

## Fitspiration: Fitness Culture on Instagram and Young Adults' Exercise Habits, Eating Attitudes and Body Image

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### ABSTRACT

A supposedly healthy alternative to thinspiration, “fitspiration” is a social media trend that idealizes fit, muscular and strong bodies. These posts contain content that emphasise fitness through exercise and change in eating habits, which if performed excessively, can lead to maladaptive behaviors. Further, the content on fitspiration provides for prototypes of “fit” bodies, which, while visually appealing, are unachievable for many. Therefore, with an aim to understand the impact of fitspiration content, as disseminated on social media (Instagram), in determining one’s exercise patterns, eating attitudes and body image, a correlational design was adopted for this study. For the purpose of which, four scales i.e., the passive and active use measure, obligatory exercise questionnaire, eating attitudes test (EAT-26) and the multidimensional body-self relations questionnaire-appearance scales (MBSRQ-AS), were administered on a sample of 138 young adults between age group of 18-28 years. The significant correlations found between the various scales indicate that accessing fitspiration content can establish or maintain maladaptive behaviours such as obligatory exercising and unhealthy eating attitudes. The study implies to spread awareness about the potential harm of such content to facilitate a certain degree of mindfulness while engaging with the same, as well as sensitizes those who knowingly or unknowingly propagate harmful messages.

**Keywords:** *Fitspiration, Instagram, Obligatory Exercise, Eating Attitudes, Body Image, Correlational Study*

Social comparison is a tendency that humans are preordained to engage in. We constantly compare others and ourselves to those around us, be it in terms of achievement, intelligence, personality attributes as well as physical appearance (Festinger, 1954). Although the standards for beauty differ according to the culture or even the time in history, there is always a ‘beauty standard’ that one is constantly compared to. People who largely meet the prototype for being ‘beautiful’ or ‘handsome’ are often positively reinforced with comments such as “Oh! You are so pretty” or “You are so handsome.” This has a reciprocal effect as societal reinforcements lead people to internalizing attitudes and exhibiting behaviours approved by significant others (Fairburn & Brownell, 2002). On the other hand, the large majority of the population who do not meet

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these 'norms' for beauty and/or physique either resist such influence of the society or try their best to alter themselves in order to meet these standards. The major concerns arise for those (who meet such standards and those who do not) who begin internalizing these beauty ideals and start evaluating themselves based on the same.

Media (television, articles, websites, and social platforms such as Instagram and Facebook etc.) has proven to be an essential carrier of various cultural stereotypes including those of beauty ideals. This is done by reinforcing certain types of images/posts, sharing similar feature, through means of 'likes,' 'shares' and 'comments'. In turn, a certain standard is set for the criteria being represented. When the criteria are that of physical appearance, norms regarding self-presentation and appearance are established (Feltman & Szymanski, 2018).

### ***Instagram***

Instagram is a social media application that allows people to share with others their daily life activities, lifestyles, habits and interests in pictures and videos. 'Centrality of images' is what sets it apart from other forms of text-based social media platforms such as Facebook and Twitter. Moreover, it has been found that Instagram users generally engage in a positive form of self-presentation by displaying merely the positive aspects of their lives (Lup, Trub, & Rosenthal, 2015). A probable reason for this is the feature of photo editing and enhancement that creates a culture of polishing/perfecting among users (Lup, Trub, & Rosenthal, 2015).

Trifiro (2018) distinguishes between two forms of social media usage patterns: active and passive. Active social media usage pattern involves direct interaction with the users' content. Such behaviors may include uploading a picture on Instagram, commenting on another's status, "liking" someone else's content, messaging the users, sharing their posts etc (Verduyn, Park, & Kee, 2009). On the other hand, passive users are those who view other's posts and profiles, but without actively engaging in them. Examples include scrolling through one's newsfeed, browsing pictures uploaded by others without 'liking' or 'commenting' on them. In other words, those users who do not engage in creating any form of content but are sheer observers of other's content, qualify as passive users of social media (Burke, Marlow, & Lento, 2010).

With the advent of such a technology, the process of influencing and being influenced has become especially easy. Every fortnight a new trend or a new phenomenon is generated and popularized on Instagram. All over the world, users engage with these vogues by reproducing similar content, applying it to their day-to-day lives, or engaging in long-drawn discussions with friends and family. Two important trends/phenomena, associated with physical appearance, that have influenced the lives of many are: to be thin and skinny (thinspiration), and to be fit and muscular (fitspiration).

***Thinspiration.*** (Thin-inspiration) refers to the phenomenon, exclusive to social media platforms, wherein users showcase idealized images of thin women, use motivational quotes to negatively portray oversized bodies and persuade viewers to implement dieting tactics (Boepple & Thompson, 2015). Many researches soon revealed the harmful consequences of viewing such content such as acceptance of unhealthy beauty standards, engaging in increased self-objectification and sexualisation, maintaining or developing eating disorders (Stonebridge, 2011; Taylor & Ghaznavi, 2015), as well as lowering of one's self esteem which in turn leads to depression and other psychological difficulties (Sigman, 2010). Soon,

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thinspiration content was clubbed with other pro-anorexia (pro-ana) and pro-bulimia (pro-mia) websites, as an instrumental tool in encouraging, promoting and sustaining anorexic behavior (Jennifer & Shannon, 2010).

### ***Fitspiration***

Given the damaging effects of thinspiration content, social media websites (e.g. Facebook, Instagram, Pinterest) started censoring content propagating thinness and skinny figures along with incorporating warnings on common searches for thinspiration content (Judkins, 2012). Soon, as an evolution of thinspiration content, the stage was set for yet another movement on social media, namely, “fitspiration,” or “fitspo,” an abbreviation for the terms ‘fitness’ and ‘inspiration.’ On Instagram, this trend is popularized with the use of hashtags such as #fitspo, #fitfam, #fitspiration, etc. Additionally, there are a number of fitspiration influencers, who have over time portrayed themselves as ‘fitness experts.’ These accounts have gained followers and prominence over time by simply sharing pictures of their bodies or regimens, sharing pro-health tips, and motivating or sharing their personal stories towards the attainment of their current bodies (Reade, 2016). Initially, fitspiration trend was established as a healthy antidote to the negative consequences of thinspiration. Its primary focus revolves around inspiring people to lead a healthier lifestyle and eating healthy, rather than merely being thin. This is generally achieved by posting pictures, images, quotes and sharing advice about fitness and nutrition. Overall, health and well-being are strongly endorsed by promoting self-care, exercise and healthy eating (Tiggemann & Zaccardo, 2015).

Despite an apparent focus on the healthy lifestyle behaviours, several aspects of fitspiration content have been found to raise problems of concerns. First, they portray only a particular type of body structure; an idealized thin athletic female body type and hyper-muscular male body type. Although it is relatively less thin and more muscular as compared to thinspiration content, it still is unattainable for most women and men (Krane, Stiles-Shipley, Waldron, & Michalenok, 2001).

