

# Visual (mis)representations on sports and weight loss: A multimodal critical discourse study of images in official health posts on WeChat in China

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**Abstract:** In response to physical inactivity and rising levels of obesity among the population, the Chinese government has used social media, such as WeChat, to engage and encourage the public to do sports in order to lose weight and maintain health. Images in official social media posts on sports and weight loss constitute an important, but currently underexplored site. Using multimodal critical discourse analysis (MCDA), this paper examines the images in the posts in “□ □ □ □ (Healthy China)”, the official WeChat account of the *National Health Commission of the People’s Republic of China*, on sports and weight loss. It is found that the images employ medical-style discursive features to establish authority on sport. Neoliberal themes of individual responsibility and competition also emerge, framing sports as self-improvement and a personal obligation. Moreover, female figures dominate, and often are depicted in alignment with societal thinness ideals, reinforcing gendered body norms and anxiety. We suggest that the discourses in the official media may lead to certain misrepresentations, obscuring

structural barriers to sports, and perpetuating sports anxiety and weight biases in the society, especially among women.

**Keywords:** multimodal critical discourse analysis; WeChat; visual (mis)representation; weight biases; public sports promotion

## **Introduction**

China's rapid growth in recent decades has led to major changes to lifestyle, especially physical exercise habits among the population. It is reported that only 29.9% to 34.1% Chinese have at least 60 minutes per day of moderate to vigorous physical activities (Liu et al., 2023). Lack of physical activity and excess sedentary time have led to greater adiposity among the Chinese population, even to the extent of the obesity pandemic faced by the country (Tian et al., 2016). It is projected that if no effective interventions could be implemented, about 65.3% of adults and 31.8% of children and adolescents in China would become overweight or obese by 2030 (Wang et al., 2021). In this context, lifestyle intervention, especially the calling for undertaking physical exercises, has become a key component in the Chinese government's efforts in tackling obesity. The government has implemented various campaigns to inspire the public to join in sports. Among various measures taken, the government has turned to media, such as WeChat, one of China's most popular mobile media platforms to educate the public on sports. The government has designed targeted posts on sports and weight loss in WeChat to get the public active. However, it remains unknown how the posts, as from official media, represent sports and weight loss. Understanding this is important, since such representations could contribute to pedagogic messages that the public receives on sports, which further are helpful for us

to examine the benefits and drawbacks of the sports promotion to improve public health education outcomes.

This paper employs the approach of multimodal critical discourse analysis (MCDA, Machin & Mayr, 2023) to explore images in Chinese official social media posts in order to understand how sports and weight loss within the wider context of reporting on obesity and body management are represented visually. We take a broad approach of ‘sport’, referring to any bodily movement involving physical exertion (cf. Markula, 1997). Sports in this study thus include fitness activities, physical exercise, games. By ‘discourse’, we broadly refer to a form of knowledge that shapes certain ideas and values and further influences how we think and act in particular situations (Foucault, 1972). Discourse can provide us insights on ‘what goes on in a particular social practice, ideas about why it is the way it is, who is involved and what kinds of values they hold’ (Ledin & Machin, 2018, p. 64). We aim to describe how the visual representations in the posts use various semiotic resources, such as languages, images, colours, fonts to communicate meanings, ideas and values about sports, thereby allowing us to reveal the posts’ motivations, interests and ideological standpoints around sports they support. This study has both theoretical and practical significance, which can not only enrich the application of MCDA in the official sports communication in China, but also provide empirical insights on media’s role in not only reflecting, but also actively constructing social realities, influencing the public’s views, attitudes and assumptions about sports, obesity and health. The research questions of this study are presented below:

**RQ 1.** In terms of the images appearing in the selected posts, how does the official public account on China's WeChat platform multimodally employ discursive strategies to communicate health messages related to obesity and sport?

**RQ 2.** Based on the findings of RQ 1, what are the ideological implications behind these ways of health communication?

## **Literature review**

### ***Obesity interventions and body(weight) management in China***

Early in 2006, the Chinese government proposed '*Exercise for one hour every day, work healthily for fifty years, and live happily for a lifetime*', emphasising the importance of regular exercise in health maintenance. In 2016, the government launched the campaign of *Healthy China 2030*, stressing the importance of obesity prevention. Yet, by far, there seems no noticeable progress in obesity prevention in China. According to a latest nationwide survey, based on the Chinese criteria, nearly half (48.9%) of the overall study population (over 15.8 million adults) have overweight (BMI 24-27.9 kg/m<sup>2</sup>) and obesity (BMI 28 kg/m<sup>2</sup> or higher) (Chen et al., 2023). Insufficient physical exercise is a key reason for the hard-to-be-tackled obesity (Pan et al., 2021). To address physical inactivity, the Chinese government has called the public to take part in exercise. For example, China's National Health Commission (2024) has issued [Notice on Strengthening Physical Activity and Promoting Healthy Lifestyle](#) (2024) [Notice on Strengthening Physical Activity and Promoting Healthy Lifestyle](#) (Obesity Diagnosis and Treatment Guidelines (2024 Edition)) listing lifestyle changes, especially sports as a key area of obesity intervention. More recently, [Notice on Strengthening Physical Activity and Promoting Healthy Lifestyle](#) (The country is calling you to lose weight) has become a recurring news in Chinese media (e.g., Xinhua News, 2025), calling the whole society to be physically active. Echoing with the official call, recent years has witnessed a boom in the public's participation in fitness activities, especially among urban Chinese middle-class (Zhu &

