endurance, not perfect body image." (Interview 4)

3.7.3. Mixed Point of View

Some participants conveyed a mixed point of view, identifying both the inspirational and potentially negative effects of the content shared by the fitness influencers on Instagram. Encouragement and guidance provided by the fitness influencers also appreciated by this group of participants, but they also highlighted the emotional risk factors that are associated with perfectionism and body comparison.

"My impression is mixed about them. After engaging with fitness influencers on Instagram, I have felt that some of them deliver a positive impression by focusing on the real progress of their followers and promoting a healthy lifestyle. However, there are also some who only show their perfect bodies and creating an unrealistic fitness standard." (Interview 7)

"I think it depends on who are you following so my impression is positive as I just follow them for learning not for anything else." (Interview 6)

3.8.   Improvement Suggestions for Fitness Influencers
Some meaningful recommendations provided by the university students on how fitness influencers can facilitate more effective and meaningful support for their followers in emotional, psychological and physical well-being. Two sub-themes were identified; promotion of authenticity and transparency and encourage inclusiveness and body positivity.

3.8.1. Promotion of Authenticity and transparency
Some students recommended that fitness influencers must underline the importance and need to create more authentic and psychologically supportive content, rather than the promotion of perfect body shapes. Some participants suggested that the influencers must promote real progress that includes both success and failures. This need for transparency originated from a desire to observe relatable experiences rather than unattainable transformations.

"I think they should focus more on progress rather than how to achieve a perfect body shape. They should create a content that focuses on real life progress, that people with different body types have different fitness journeys." (Interview 1)

3.8.2. Encourage Inclusiveness and Body Positivity
Another core recommendation suggested by the university students for fitness influencers was to promote body positivity and showcase different body types. They have proposed that fitness influencers should place greater emphasis on self-acceptance and self-love, which have a favorable effect on the general psychological health of their followers.

"Fitness influencers should promote self-acceptance, mental wellbeing and physical fitness." (Interview 10)

"Instagram content should promote all body types, emphasizing on self-care and acceptance through the fitness journey". (Interview 8)

4.   Discussion
The key findings of this study are analyzed within the context of existing literature and theoretical framework. Influencers serve as a source of inspiration and aspiration due to their dedication, consistency, and transformation of lifestyle. The representation of idealized standards of health by fitness influencers frequently motivate their followers to take certain actions towards wellness (Li et al., 2023). Simple meal planning and no-equipment workouts are convenient and fit in well with students' hectic schedules. This finding aligns with the social learning theory (Bandura & Walters, 1977) which posits Instagram influencers as virtual role models, modeling behaviors, lifestyles, and body ideals. Many followers imitate these or take up similar attitudes towards appearance, health, or fitness. Research has shown that Instagram facilitates accessible and practical health information to their users that contributes them to become more health literate (Gao et al., 2021). Another key reason was the easy accessibility of information, especially about advance workout techniques and dietary practices.

Zangger et al. (2024) revealed that practical and simple fitness instructions provided on Instagram boost knowledge and fosters behavioral changes among youngsters. Furthermore, peer affirmation also appeared as a driving factor. Aguilar and Arbaiza (2021) highlighted the significance of social groups in shaping fitness inspired media engagement. In addition, Liu et al. (2022) demonstrated that social-media/ digital fitness influence is not necessarily only on appearance; it can also promote health-promoting behavior. Many substantial transformations reported by the participants in their behavior including modification of dietary habits and formation of regular physical activity into their daily living. These transformations validated by the study of Goodyear et al. (2021) who reported that consistent exposure to Instagram fitness content promote healthy behaviors teenagers. The adoption of structured routines such as monitoring of daily calorie intake, home-based workout, and early morning walk is consistent with the findings of (Fruhauf et al., 2024). Many students reported the importance of personal development, by celebrating small accomplishments and avoiding unhealthy comparisons. Participants who focused on their personal development rather than comparison reported to have

increased confidence. This demonstrates that maintaining of positive behavioral changes only requires the internal motivation rather than the external validation. Li et al. (2023) claimed that individuals used to experience better self-regulation and body appreciation, if they prioritize progress and functionality over perfectionism.