Secondly, fitspiration content attempts to inspire people towards health and fitness by focusing on the appearance-related benefit of such a lifestyle. e.g., “No sweat, no beauty, no squat, no beauty.” Research has shown that negative body image is linked to exercise motivated by appearance reasons (Strelan, Mehaffey, & Tiggemann, 2003).

Finally, a number of images have objectifying features, such as focus on a particular part of the body or certain repetitive poses. Studies have shown that exposure to objectified images can lead to enhanced self-objectification and body dissatisfaction (Fredrickson & Roberts, 1997; Harper & Tiggemann, 2008).

Similarly, other researches, using methods of experiment and content analysis and interviews have revealed similar aspects of fitspo content. In a study conducted by Tiggemann & Zaccardo (2015), Australian undergraduate women who were exposed to fitspiration images were found to have increased body dissatisfaction, reduced self-esteem and relatively negative mood, as compared to women exposed to appearance neutral (travel) images (Brannan & Petrie, 2008).

Bohjalian (2017) analysed the content of six most influential, women fitspiration experts on Instagram to find that most of their content does not show them engaging in any form of

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exercise, but rather feature non-workout related content. Furthermore, pictures of their bodies were more noticeable than the few inspirational quotes and tips they had posted, thus highlighting the end goal rather than the effort put in along the way. This essentially makes the goal unrealistic and unattainable as the steps involved in the attainment of the goal have not been specified, as a consequence of which individuals find it difficult to evaluate if they have the required set of ability (self-efficacy) to achieve the goal (Locke & Latham, 2006)

The magnitude of impact created by this trend on people's lives can be linked to the growth of the fitness industry. In 2019, the annual revenue generated by the fitness industry in the US was more than 80 billion US dollars, with an annual growth rate of 4.5% and in India, the revenue sums up to more than 1,640 million dollars, with a 5.2% growth rate (Gough, 2019). Furthermore, many companies in the fashion industry have opened new lines of clothing focused on gym wear; the digital market has started investing on wearable devices such as apple watch, fit-bit and other fitness bands that allow people to see how many steps they have taken per day, the calories burnt, their blood pressure and heart rate. Alternative workout modes such as zumba, pilates, kickboxing, cult fitness, etc. are gaining grounds; online apps such as HealthifyMe, Health\_Jinn, Fitify, Cure.fit, etc., that stream exercise classes, help maintain calorie count, and provide tips on diet and exercise, have also become extremely popular among the youth (Midgley, 2018).

When one is primed repeatedly to engage in fitness, available in its various forms, it becomes difficult to repel this magnetic pull. As a result, many become increasingly aware of their bodily functions, feel a need to engage in some form of exercise, become extremely mindful of what they consume (Jong & Drummond, 2016) and therefore engage in bio-pedagogy i.e. "the disciplinary and regulatory strategies that enable the governing of bodies in the name of health and life" (Wright, 2009, p.g. 14). Initially, it appears to be a healthy lifestyle to engage into, however, when one starts engaging in excessive exercise, reduces their calorie intake to a significant level, starts feeling guilty for dodging a day's exercise or eating a slice of pizza, this is when the quest to attain a healthy body starts interfering with one's psychological well-being.

Two ways in which people behaviourally engage in the fitspiration movement is by either engaging in various forms of exercise or altering their eating patterns.

### ***Fitspiration and Exercise***

A certain amount of regular exercise is beneficial for health, both physically as well as psychologically. However, as stated previously, when it is done in excessive amounts without giving adequate rest to the body, it can lead to harmful consequences; physically, it may lead to bloating, muscle twitching, inflammation, while psychological effects include anxiety, restlessness, guilt, depression, irritability etc. (Griffiths, 1997). However, the reason behind engaging in exercise also greatly determines the outcome; whether positive or negative.

While fitspiration posts may inspire people to engage in exercise, certain characteristics of these posts may create misconceptions, disseminate misinformation or provide its viewers with the wrong reasons to engage in exercise (Holland & Tiggemann, 2016). Content analysis on fitspiration content reveals some of these characteristics. Bohjalian (2017) found that 60% of the posts of fitness influencers consisted of bodies with no relation to exercise, 33% posts consisted of people wearing workout clothes and only 3.0% of the posts showcased people engaging in active exercise. This indicates that neither do these posts

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provide information on the types of exercises, their variations, the right pattern of exercise, dos or don'ts of exercise, nor do they show the journey of one's attainment of their bodies. Rather, merely the end result is displayed without any details how they got there, the hardships faced and the realities of the journey. As a result, people lack the knowledge of how much time it can take, what frequency of exercise that is required, the hurdles that they may face. This can lead to one engaging in excessive exercise, in order to achieve that ideal body that seems so effortless to attain and when they are unable to do so, it may lead to frustration and anger (Harris, 2009).

### ***Fitspiration and Eating Attitudes***

Controlled eating and exercise are not mutually exclusive; more often than not, people do both together in order to attain speedy results (Boepple & Thompson, 2015). Indeed, results of a content analysis of fitspiration posts on Facebook suggested that the most common codes related to 'diet/restraint messages' (15.6%), followed by 'losing fat/weight' (11.8%) (Blackstone & Herrmann, 2018). Similar to the content on exercise, these posts too lack information on various aspects of diet and food restrictions, as a result of which the only message that people receive is to "eat less" or to "eat healthy." Information on what is healthy or unhealthy, the amount of calorie intake based on BMI, the hardships of engaging in food restrictions, etc. is generally skipped in such posts. Due to this lack of guidance along with an overemphasis on dietary restrictions, individuals may become hyper vigilant about the food they eat, the calories contained in them, slight changes in weight; they may start feeling guilty for eating a little extra or may even start enjoying the feeling of having an empty stomach. Such destructive behaviour may eventually lead to eating disorders such as anorexia nervosa and bulimia nervosa (O'Brien, 2015).

### ***Fitspiration and Body Image***

The Oxford English Dictionary (2010) defines body image as "a person's mental picture of how good or bad their physical appearance is, especially when compared with how they think they should look" (p. 58). The fact that it is a "mental picture" highlights the role of cognition in the development of one's body image, secondly, the perception is subject to social comparison and lastly, the term "should" reflects what the society thinks is the "ideal" body. Media too plays a very important role in disseminating such information that shapes the attitudes and perception of people towards their own bodies (Wykes & Gunter, 2015).

According to cultivation theory, one's exposure to social media shapes one's view of the world and of social reality (Gerbner, 1976). The theory assumes that increased exposure to media will lead to an increased resemblance of one's view of social reality to that portrayed on media and the viewers in turn will create their "real world" through observing the world created by media. Therefore, application of cultivation theory to fitspiration suggests that increased exposure to "fitspo" content, that portrays a specific body type will lead a viewer to believing that 'this' body is the ideal body and that 'being fit' and 'eating healthy' is where the society's consensus lies. The stability/ instability of such beliefs depend upon how consistent/inconsistent the contents are on the given media; the effects of media may diminish if the content of the media changes.