Zhu, 2017). People become vigilant about their weights. For example, exercise for weight loss has become the No.1 trend for fitness among the population (Li et al., 2019).

In this context, discourses about losing weight are prevailing in China. Dominant ‘obesity is a problem’ narrative not only emerges in policy reports (e.g., the latest □ □ □ □ □ (Weight Management Year) Campaign, which aims to achieve good weight control and management among the public in three years, starting from 2024 in China), academic literature (e.g., obesity as an economic burden, e.g., Zhao et al., 2008), but also in daily-life talks. For example, Holmes & Ma (2023) have shown their concern with the everyday weight talk which leads to common female weight anxiety in China. Obesity stigma has been observed in Chinese society that individuals with obesity are more likely to be deemed poor in health, unattractive, physically lazy and sloppy (Huang, 2025). On the contrary, ‘thinness is good’ narrative is accepted among young Chinese women (Wu et al., 2023) and college students (Wang et al., 2020). Further, the idea that ‘thinness is attainable through doing sports’ is encouraged among the public, such as one can train his/her body to win the ‘A4 challenge’ (one’s waist can be hidden by a letter-sized A4 sheet, Jackson et al., 2021). It is similar with the ‘before-after’ weight loss narrative prevalent in Western societies which frames obesity as temporary and thinness is in reach after individual efforts such as physical exercises (Maor, 2014). Yet, as cautioned by Lei & Perrett (2023), while thinner bodies tend to be seen as more attractive, they are not necessarily deemed healthier in China. The complex relation between weight, physical appearance, sports and health are amplified by media, seen in their intricate media representations.

### ***Media representations of sports, obesity and health***

Obesity has become a recurring topic in media (Boero, 2013), leading to more coverage on sports for losing weight. For example, teenager girls' magazines in U.S. show a significant increase in content related to exercise from 1956 to 2005 (Luff & Gray, 2009). Likewise, De Brún et al (2015) find that physical activities are represented as a key subframe within self-regulation, itself being a subframe of the 'cause' frame of obesity in the Irish media. The idea that sports-good-for-weight loss is so prevalent that sports have been default represented as one of the preventive strategies in the context of obesity control. Studies have shown media's proposal of sport as a part of lifestyle, further a cure of obesity, such as 'the exercise prescription' for obesity in pharmaceutical advertisements (e.g., Adams et al., 2017). This aligns with the idea of 'exercise is a medicine' (Cairney et al., 2018), a global health initiative which encourages physical activity assessment as a part of disease prevention and treatment. The initiative is closely related to healthism, which frames health as unequivocally positive and thus an indisputable personal goal and responsibility (Crawford, 1980). Under healthism, health has become a personal task, which however, could mislead health information in that only a specific body type can be seen as healthy.

A further layer of complexity is added since the media often equivocally integrate concepts of health and physical appearance. For example, Deighton-Smith & Bell (2018) investigate the #fitspiration (fitness + inspiration) posts on Instagram. Their study find the posts tend to represent fitness within an appearance frame (doing sports for looking attractive), rather than a health frame (doing sports for being healthy), thus objectifying fitness (e.g., bodies as objects to be monitored, worked, evaluated, desired and attained). The focus on appearance, especially on thinness is also found by McMahon & Barker-

Ruchti (2016) in Australia media's 'slim to win' ideologies in their coverage of Olympic athletes. Other studies have shown similar concerns on the outweighing of appearance on health in sports coverage in various media, including traditional media, such as health magazines in U.S. (Aubrey, 2010) and social media such as TikTok (Pryde & Prichard, 2022). This is problematic for individuals who are socially and economically disadvantaged in terms of doing sports, especially when it comes to different genders.