Likewise, Batool and Shaqoor (2024) stated that concentrating on one's own achievements and striving for personal development can help to reduce the adverse consequences of social media comparison. In contrast, some students experienced feeling of inadequacy about their own appearance to meet the unattainable beauty ideals after their engagement with the fitness content on Instagram. Social comparison theory Festinger (1954) explains how such followers compare themselves with idealized images; these comparisons influence motivation, self-perception, and sometimes body dissatisfaction. Cataldo et al. (2021) reported that "Fitspiration" causes more harm than good and recommended more nuanced, health-focused content on social media. Furthermore, participants reported diverse experiences with the fitness influencers content on Instagram. For some the content appeared to be helpful and motivating, others criticized the unrealistic fitness standards. Many of them shared diverse experiences about the fitness influencers content. It is consistent with the findings of Bajwa and Chandola (2023) who highlighted that fitness influencers can play an important role in boosting the motivation levels of their followers through inspiring content but may also exacerbate body image concerns due to unrealistic fitness ideals. Similarly, Sokolova and Perez (2021) highlighted that the fitness content can be both inspiring and demotivating for users as it depends on the follower's mindset about one's own improvement.

Moreover, Prichard et al. (2020) stated that the idealized images shared by influencers often cause users to experience conflicting emotional reactions, leaving them unsure whether to admire them or feel insecure. Students also provided improvement suggestions for fitness influencers' content that include promotion of authenticity and transparency, and inclusiveness encouragement for body positivity. Social comparison theory Festinger (1954) asserts that individuals assess themselves in comparison with others; therefore, inclusive communication can reduce negative comparisons due to idealized images. Lifespan theory by Baltes et al. (1999) also compliment this interpretation because younger users who are still developing their identity are more likely to benefit from inclusive body-image messaging. Batool and Shaqoor (2024) informed that promotion of authentic content result in the enhancement of emotional connection and diminution of social-comparison. While inclusiveness encouragement for body positivity supported by the study of Li et al. (2023) who especially highlighted the significant need of inclusive communication for promoting mental-wellness. Similarly, Couto and Willoughby (2024) indicated that portraying of realistic and diverse body types by the fitness influencers on the social media, help their audience to reduce pressure and greater acceptance of their own appearance.

4.1. Recommendations

Future efforts should prioritize policies and research that address the psychological impact of fitness content on young people. Policymakers should encourage the promotion of diverse, realistic, and body-positive imagery on social media platforms to reduce appearance-related pressure among students. Another measure is to introduce media literacy programs that enable the students to critically assess online content. Also, one can suggest more culturally diverse samples, focusing on several platforms, including Tik Tok and YouTube, use longitudinal or experimental designs, to investigate the long-term effects and the causation relationships. These measures can help to make digital environments healthier and help support students.

4.2. Strengths and limitations

The theoretical strengths of this study include the strong theoretical foundations as a result of the adoption of social learning theory, social comparison theory and life span theory, that together offer a holistic lens to consider how followers' behaviors and perceptions are shaped through the lenses of observation, comparison and development. The use of in-depth interviews provided rich, nuanced interpretations of participants' experiences with appearance-based comparison and self-knowledge. The interview protocol was rigorously developed with the assistance of IPR and pilot testing. Credibility enhanced through reflexivity; expert review added trustworthiness. The study sample was limited as with most qualitative studies which may limits the generalizability of the findings. While gender differences were not developed as a distinct theme, data suggest that male and female participants were influenced in somewhat different

ways by the fitness influencers on Instagram; therefore, further research concerning gender-specific impacts is warranted. Moreover, the study focused exclusively on Instagram, leaving out other influential platforms such as TikTok and YouTube, which may shape body image perceptions through different visual styles and user dynamics. Lastly, since the data were collected at a single point in time and relied on participants' self-reports, the findings may be limited by memory inaccuracies or social desirability bias and cannot speak to cause-and-effect relationships and long-term effects of Instagram viewing habits on body image.