In many cases, cultivation may not create attitude, but rather reinforce certain beliefs. Such as a person's body dissatisfaction may increase as a result of increased exposure to 'fitspo' content and this in turn can lead to two alternative behaviours: first, exercising, eating well, acceptance of self; or second, restricting, purging, excessive exercise, self-harm (Anderson, 2016).

***Exercise, Eating Attitudes and Body Image***

Exercise, eating attitudes and body image, supposedly independent, are indeed highly intertwined. The cognitive discrepancy theory by Rogers (1959) can be applied to understanding the dynamics of experiencing body dissatisfaction. According to this theory, when one experiences incongruence between the real self and the ideal self, with regard to their bodies, a diminished sense of self-worth, frustration and other negative self-evaluations emerge (Bessenoff & Snow, 2006). In order to reduce these negative feelings, one engages in behavior to reduce these discrepancies and attempts to bring the two selves closer to one another, thus reducing incongruence. In order to reduce this discrepancy, one may alter their perception towards their bodies, start evaluating their bodies more positively, change the perception of their ideal bodies, or alternatively, engage in behavior that will alter their current 'real' bodies so as to increase its resemblance with the 'ideal' body. Two most frequently practiced behaviors for the purpose of achieving one's ideal bodies are: engaging in exercise and/or altering eating patterns.

While a certain degree of regulation is beneficial, excessive exercising or too restrictive eating can lead to harmful consequences. Obligatory exercisers are those who consider exercise as a central focus of their lives, regardless of physical or social consequences. Maintaining a rigid schedule of intense exercise, experiencing guilt or anxiety upon missing a scheduled exercise, preoccupation with food, engagement with exercise despite being ill/tired, etc, are characteristic features of an obligatory exerciser. Young & Anderson (2010) state that when one engages in exercise for appearance-based reasons, or in response to negative affect, one is more susceptible to eating and body image pathologies. Seigel & Hetta (2001) found eating disorder symptoms in young females to be related to obligatory exercise attitudes, rather than to exercise frequency. Grave, Calugi, & Marchesini (2008), found that 80% of restricting-type anorexia nervosa, 43.4% of binge eating disorder and 39.3% bulimia nervosa patients were compulsive exercisers. Lavender et.al., (2010) highlighted the moderating influence of negative affect/emotional fixation in predicting the link between eating disorders and excessive exercise.

***The Present Study***

In this technology-driven century, social media, given its widespread reach, plays a central role in shaping our attitudes and perceptions regarding a wide range of themes and issues. As an improvement to the trend of thinspiration, social media influencers and users have started propagating what is now called, "fitspiration". Supposedly a healthy alternative to thinspiration, fitspiration too idealizes a particular body type i.e. thin athletic female body type and hyper-muscular male body type, both of which are unattainable for most individuals (Krane, Stiles-Shipley, Waldron, & Michalenok, 2001). Nevertheless, the increased dissemination/consumption of such content leads to increased amount of social comparison, which may lead to feelings of discontentment with one's current body, maladaptive eating behaviors and exercise patterns.

***RQ1:*** What is the extent of relationship between usage of fitspiration content on Instagram and exercise-related behaviours among young adults?

***Hypothesis 1.*** It is hypothesized that there will be a significant correlation between usage of fitspiration content (active and passive use) and one's obligation to exercise (exercise fixation, exercise frequency, exercise commitment). Since fitspiration content has fitness and appearance-based themes, people who regularly access this content are likely to engage

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in exercise behaviours. Hence, exercise fixation, frequency and commitment will be positively correlated with use of fitspiration content.

**RQ2:** What is the extent of relationship between usage of fitspiration content on Instagram and eating related attitudes among young adults?

**Hypothesis 2.** It is hypothesized that there will be a significant correlation between usage of fitspiration content (active and passive use) and eating related attitudes (dieting, bulimia & food preoccupation and oral control). Since fitspiration posts often relate to diet/restraint and losing fat/weight messages, the resulting correlations will be positive.

**RQ3:** What is the extent of relationship between usage of fitspiration content on Instagram and one's body image?

**Hypothesis 3.** It is hypothesized there will be a significant correlation between usage of fitspiration content (active and passive use) and one's body image (appearance evaluation, appearance orientation, body areas satisfaction scale, overweight preoccupation and self-classified weight).

**RQ4:** What is the extent of relationship among exercise related behaviour among adults, eating attitudes and attitude towards one's body image?

**Hypothesis 4.** It is hypothesized that there will be significant correlations among one's obligation to exercise (exercise fixation, exercise frequency, exercise commitment), eating related attitudes (dieting, bulimia & food preoccupation and oral control) and body image (appearance evaluation, appearance orientation, body areas satisfaction scale, overweight preoccupation and self-classified weight).

## **METHODOLOGY**

The primary aim of the study was to describe the ways in which people engage with 'fitspiration' content on Instagram and how this in turn affects one's patterns of engagement with exercise, eating behaviours and one's overall perception of their body image. "Fitspiration" in this study has been conceptualized as content available on Instagram that focuses on workout/exercises, diet/detox/body cleanses, body transformation, posts by fitness influencers such as body builders, athletes, personal trainers and posts with fitness related hashtags. In order to accomplish the above aim, data was gathered by administering various scales to the participants, and correlations were found between usage patterns of fitspiration content, exercise related behaviours, eating attitudes and body image, along with gathering basic demographic details.

### **Participants**

The study included 138 participants, comprising of men (38), women (99) and gender fluid (1), from across India. The following inclusion criteria were used to screen the participants:

- The participants should be between 18-28 years of age
- The participants should hold an Instagram account/s for at least a year. Data shows that 73% had private accounts 12% had public accounts, 10% had both private and public accounts and 5% had business accounts.
- Participants must access any one or more of the following forms of fitspiration content:
  - posts tagged with #fitspo, #fitfam, #fitspiration
  - photos/videos of everyday people (family/friends/others) working out

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- posts by personal trainers, fitness models, body builders or athletes
- inspirational posts of weight loss or body transformation
- posts on diet, detox or body cleanses.

The age range of 18-28 years ( $M=21.43$ ,  $SD=2.25$ ) was determined by the fact that 65% of Instagram users age between 18-34 years (Clement, 2020), and eating disorders commonly begin during late adolescence and early adulthood. Respondents were solicited by circulating the Google form, along with an attached letter of intent and a consent form, through the medium of Whatsapp and Instagram. Largely, sampling techniques of convenience and snowball were used. The participants' BMI (Basal Metabolic Rate) was also measured to provide additional information about their height and weight. The formula for which is:

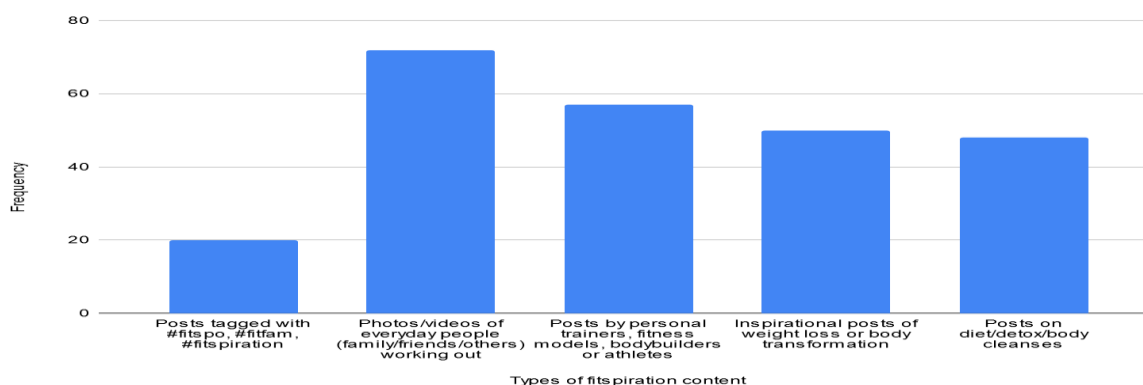
$$\text{BMI} = \frac{\text{weight (kgs)}}{\text{height (cm)}^2} \times 10,000$$

**Table 1. Table showing demographic details of the participants.**

Categories	n	M	SD
<b>Gender</b>			
Men	38	----	----
Women	99	----	----
Gender fluid	1	----	----
<b>Age (18-28 years)</b>	----	21.43	2.25
<b>BMI (Basal Metabolic Rate)</b>			
Underweight (below 18.5)	18	17.03	1.30
Normal (18.5-24.9)	72	21.91	9.42
Overweight ( 25-29.9)	36	27.37	8.36
Obese (30.0 above)	12	32.66	8.41

**Table 2. Table showing the frequency and percentages of respondents following the various types of fitspiration related content on Instagram.**

Responses	Frequency	Percentage%
Posts tagged with #fitspo, #fitfam, #fitspiration	20	15
Photos/videos of everyday people (family/friends/others) working out	72	53
Posts by personal trainers, fitness models, bodybuilders or athletes	57	42
Inspirational posts of weight loss or body transformation	50	37
Posts on diet/detox/body cleanses	48	36



**Figure 1. Bar graph depicting the frequency with which particular fitspiration content is accessed by respondents on Instagram.**



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### ***Variables***

The *usage pattern of fitspiration* content on Instagram was categorized dominantly into active and passive use. Active use is a social media usage pattern involving direct interaction with the users' content related to fitspiration through means of 'commenting,' 'liking,' 'sharing' etc. (Verduyn, Park, & Kee, 2009) while passive use involves inactive consumption of fitspiration content through means of browsing and scrolling without actively 'liking', 'commenting' or 'sharing' on the posts (Burke, Marlow, & Lento, 2010).

*Obligatory exercise*, interchangeable with terms "excessive exercise," "exercise addiction," are those who consider exercise as a central focus of their lives, regardless of physical or social consequences (Ackard, Brehm, & Steffen, 2002). Maintaining a rigid schedule of intense exercise, experiencing guilt or anxiety upon missing a scheduled exercise, preoccupation with food, engagement with exercise despite being ill/tired, etc. are characteristic features of an obligatory exerciser.

Likewise, *eating attitude* variables assess the extent to which people are preoccupied with the thought of food, show maladaptive patterns pertaining to food consumption and display negative affect when the planned diet has been compromised in some way (Garner et.al, 1982).

The last variable, "*body image*" attempts to identify the extent to which individuals are satisfied or dissatisfied with their bodies and other specific physical attributes, along with the extent to which they are preoccupied with their physicality and engage in appearance-based evaluation of themselves (Cash T. F., 2004).

### ***Measures***

**The passive and active use measure.** The Passive and Active Use Measure (Gerson, Plagnol, & Corr, 2017), was used to determine ones Instagram usage pattern, with regard to fitspiration content. The original measure attempts to distinguish between active social, active non-social and passive users of Facebook. However, given that the original scale was formulated to measure the various Facebook related activities, the scale was adapted for this study to include items pertinent to the features of Instagram (Appendix G) and especially relevant to fitspiration content, along with omitting those that didn't apply to this study. The total number of items was reduced from 13 to 10, of which, five measured active use and five measured passive use. Moreover, since the difference between active social and active non-social users seemed unclear, both the categories were merged into one i.e. active users. Respondents were required to determine how frequently they engage in each of these activities by selecting one of the following options: never, rarely, sometimes, somewhat frequently, and very frequently. The scores for the same are 1, 2, 3, 4 and 5 respectively. Total scores for the two dimensions were calculated by adding the scores of the items within each dimension.

*Active use items*- 1, 2, 3, 5, 7

*Passive use items*- 4, 6, 8, 9, 10

**Obligatory exercise questionnaire.** Although exercise has been linked to promoting health and well-being, engaging in excessive exercise has repeatedly been linked to numerous negative consequences and other maladaptive behaviours such as eating disturbances and other mood disturbances such as irritability and depression (Smith, 2003). In order to assess the construct of obligatory exercise, Pasma & Thompson (1988) developed the Obligatory Exercise Questionnaire, comprising 20 items (Appendix I). Factor analysis of the scale

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(Ackard, Brehm, & Steffen, 2002) revealed 3 factor structures: exercise fixation, exercise frequency and exercise preoccupation. Exercise fixation, contains five items describing a preoccupation with exercise, negative affect associated with missed exercise, and the use of exercise to compensate for perceived overeating. Exercise frequency, contains three items that refer to the frequency and the type of exercise episodes. Exercise commitment has three items indicative of an individual's sense that routine exercise episodes cannot be missed. An item was incorporated in the form to identify participants who engage in certain level of exercise. Only those who responded 'rarely' to the question, "How frequently do you engage in some form of exercise," were not allowed to fill this scale. Respondents have to choose between the options of never, sometimes, usually and always, scored 1, 2, 3 and 4 respectively. Sub dimension scores were calculated by added the scores its items. Items 9 and 10 were reverse scored. Factors 1, 2 and 3 were found to have coefficient alphas of .775, .829 and .661 respectively.

*Exercise fixation items-* 1, 2, 3, 4, 5

*Exercise frequency items-* 6, 7, 8

*Exercise preoccupation items-* 9, 10, 11

**Eating attitudes test.** The Eating Attitudes Test, developed by Garner & Garfinkel (1979), is a standardized measure for screening individuals who are at a risk for developing eating disorder (Appendix H). The original test comprised of 40 items (EAT-40), however an abbreviated 26 item version of the EAT, known as EAT-26, was later proposed based on factor analysis of the original scale (Garner, Olmsted, Borh, & Garfinkel, 1982). EAT-26 is highly correlated with Eat-40 ( $r=.98$ ) (Lee, Kwok, Liau, & Leung, 2002). The reliability of the EAT-26 is high ( $\alpha=.90$ , for AN group) and test-retest reliability ranged from .84 to .89 (Banasaik, Wertheim, Koerner, & Voudouris, 2000). The EAT-26 can be divided into three subscales of dieting, bulimia and food preoccupation, and oral control. The dieting subscale comprised of 13 items describing the extent to which one is concerned about weight gain. The bulimia and food preoccupation scale comprises of 6 items focusing on symptoms of bulimia nervosa. The oral control subscale comprises of 7 items indicative of one preoccupation with restrictive food intake. The subscale scores are computed by adding the scores of all the items in that particular subscale.