### ***Body, gender and neoliberalism***

Discussions about topics such as obesity and body management inevitably intersect with the factor of gender. Women, in particular, often become primary victims of body shaming narratives, which become prominent by pervasive promotion of the ideal body and instructive pedagogy for women to instruct and regulate their bodies through certain interventions like dieting and fitness routines by traditional and social media (Camacho-Miñano et al., 2019). For traditional media, for instance, Brookes & Baker (2021), in their study on British newspapers' representations of obesity, find that gendered discourses are prominently featured, further reinforcing certain gender stereotypes and even perpetuating gender inequality. Women are portrayed as caregivers, assigned the responsibility of minimising the obesity risks of those around them. Additionally, women's weight and body shape are often used to evaluate their appearance, and their emotional aspects are emphasised in the weight loss process, such as the embarrassment and depression caused by obesity and the boost in confidence following weight loss. On social media, the situation is even more severe. Ando et al. (2021) find that the pervading discourses around ideal body intensify body anxiety among women, with standards such as extreme thinness significantly reinforcing traditional gendered norms about physical appearance. This could lead to body objectification (Fredrickson & Roberts, 1997), the

tendency to perceive and describe body according to externally perceivable traits (i.e., how it appears) rather than the internal traits (i.e., what it can do) (Harrison & Fredrickson, 2003). Notably, anxiety and dissatisfaction with one's body may give rise to 'ugly feelings' (Coffey, 2020), which might influence women's perceptions and practices of their bodies within the context of neoliberal gender norms and health ideals. These emotions not only reinforce the demand for achieving an idealised feminine image through bodily self-management but also constrain the potential for forming new social relationships by limiting the body's capacities, thereby further sustaining patriarchal systems.

Women's engagement in sports on social media reflects a deep intertwining of postfeminist and neoliberal influences. For instance, fitspiration, which refers to the motivation to pursue exercise and a healthy lifestyle inspired by fitness influencers, media, celebrities, or personal experiences, embodies these dynamics. From a postfeminist perspective, social media fitspiration appears to showcase women's autonomy but in reality, obscures conformity to societal beauty standards, framing failure to meet these standards as personal shortcomings, while neoliberalism further amplifies individual responsibility for one's life, health, security, and happiness, which are reinforced by using happiness as a disciplinary mechanism, urging women to treat their bodies as personal projects, meticulously managed to achieve an idealised 'perfect body' and happiness (Ge & Tian, 2025). In addition, Bouvier & Chen (2021)'s investigation of the self-representations on Chinese popular social media, Weibo, of Chinese fitness influencers and experts reveals that these women view fitness as a form of empowerment and as part of the neoliberal understanding of self-betterment. In their self-representational posts, the boundaries between work, leisure, consumption, and family life become blurred, giving



way to a lifestyle characterised by balance, freedom, ease, and self-betterment. This is expressed through showcasing their consumption of Western products and values. While these women challenge traditional Confucian gender role expectations through fitness and self-expression, their success narratives from the perspective of neoliberalism obscure deeper inequalities, such as the limited accessibility of these middle-class lifestyles for women from other social classes.

## **Methodology**

### ***Data collection***

In this study, we focus on “国家健康委员会 (Healthy China)”, the official WeChat account of the *National Health Commission of the People's Republic of China* to collect posts related to sports and weight loss. We accessed the posts in the early April 2025 and collected posts published between 1st January 2021 and 1st April 2025. The reason for choosing 1st January 2021 is that it is the aftermath of the Covid-19 pandemic, which has witnessed a higher obesity rate in the country as well as higher sports awareness among the public (Lin et al., 2022). “国家健康委员会 (Healthy China)” is a highly active public account, publishing health-related articles on a daily basis. These articles cover a wide range of topics, including the prevention of various diseases such as gastritis, insomnia, fractures, and allergies. The purpose of our study is to collect posts about sports and weight loss on “国家健康委员会 (Healthy China)” platform. Therefore, we applied specific criteria for sampling. The selection criterion is two-folded: the posts need to be about the topic of sports, i.e., advice or information on doing sports, and are aimed at losing weight or weight control (not for other purposes, such as stress relief for mental well-being). In detail, we searched the word “运动 (sports)” in the “往期回顾 (review of past issues)” column in the account to identify potential posts. Some of the posts, although they

mention sports, are simply discussing sports itself or its relation to other health issues—for example, how exercise might help alleviate insomnia. Others mention exercise in the context of weight loss, but only in passing. For instance, some posts list sport as one of the potential solutions for losing weight, but without further elaboration. The posts with forementioned features were deleted. Moreover, in order to more thoroughly identify the posts we need, we also examined posts containing keywords like “减肥/减重 (losing weight)”, and selected those that specifically discussed both weight loss and sports. Posts focusing on other weight-loss solutions, such as eating habit, were excluded. In the end, we selected 25 posts for analysis in this study. While not big in size, the posts represent the latest official posts on sports and weight loss in China and thus can provide us with the latest insights. The posts fall into a manageable size for this qualitative study since MCDA works better on smaller datasets. The posts, with their titles (also English translations of the titles<sup>1</sup>), publication dates and URL are accessible on Figshare at <https://figshare.com/s/b2d279d46d666e73a5c1>.