5. Conclusion

This study demonstrates that following Instagram fitness influencers has profound and multifaceted effects on university students. Although, a significant proportion of students reported feeling motivated and inspired by fitness content, others described experiencing pressure, comparison and dissatisfaction stemming from unrealistic or idealized portrayals. These opposite reactions demonstrate the need to create more inclusive, diverse and body-positive content that promotes healthy identities, body image and self-esteem among followers. The results also add value to the comprehension of the complex dynamics of digital fitness media that is culturally informed. Overall, this research reinforces the idea that that both the influencers and social media should have psychologically informed guidelines and policies to ensure responsible content creation and protect the well-being of users.

References

Abdullah, M. (2023). *How do Fitness Influencers on Instagram negatively impact the body image of their male followers in Karachi* (Unpublished undergraduate project). Institute of Business Administration, Pakistan. Retrieved from https://ir.iba.edu.pk/sslace/213

Aguilar, D., & Arbaiza, F. (2021). The role of fitness influencers in building brand credibility through distorted imagery of healthy living on Instagram. *In 2022 17th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1–8). https://doi.org/10.23919/cisti52073.2021.9476251

Ahmed, S. K. (2025). Sample size for saturation in qualitative research: Debates, definitions, and strategies. *Journal of Medicine Surgery and Public Health, 5*(1), 100171 https://doi.org/10.1016/j.glmedi.2024.100171

Bajwa, T., & Chandola, R. (2023). Effect of body image on mental health. *European Chemical Bulletin, 12*(4), 6101–6106. https://doi.org/10.48047/ecb/2023.12.si4.543

Baker, N., Ferszt, G. G., & Breines, J. G. (2019). A qualitative study exploring female college students' Instagram use and body image. *Cyberpsychology, Behavior, and Social Networking, 22*(4), 277–282.

Baltes, P. B., Staudinger, U. M., & Lindenberger, U. (1999). Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology*, *50*(1), 471–507. https://doi.org/10.1146/annurev.psych.50.1.471

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Barnes, K., Newman, E., & Keenan, G. (2023). A comparison of the impact of exposure to fit ideal and non-fit ideal body shapes in fitspiration imagery on women*. Computers in Human Behavior, 144*. https://doi.org/10.1016/j.chb.2023.107728

Batool, W., & Shaqoor, S. (2024). Impact of Instagram usage on body image appreciation among young females: Mediating effect of selfie posting behaviour. *Journal of Xi'an Shiyou University, Natural Science Edition, 20*(07), 25–33. https://www.xisdxjxsu.asia/V20I07-04.pdf

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Casale, S., Gemelli, G., Calosi, C., Giangrasso, B., & Fioravanti, G. (2021). Multiple exposure to appearance-focused real accounts on Instagram: Effects on body image among both genders. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, *40*(6), 2877–2886. https://doi.org/10.1007/s12144-019-00229-6

Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report, 21*(5), 811–831. https://doi.org/10.46743/2160-3715/2016.2337

Cataldo, I., De Luca, I., Giorgetti, V., Cicconcelli, D., Bersani, F. S., Imperatori, C., Abdi, S., Negri, A., Esposito, G., & Corazza, O. (2021). Fitspiration on social media: Body-image and other psychopathological risks among young adults. A narrative review. *Emerging*

Trends in Drugs Addictions and Health, *1.* https://doi.org/10.1016/j.etdah.2021.100010

Chatmon, B. N. (2020). Males and mental health stigma. *American Journal of Mens Health*, *14*(4), https://doi.org/10.1177/1557988320949322

Couto, L., & Willoughby, J. F. (2023). #LoveYourBody: An experimental test of the effects of objectification and body appreciation content on Instagram fitness and health posts among young women. *Health Communication,* *39*(11), 2298–2306. https://doi.org/10.1080/10410236.2023.2265647

Data Reportal. (2024). *Digital 2024: Pakistan*. https://datareportal.com/reports/digital-2024-pakistan

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*(2), 117–140. https://doi.org/10.1177/001872675400700202