*Dieting scale items:* 1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24, 26

*Bulimia and food preoccupation scale items:* 3, 4, 9, 18, 21, 25

*Oral control subscale items:* 2, 5, 8, 13, 15, 19, 20.

A total score of 20 or higher indicated a risk for eating disorder and one must seek advice from a qualified medical health professional. It is important to note that the scale is not designed to make a diagnosis of any eating disorder neither does it attempt to take the place of a professional consultant. EAT-26 comprises of three parts i.e. Part A, which collects demographic details of the respondents, Part B, which comprises of the 26 items and Part C, which includes 5 behavioural questions. For the purpose of the study, only Part B was administered to the respondents as the questions from the other two parts were already included under other items.

**The multidimensional body-self relations questionnaire-appearance scales (MBSRQ-AS).** It is a 69 item self-report inventory for the assessment of self-attitudinal aspects of the body-image construct, as developed by Cash (1990). A shorter version of the scale, known as MBSRQ-AS (MBSRQ-Appearance Scales), comprising 34 items was used in this study (Appendix J). The subscales included in this version are: appearance evaluation, appearance

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orientation, overweight preoccupation, self-classified weight and the BASS. Appearance evaluation refers to the feelings of physical attractiveness or unattractiveness; satisfaction or dissatisfaction with one's look, a low score in which indicates dissatisfaction whereas a high score indicates a general satisfaction. Appearance orientation is the extent to which one invests in their appearance. Overweight preoccupation assesses a construct reflecting fat anxiety, weight vigilance, dieting, and eating restraint. Self-classified weight reflects how one perceives and labels one's weight, from very underweight to very overweight and body areas satisfaction scale (BASS) deals with ones level of satisfaction with specific areas/parts of their bodies.

For the first 22 items, respondents were required to indicate on a five point scale, the extent to which they agreed/disagreed with each item, based on its applicability to themselves. Items 23, 23 and 25 comprised its individual likert scales and required participants to choose from the most appropriate response. Items 26-34, required the participants to indicate how satisfied/dissatisfied they are with certain parts of their bodies.

*Appearance evaluation items-* 3, 5, 9, 12,15, 18, 19

*Appearance orientation items-* 1, 2, 6, 7, 10, 11, 13, 14, 16, 17, 20, 21

*Body areas satisfaction items-* 26, 27, 28, 29, 30, 31, 32, 33, 34

*Overweight preoccupation items-* 4, 8, 22, 23

*Self-classified weight items-* 24, 25

Items 11, 14, 16, 18, 19 and 20 are reverse scored. MBSRQ-AS subscales are the means of items.

### ***Procedure***

Once the topic of interest was conceptualized and finalized, guided by existing literature, the research questions and hypotheses were formulated. The design of the study was decided based on the research questions. Therefore, keeping in mind the purpose of the study, various scales measuring the different variables were selected and were subjected to correlational study.

The selection of scales was based on the variable at hand, psychometric properties of the scales and the purpose of the study. In total, four scales measuring four different variables namely, fitspiration usage, obligatory exercise, eating attitude and body image, were finalised. Subsequently the online tool in the form of a survey was formed, using Google forms, which included the consent form, items inquiring about personal demographics along with one item soliciting the type of fitspiration content accessed by the respondents and the four scales measuring a variable each. A filter item was also added to identify participants who engage in some form of exercise. Those who responded 'rarely' to the question, "How often to engage in some form of exercise" were not administered the scale. Necessary changes were made to the scales in order to adapt to the format prescribed by Google form. Items were reviewed, over several sessions to make sure that the items were comprehensible, pertinent to the objectives of the study, gender sensitive and exhaustive. Subsequently, a pilot was conducted on three females and three males to eradicate any hindrance that may occur while filling the final form. Feedbacks were reviewed and necessary changes were made to the form.

The next step was data collection. An online form was prepared for administration. The form was proofread one last time and a cover letter was generated which briefly mentioned the purpose of the study and the inclusion criteria. The form was then circulated through

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Whatsapp and Instagram. Once the data was gathered, the responses were sorted in the excel sheet, incomplete responses were eliminated from analysis (n=8), and scores of each scale and its sub-dimensions were calculated. Finally, correlations between the scales were found using SPSS (Statistical package for the Social Sciences) and conclusions were drawn.

### RESULT

#### Correlational Study

**Table 3. Table showing the sample size (n), mean and SD for all variables included in the study.**

Variables	Mean	SD
<b>Instagram usage pattern (n=138)</b>		
Active Use	9.69	3.99
Passive Use	11.59	4.39
<b>Obligatory Exercise (n=91)</b>		
Exercise Fixation	11.66	3.80
Exercise Frequency	9.15	2.54
Exercise Commitment	7.48	2.16
Total	28.30	6.69
<b>Eating Attitudes (n=138)</b>		
Diet	6.60	7.68
Bulimia & Food Preoccupation	1.70	2.81
Oral Control	2.44	3.04
Total	10.73	11.99
<b>MBSRQ-AS (n=138)</b>		
Appearance Evaluation	3.31	0.87
Appearance Orientation	3.35	0.63
Body Areas Satisfaction	3.30	0.67
Overweight Preoccupation	2.57	0.91
Self-Classified Weight	3.31	0.86

**Table 4. Table showing correlations between active & passive use of fitspiration content and variables measuring one's obligation to exercise. (n=91)**

	Exercise Fixation	Exercise Frequency	Exercise Commitment	Obligation to Exercise (Total)
<b>Active Use</b>	.308**	.324**	.227*	.372**
<b>Passive Use</b>	.336**	.201	.123	.307**

\*\*p<.01, \*p<.05

Significant correlations were found between passive and active use, and obligatory exercise. Both active (r=.372) and passive use (r=.307) were significantly correlated with total obligation to exercise. Within the sub-dimensions, significant correlations have been found between active use and exercise fixation (r=.308), exercise frequency (r=.324) and exercise commitment (r=.227), while only exercise fixation is significantly correlated to passive use (r=.336).

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**Table 5. Table showing correlations between active and passive use of fitspiration content and eating related attitudes. (n=138)**

	<b>Dieting</b>	<b>Bulimia &amp; Food Preoccupation</b>	<b>Oral Control</b>	<b>Eating Attitude (Total)</b>
<b>Active Use</b>	.263**	.203*	.254**	.280**
<b>Passive Use</b>	.259**	.278**	.314**	.310**

\*\*p<.01, \*p<.05

Significant correlations were found between Instagram usage and eating attitudes. A greater positive significant correlation has been found between overall eating attitude and passive use (r=.310), than active use (r=.280). All sub-dimensions are found significantly correlated with both active as well as passive use.