Fioravanti, G., Tonioni, C., & Casale, S. (2021). #Fitspiration on Instagram: The effects of fitness-related images on women's self-perceived sexual attractiveness. *Scandinavian Journal of Psychology, 62*(5), 746–751. https://doi.org/10.1111/sjop.12752

Fruhauf, A., Roth, M., Rausch, L., & Kopp, M. (2024). Fitspiration—Inspiration or threat for adolescent girls? A qualitative investigation on fitness-related social media content and physical education. *Children & Society, 38*(6), 2089–2106. https://doi.org/10.1111/chso.12879

Gao, Y., Wang, J., & Liu, C. (2021). Social media's effect on fitness behavior intention: Perceived value as a mediator. *Social Behavior and Personality an International Journal*, *49*(6), 1–11. https://doi.org/10.2224/sbp.10300

Glaser, H. C., Jansma, S. R., & Scholten, H. (2024). A diary study investigating the differential impacts of Instagram content on youths' body image. *Humanities and Social Sciences Communications, 11.* https://doi.org/10.1057/s41599-024-02960-3

Goodyear, V. A., Wood, G., Skinner, B., & Thompson, J. L. (2021). The effect of social media interventions on physical activity and dietary behaviours in young people and adults: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity, 18*(1), 72. https://doi.org/10.1186/s12966-021-01138-3

Guarda, T., Lopes, I., Victor, J. A., & Vázquez, E. G. (2020). User Behavior: The case of Instagram. *Smart Innovation, Systems and Technologies*, 167, 38–48. https://doi.org/10.1007/978-981-15-1564-4_5

Gültzow, T., Guidry, J. P. D., Schneider, F., & Hoving, C. (2020). Male body image portrayals on Instagram. *Cyberpsychology, Behavior, and Social Networking, 23*(5), 281–289. https://doi.org/10.1089/cyber.2019.0368

Kepios. (2023, January 26). *Digital 2023: Global Overview Report.* DataReportal. https://datareportal.com/reports/digital-2023-global-overview-report

Kucharczuk, A. J., Oliver, T. L., & Dowdell, E. B. (2021). Social media's influence on adolescents' food choices: A mixed studies systematic literature review. *Appetite*, *168*. https://doi.org/10.1016/j.appet.2021.105765

Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, *4*(1), 2-22. https://psycnet.apa.org/doi/10.1037/qup0000082

Li, W., Ding, H., Xu, G., & Yang, J. (2023). The impact of fitness influencers on a social media Platform on exercise intention during the COVID-19 Pandemic: The role of parasocial relationships. *International Journal of Environmental Research and Public Health, 20*(2). https://doi.org/10.3390/ijerph20021113

Liu, R., Menhas, R., Dai, J., Saqib, Z. A., & Peng, X. (2022). Fitness apps, live streaming workout classes, and virtual reality fitness for physical activity during the covid-19 lockdown: An empirical study. *Frontiers in Public Health, 10*. https://doi.org/10.3389/fpubh.2022.852311

Merchant, R. M., South, E. C., & Lurie, N. (2021). Public health messaging in an era of social media. *JAMA*, *325*(3), 223-224. https://doi.org/10.1001/jama.2020.24514

Modica, C. A. (2020). The associations between Instagram use, selfie activities, appearance comparison, and body dissatisfaction in adult men. *Cyberpsychology Behavior and Social Networking*, *23*(2), 90–99. https://doi.org/10.1089/cyber.2019.0434

Muller, G. (2020). *Male body image*. The Psych Professionals. https://psychprofessionals.com.au/male-bodyimage/

Nuss, K., Coulter, R., & Liu, S. (2024). Content of social media fitspiration and its effect on physical activity-related behavior: A systematic review. *Psychology of Popular Media*, *13*(3), 353-362. https://doi.org/10.1037/ppm0000489

Openr. (2022, November 24). *Why young adults are the most active social media users*. Openr. https://openr.co/why-young-adults-are-the-most-active-social-media-users