**Table 6. Table showing correlation between active and passive use of fitspiration content and the five subscales of MBSRQ-AS (n=138)**

	<b>Appearance Evaluation</b>	<b>Appearance Orientation</b>	<b>Body Areas Satisfaction</b>	<b>Overweight Preoccupation</b>	<b>Self-Classified Weight</b>
<b>Active Use</b>	.183**	.032	.095	.112	-.069
<b>Passive Use</b>	.041	.137	-.079	.168*	.055

\*\*p<.01, \*p<.05

Significant correlation was found between appearance evaluation and active use (r=.183) and overweight preoccupation and passive use (r=.168).

**Table 7: Table showing correlations between eating related attitudes and the five subscales of MBSRQ-AS. (n=138)**

	<b>Appearance Evaluation</b>	<b>Appearance Orientation</b>	<b>Body Areas Satisfaction</b>	<b>Overweight Preoccupation</b>	<b>Self Classified Weight</b>
<b>Dieting</b>	-.267**	.352**	-.254**	.643**	.280**
<b>Bulimia &amp; Food Preoccupation</b>	-.273**	.280**	-.301**	.422**	.122
<b>Oral Control</b>	-.035	.239**	-.128	.301**	-.148
<b>Eating Attitude (Total)</b>	-.244**	.351**	-.265**	.586**	.170*

\*\*p<.01, \*p<.05

Significant correlations were found between eating attitudes and body image. Strongest correlation is between overweight preoccupation and dieting (r=.643), followed by overweight preoccupation and overall eating attitude(r=.586). Weakest negative correlation has been found between oral control and appearance evaluation (r=-.035).

*Table 8. Table showing correlations between variables measuring one's obligation to exercise and MBSRQ-AS (n=91)*

	Appearance Evaluation	Appearance Orientation	Body Areas Satisfaction	Overweight Preoccupation	Self-Classified Weight
<b>Exercise Fixation</b>	-.138	.186	.067	.322**	.123
<b>Exercise Frequency</b>	.254*	-.036	.336**	.014	.030
<b>Exercise Commitment</b>	.060	-.071	.092	.193	-.002
<b>Obligation to Exercise (Total)</b>	.037	.115	.119	.250	.080

\*\*p<.01, \*p<.05

Significant correlations have been found between exercise fixation and overweight preoccupation (r=.322) and exercise frequency with appearance evaluation (r=.254) and body areas satisfaction (r=.336).

*Table 9. Table showing correlations between variables measuring one's obligation to exercise, eating related attitudes (n=91).*

	Dieting	Bulimia & Food Preoccupation	Oral Control	Eating Attitude (Total)
<b>Exercise Fixation</b>	.503**	.329**	.363*	.483**
<b>Exercise Frequency</b>	.100	-.065	.079*	.069
<b>Exercise Commitment</b>	.226*	-.049	.092	.156
<b>Obligation to Exercise (Total)</b>	.397**	.147	.266*	.351**

\*\*p<.01, \*p<.05

Significant correlations have been found between obligatory exercise and eating attitudes. Exercise fixation was significantly correlated with dieting (r=.503), bulimia and food preoccupation (r=.329), oral control (r=.363) and total eating attitude (r=.483). Exercise frequency was significantly correlated with oral control (r=.079). Exercise commitment was significantly correlated with dieting (r=.226) and overall obligation to exercise was significantly correlated with dieting (r=.397), oral control (r=.266) and total eating attitude (r=.351).

## DISCUSSION

Fitspiration, a relatively new phenomenon on social media, which propagates fitness through exercising and food restriction, strives to motivate people to engage in these behaviours in order to achieve an ideal "fit" body which is characterised by toned, buxom, thin waist body for females and hyper-masculine, V-shape body for males. A relatively healthier alternative to the trend of "thinspiration," fitspiration focuses on being "fit" rather than "thin." However, both the trends idealize and romanticise a particular body type, which is

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unachievable for most. On Instagram, this trend is popularized with the use of hashtags pages and pages of fitness influencers. Moreover, the increasing number of eating disorders, evidence of growing body dissatisfaction, and the sprouting of the fitness industry, calls for an in-depth analysis of the impact of fitspiration on exercise habits, eating related attitudes and body image.

Therefore, keeping the purpose of the study in mind, the first research question was to understand the possible relationships between usage of fitspiration content on Instagram and exercise related behaviour. For this, correlations were found between two scales: The passive and active use measure and the obligatory exercise scale. The subsequent hypothesis was that there will be a significant correlation between usage of fitspiration content (active and passive use) and one's obligation to exercise (exercise fixation, exercise frequency, exercise commitment).

Exercise fixation was positively correlated to both, active use ( $r=.308$ ,  $p<.01$ ) and passive use ( $r=.336$ ,  $p<.001$ ). This indicates that accessing fitspiration content, both actively and passively, can lead to an increase in one's preoccupation with exercise, negative affect when exercise is skipped or the use of exercise in order to compensate for perceived overeating. Interestingly, the correlation between passive use and exercise fixation is slightly higher as compared to active use, suggesting that passive users are more likely to develop exercise fixation. According to Ellison, Steinfeld, & Lampe (2007), passive use of social media is associated with greater levels of 'social envy' which is an outcome of engaging in social comparison. De Vries, et.al. (2017) found that those who increasingly compare themselves to others, have a tendency to elicit negative moods in themselves after viewing positive posts by strangers, especially if they view them as superior in some way. Therefore, passive users feel the need to achieve the fitness standards hastily, in order to reduce the experienced negative affect. As a result, they may be too harsh on themselves when not following the prescribed list of behaviours in order to achieve "the body," and in the process start experiencing negative affect when exercise is skipped, exercise as compensation for overeating and in turn become preoccupied with the thought of exercising.

Exercise frequency was positively correlated to active use ( $r=.324$ ,  $p<.01$ ). However, it was not significantly correlated to passive use. A possible reason for this may be that while actively engaging with fitspiration content, through means of liking, sharing, commenting and messaging, one may perhaps be encouraged to bring forth behavioral changes, which in this case is engaging in exercise frequently, whereas passively viewing fitspiration content is more likely to bring about changes in attitude, as against overt behaviour. Applying the theory of cognitive dissonance which states that many a times there is a discrepancy between attitude and behaviour (Festinger, 1957), it can be reasoned that passive users, as compared to active users, are more likely to experience a greater dissonance. However, although passive users may not evidently engage in frequent exercise, it is possible that they hold the attitude that exercise enables a fit body. Further, individual differences may account for one engaging or resisting persuasion to exercise (Wood, 2000).

Similarly, exercise commitment was positively correlated to active use ( $r=.227$ ,  $p<.05$ ), while no significant correlation was found with passive use. This indicates that active users are especially concerned about completing their exercise routines and try their best not to skip them no matter the circumstance. The above explanation can be applied here as well. Overall, both active and passive use was found to be significantly correlated to the total

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score of obligation to exercise. A correlation of  $r=.372$ ,  $p<.01$  was found between active use and obligation to exercise, and a correlation of  $r=.307$ ,  $p<.01$  was found between passive use and obligation to exercise. Consistent with the findings of the present study, (Holland & Tiggemann, 2016) found that people who actively engage with fitspiration content have a higher score on Obligatory exercise. This is possibly because of the nature of fitspiration content that repeatedly emphasises the importance of exercise, along with condemning the lack of exercise. However, the findings do not establish whether accessing fitspiration content leads to obligatory exercise or whether it helps maintain an already existing maladaptive behaviour.

The second research question explored the possible relationship between fitspiration content on Instagram and eating related attitudes, for the purpose of which, two scales were correlated i.e. The passive and active use scale and the eating attitudes scale. The related hypothesis was that there will be a significant correlation between usage of fitspiration content and eating related attitudes. Significant positive correlations were found between both scales and their sub dimensions (Table 5). Dieting was positively correlated to both active use ( $r=.263$ ,  $p<.01$ ) and passive use ( $r=.259$ ,  $p<.01$ ). Bulimia and food preoccupation too was positively correlated to active use ( $r=.203$ ,  $p<.05$ ), and passive use ( $r=.278$ ,  $p<.01$ ). Similarly, the subscale of oral control was significantly correlated with both active use ( $r=.254$ ,  $p<.01$ ) and passive use ( $r=.314$ ,  $p<.01$ ). Overall eating attitude was positively correlated to both, active use ( $r=.280$ ,  $p<.01$ ) and passive use ( $r=.310$ ,  $p<.01$ ). This indicates that accessing fitspiration content, both actively and passively, can lead to a risk of developing an eating disorder. Therefore, even if fitspiration sites have not been labelled as pro-anorexia, pro-bulimia websites, such as that of thinspiration pages, the content is not free of its potential to maintain or establish an eating disorder.

Many studies exploring the relationship between media usage and eating attitudes theorize that one is more likely to follow food habits that they are exposed to on social media. For instance, if ones feed is filled with posts of junk food, the person is more likely to consume junk food and alternatively, if ones feed contains posts of healthy food, that person is more likely to eat healthy food (Millard, 2020). Therefore, given that fitspiration consumers are exposed largely to posts suggesting healthy eating alternatives, and controlled eating, they are more likely to engage in doing so. In other words, those who access fitspiration content are repeatedly primed to engage in healthy eating patterns. (Molden, 2014). One reason why passive users have a stronger correlation to eating attitude as compared to active users is because passive users have been found to have a diminished sense of subjective well-being and therefore it makes them more vulnerable to develop certain maladaptive behaviour (Ellison, Steinfeld, & Lampe, 2007). However, active users have been found to have a better sense of subjective well-being, as a result of which they have a stronger social capital and connectedness with other users, which also gives them the opportunity to clarify the usefulness/harmfulness of engaging in certain behaviour and therefore reduces their risk of developing maladaptive behaviour (Ellison, et.al., 2007; Grieve, et.al., 2013). However, it must be noted that users are not exclusively active or passive and that it is a continuum along which people can vary in their degree of active or passive use (Perloff , 2014).

Consistent with these findings, Raggatt et al. (2018) found that 17.7% of the participants who accessed fitspiration content were at a high risk of developing an eating disorder. Holland & Tiggemann (2016) too found in their study that women who post fitspiration images were at a risk for diagnosis of a clinical eating disorder.



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The third research question explored the relationship between usage of fitspiration content on Instagram and attitude towards one's body image. The hypothesis formulated was that there will be a significant correlation between usage of fitspiration content and attitudes towards one's body image. Table 6 shows that appearance evaluation is positively correlated to active use ( $r=.183, p<.01$ ). This indicates that those who actively access fitspiration content have positive evaluation towards their appearance and show a general level of satisfaction with the way they look. Trifiro (2018) found that active Instagram use is positively correlated with self-esteem and well-being. Generalizing the finding to this study, it can be said that since active users showcase a greater sense of subjective well-being as demonstrated by their social capital and active connectedness with other users, it is less likely for them to be susceptible to developing negative self-evaluations, as compared to passive users. However, intensity of Instagram use plays a mediating effect in determining the consequences of active/passive use (Trifiro, 2018). Further, a significant correlation was found between overweight preoccupation and passive use ( $r=.168, p<.05$ ), which indicates that passive users have a high level of fat anxiety, weight vigilance, dieting, and eating restraint. This is a replication of findings from Table 5 that shows a significant correlation between passive use and eating attitudes.

Other subscales were not significantly correlated with one another, implying that accessing fitspiration content is not related to one's body image. The possible explanation for this is that body image as a construct is hugely dependent on multiple environmental factors such as communication with peers, influence of family, cultural background etc., and varying individual factors such as personality, onset of puberty, body mass index, self-esteem etc. (Oh, Song, & Shin, 2017). Therefore, the fitspiration content alone does not influence one's perceptual body image.

The last research question proposed aimed at uncovering the possible relationships between exercise related behaviour among adults, eating attitudes and attitude towards one's body image. The subsequent hypothesis was that there will be significant correlations between one's obligation to exercise, eating related attitudes and attitudes towards one's body image. Table 7 shows the correlation between eating related attitudes and attitudes towards one's body image. Appearance evaluation was significantly correlated to dieting ( $r= -.267, p<.01$ ), bulimia and food preoccupation ( $r= -.273, p<.01$ ) and overall eating attitude ( $r= -.244, p<.01$ ). This indicates that those who have a greater level of satisfaction with their overall physical appearance and evaluate their physical attributes more positively, are at a lesser risk of developing eating related disorders. Appearance orientation was significantly correlated with dieting ( $r=.352, p<.01$ ), bulimia and food preoccupation ( $r=.280, p<.01$ ), oral control ( $r=.239, p<.01$ ) and overall eating attitude ( $r=.351, p<.01$ ), implying that those who place a lot of emphasis on the way they look, along with investing a lot of time on grooming behaviours are highly likely to indulge in dieting behaviour, are occupied with the thought of food and exercise oral control to a great extent, therefore putting themselves at a risk for diagnosis of an eating disorder. Body areas satisfaction was significantly correlated with dieting ( $r= -.254, p<.01$ ), bulimia and food preoccupation ( $r= -.301, p<.01$ ) and overall eating attitude ( $r= -.265, p<.01$ ). This suggests that those who are satisfied with specific areas/parts of their bodies, are less likely to develop eating related disorders, while those that exhibit dissatisfaction with their body parts are more likely to develop eating disorders. Overweight preoccupation was significantly correlated to dieting ( $r=.643, p<.01$ ), bulimia and food preoccupation ( $r=.442, p<.01$ ), oral control ( $r=.301, p<.01$ ) and overall eating attitude ( $r=.586, p<.01$ ). This indicates that those who exhibit fat anxiety and weight

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vigilance are very highly likely to develop eating disorders. Lastly, self-classified weight was significantly correlated with dieting ( $r=.280$ ,  $p<.01$ ) and overall eating attitude ( $r=.170$ ,  $p<.05$ ), suggesting that those who perceive themselves in the overweight/obese spectrum of weight classification are more likely to indulge in dieting behaviour and are at a risk of developing an eating disorder.