Pasha, S. A. (2021). Instagram usage and watching what others are doing: A case study of Lahore City. *Global Regional Review, 6*(II), 213–225. https://doi.org/10.31703/grr.2021(VI-II).24

Popat, A., & Tarrant, C. (2023). Exploring adolescents' perspectives on social media and mental health and well-being – A qualitative literature review. *Clinical Child Psychology and Psychiatry, 28*(1), 323–337. https://doi.org/10.1177/13591045221092884

Prichard, I., Kavanagh, E., Mulgrew, K. E., Lim, M. S. C., & Tiggemann, M. (2020). The effect of Instagram #fitspiration images on young women's mood, body image, and exercise behaviour. *Body Image,33*,1-6. https://doi: 10.1016/j.bodyim.2020.02.002.

Purvis, C. (2019, December 19). *Body positivity affects men too—it's just as stressful for men*. Thrive Global. https://thriveglobal.com/stories/body-positivity-affects-men-too/

Rousseau, A. (2024). Body-Positive Instagram exposure and young women's body image: The mediating role of appearance comparison and broadly conceptualizing beauty. *Health Communication*, *39*(8), 1520–1531. https://doi.org/10.1080/10410236.2023.2222460

Saini H, Majumdar IG. (2025). Exploring self-objectification among Queer Community in India— A qualitative study. *Journal of Psychosexual Health*,7(2),160-165. https://doi:10.1177/26318318241302389

Sicilia, A., Alcaraz-Ibáñez, M., Dumitru, D. C., Paterna, A., & Griffiths, M. D. (2020). Fitness related self-conscious emotions and risk for exercise addiction: Examining the mediating role of passion. *Journal of Sport and Exercise Psychology*, *42*(3), 240–248. https://doi.org/10.1123/jsep.2019-0260

Sokolova, K., & Perez, C. (2021). You follow fitness influencers on YouTube. But do you actually exercise? How parasocial relationships, and watching fitness influencers relate to intentions to exercise. J*ournal of Retailing and Consumer Services, 58*. https://doi.org/10.1016/j.jretconser.2020.102276

Taylor, J., & Armes, G. (2024). Social comparison on Instagram, and its relationship with self-esteem and body-esteem. *Discover Psychology, 4*. https://doi.org/10.1007/s44202-024-00241-3

Tiggemann, M., & Anderberg, I. (2020). Muscles and bare chests on Instagram: The effect of influencers' fashion and fitspiration images on men's body image. *Body Image, 35,* 237–244. https://doi.org/10.1016/j.bodyim.2020.10.001

Tricás-Vidal, H. J., Vidal-Peracho, M. C., Lucha-López, M. O., Hidalgo-García, C., Monti-Ballano, S., Márquez-Gonzalvo, S., & Tricás-Moreno, J. M. (2022). Impact of fitness influencers on the level of physical activity performed by Instagram users in the United States of America: Analytical cross-sectional study. *International Journal of Environmental Research and Public Health*, *19*(21), 14258. https://doi.org/10.3390/ijerph192114258

Vuong, A. T., Jarman, H. K., Doley, J. R., & McLean, S. A. (2021). Social media use and body dissatisfaction in adolescents: The moderating role of thin- and muscular-ideal internalisation. *International Journal of Environmental Research and Public Health*, *18*(24), 13222. https://doi.org/10.3390/ijerph182413222

Xie, Z. (2024). The influence of social media on perception of body image and beauty standards on young people. *Transactions on Social Science, Education and Humanities Research*, *5*(4), 143-148.

Zangger, G., Mortensen, S. R., Tang, L. H., Thygesen, L. C., & Skou, S. T. (2024). Association between digital health literacy and physical activity levels among individuals with and without long-term health conditions: Data from a cross- sectional survey of 19,231 individuals. *Digital Health, 10*. https://doi.org/10.1177/20552076241233158

Zeib, F., & Shahzad, S. (2023). Instagram use and social anxiety among youngsters in Pakistan: Serial mediation analysis. *Pakistan Journal of Social Research, 5*(2), 1091–1104.