Therefore, the findings suggest that body image is highly correlated with eating attitudes and that those with a negative perceptual body image are at a higher risk for developing an eating related disorder, as compared to those with a positive perceptual body image. This is probably because people with negative body image place a lot of importance on their body shape and weight to determine their self-worth and are not able to separate their value from the way they look (Muhlheim, 2020). However, not all with a negative body image develop an eating disorder nor does everyone with an eating disorder have a negative body image. Nevertheless, body image is a very common symptom for diagnosis of an eating disorder (Zanetti, 2013).

Table 8 shows the correlations between one's obligation to exercise and attitudes towards one's body image, along with correlation between their respective sub-dimensions. Significant correlations were found between exercise frequency and appearance evaluation ( $r=.254$ ,  $p<.05$ ), implying that those who exercise frequently have a more positive sense of self evaluation; body areas satisfaction and exercise frequency ( $r=.336$ ,  $p<.01$ ), signifying that those who exercise more frequently have a greater level of satisfaction with their body areas/parts; overweight preoccupation and exercise fixation ( $r=.322$ ,  $p<.01$ ), implying that those who exhibit fat anxiety, weight vigilance and dieting behaviours are more likely to be preoccupied with the thought of exercising, may experience negative affect when exercise is skipped or may use exercise in order to compensate for perceived overeating. Although most correlations between the two scales were found to be insignificant, the above correlations show that exercise frequency is positively correlated with body image.

A very important factor that mediates the relationship between exercise and body image is the reason for exercise. Homan & Tylka (2014) state that people who engage in exercise as a means to relieve themselves of stress, enjoy themselves, improve health, with an overall aim to promote self-care, have a positive body image against those who engage in exercise in order to alter their appearance. Although exercise has been implicated in the experience of positive psychological states, various characteristics such as pre-existing body image disturbance, enjoyment of the activity, and cognitions during the activity, moderate psychological outcomes associated with exercise (Lepage & Crowther, 2010; Vocks, et al., 2009; Raedeke, Focht, & Scales, 2007).

Finally, Table 9 shows the correlations between obligatory exercising and eating attitudes. A significant correlation was found between dieting and exercise fixation ( $r=.503$ ,  $p<.01$ ). Therefore, those who engage in some form of exercise and exhibit emotionality regarding physical activity such as feeling guilty when unable to exercise or displaying pride after completing a session, are generally the ones who also engage in dieting behaviour such as counting calories, avoiding sweets, think about calories burnt while exercising etc. Similarly, significant correlations were found between bulimia and food preoccupation and exercise fixation ( $r=.329$ ,  $p<.01$ ), oral control and exercise fixation ( $r=.363$ ,  $p<.01$ ) and exercise fixation and overall eating attitude ( $r=.483$ ,  $p<.01$ ). This implies that those who are at a risk of developing an eating disorder are also fixated with the thought of exercise, given

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their preoccupation with their physical appearance. Furthermore, a correlation of  $r=.079$ ,  $p<.05$ , between oral control and exercise frequency indicates that those who engage in exercise with greater frequency are also more likely to avoid food when hungry, reduce their food intake, display self-control around food etc.

A significant correlation was found between dieting and exercise commitment ( $r=.226$ ,  $p<.05$ ), implying that those who are excessive particular of not missing exercise sessions, are more likely to engage in the above-mentioned dieting behaviours. Significant correlations were also found between dieting and total obligation to exercise ( $r=.397$ ,  $p<.01$ ) and oral control and total obligation to exercise ( $r=.266$ ,  $p<.01$ ). The overall correlation between total eating attitude and total obligation to exercise was found to be  $r=.351$ ,  $p<.01$ . This indicates that those who have a greater obligation to exercise are more likely to be at a risk of developing an eating disorder, and vice versa.

Several studies have found similar relations between eating attitudes and exercise related behaviours. Young & Anderson (2010) state that when one engages in exercise for appearance-based reasons, or in response to negative affect, one is more susceptible to eating and body image pathologies. Seigel & Hetta (2001) found that eating disorder symptoms in young females were found to be related to obligatory exercise attitudes, rather than to exercise frequency. Grave, Calugi, & Marchesini (2008), found that 80% of restricting-type anorexia nervosa, 43.4% of binge eating disorder and 39.3% bulimia nervosa patients were compulsive exercisers. Another study conducted by Lavender et.al., (2010), highlighted the moderating influence of negative affect/emotional fixation in predicting the link between eating disorders and excessive exercise.

Therefore, the multiple correlations between the scales show that accessing fitspiration content is not only related to one's engagement with exercise, but also is associated with one's risk of developing an eating disorder. Further, eating pathologies is linked to both body image variables as well as obligatory exercise, which implies that an increase in body dissatisfaction or one's obligation to exercise is likely to bring about an increase in one's risk of diagnosis of an eating disorder. However, no such relationship was found between body image variable and obligatory exercise, thus implying the mediating role of one's reason to engage in exercise as determining its association with body image.

### **CONCLUSION**

Using a correlational design enabled the understanding of the relationship between accessing fitspiration content and its impact on exercise, food and body image. Media available on fitspiration places immensely emphasis on being 'fit' and developing physical strength while idealizing certain types of bodies as being a prototype to this phenomenon. While not all may fall prey to the harmful aspects of this content given other variables such as personality, age, self-esteem etc., the content carries potential harm for those who may have a pre-existing vulnerability towards their bodies. Further, although body image as a variable is not singularly influenced by accessing fitspiration content, accessing fitspiration content is evidently related to one's risk of developing eating disorders and cultivating obligatory exercise patterns, thus providing evidence to the harmful consequences of accessing such content.

***Limitations, implications and directions for future research***

Like every other research, this research too needs to be interpreted in the light of its limitations. The first is that the results cannot be generalized to other age groups as the age range for this study was limited between 18-28 years. Therefore, future research could involve a cross-sectional study to investigate the age-related variations in the experience of fitspiration content. Moreover, since samples obtained for males were insufficient, gender comparisons could not be made. Therefore, suggestions are to conduct a gender comparison study given the lack of knowledge about body related concerns among the male population and other non-binary genders. Due to the paucity of time, reasons for exercise and individual constructs such as self-esteem and personality could not be assessed which could have enriched the existing data. Assessing these variables and their association with fitspiration could be explored to bridge the gap in information and determine its mediating effect. Lastly, given the emerging body-positivity movement, especially on social media, a comparison between the two phenomena i.e. fitspiration and body positivity could also be done. Lastly, qualitative methods such as interviews, case study, focus groups can be employed to understand individual experiences of people accessing fitspiration content.

An implication of this study includes identifying individuals at risk of developing an eating disorder or developing maladaptive behavioural patterns and applying methods to lessen the impact of such content on their subjective well-being. The study also implies to spread awareness about the potential harm of such content to facilitate a certain degree of mindfulness while engaging with the same, as well as sensitize those who knowingly or unknowingly propagate harmful messages. Largely, the study illustrates the complexity of the role played by social media in developing harmful attitudes, perceptions and behaviours.

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