We saved the collected data in Word documents to facilitate coding and annotation. All images that appeared in the 25 selected posts were collected, and a total of 70 images were collected. The collected images fall into three categories. The first type of images is the posts themselves. In other words, the content of the posts is presented in the form of images (as shown in Figure 1 below). For this category of images, we analyse them as a whole. The second type of images are not closely tied to the written content of the posts (as shown in Figure 2 and Figure 3 below). They neither clarify nor reinforce the text directly, but instead exist independently. They carry specific meaning on their own and warrant independent analysis. Thus, we do not conduct detailed textual analysis of the accompanying written content that exists outside of the images. The third type of images

is auxiliary images, which are often similar to emojis or decorative elements. They do not contribute meaningful content to the posts. So this kind of images (7 cases) were excluded.

### **Analytical approach**

This paper adopts the approach of multimodal critical discourse analysis (MCDA) (Machin & Mayr, 2023). MCDA has been applied and proved useful in public health promotion contexts, such as breastfeeding in the UK (Brookes et al., 2016) and cervical cancer in China (Zhao & Bouvier, 2023). MCDA is particularly applicable in the context of social media where various modalities (e.g., text, image, video and gif) are employed. A key focus in MCDA is the concept of ‘choice’, i.e., the selection of semiotic resources from an underlying repertoire of available choices and further the power and ideology carried by the choices in context. The ‘choices’ help us to draw out ‘discursive scripts’, or the ‘doings’ of the posts (Van Leeuwen, 2008) in representing obesity and sports. More specifically, we analyze how various semiotic choices—such as lexis, imagery, photographs, font, layout, and colour—represent the following aspects within the images in the posts:

- i. Who is involved? (the actors)
- ii. What actions? (what are the actors doing?)
- iii. Where are the actors depicted (settings)?
- iv. What issues, causalities, and solutions are involved?

In addition, based on the analysis of multimodal elements, we also examine the multimodal metaphors in the images. Metaphor is the process of understanding A (the source domain) in terms of B (the target domain) (Lakoff & Johnson, 2008). Multimodal

metaphor refers to a metaphor in which the source domain and the target domain are represented entirely or primarily through two different modes (Forceville, 2006). As a cross-modal meaning-construction mechanism, multimodal metaphor enables a deeper understanding of how meaning is constructed and communicated across language, visuals, and other modalities. By exploring how these metaphors interact across modalities, we can gain a more comprehensive understanding of how sports and obesity are framed and represented in different multimodal discourses.

### Findings and analysis

Through conducting thematic coding of the images, we identified three main discursive features. Their frequencies, percentages, and distribution across the posts are presented in Table 1. Since some posts contain more than one discursive feature, we conducted multiple codes to a single image. This is why the total count exceeds 70 (the total number of images). Based on this, we proceed with a focused analysis of these three discursive features.

**Table 1.** Distribution of discursive features of selected images

Discursive features	Number	Percentage	Distribution	Identifying elements
Hidden sexism	28	35%	13	* The frequency of each gendered social actor's appearance
Scientific authority	27	33%	10	* Authoritative figures (such as images of doctors);

				<ul style="list-style-type: none"> <li>* Visual cues signaling scientific knowledge (such as magnifying glasses);</li> <li>* Medical-related colours (such as blue and white)</li> </ul>
Neoliberalism	26	32%	12	<ul style="list-style-type: none"> <li>* Individual responsibility and self-discipline (such as goal-setting elements);</li> <li>* Efficiency consciousness (such as exercise duration and intensity elements);</li> <li>* A sense of competition (such as race and confrontation elements)</li> </ul>

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### ***Hidden sexism: prominence of female imagery and fabricated self-betterment***

While sports usually are more generally reported as a male issue, female figures are recurrent in the posts, suggesting that women are positioned as in particular in need of doing sports for losing weight. A possible explanation for this could be that weight standards are higher for women than for men (De Brún et al., 2014). It aligns to deeply ingrained societal views that femininity means a slender figure, which is equated with sexual attractiveness. Two types of women are found in the posts: fat women and women with ideal figure (thin or muscular)<sup>2</sup>. The visual choices in the representations of women across the posts are designed to present thin or muscular women in more favorable ways with more positive evaluation compared to fat women. Figure 1 showcases a thin woman.



**Figure 1.** Woman doing rope-skipping<sup>3</sup> (2024-August-29)

What is prominent in Figure 1 is the central place and big size of a ‘jumping woman’ in the image. We see a tanned and lean woman skipping rope with her vigorous-looking pose. She falls into the stereotypical female thin standard, as evidenced in her slim waist and tight thighs, with model-like ration of body (e.g., a curved body, a thin face and a bare midriff). She seems to be exhilarated, as shown in her glistening eyes and smiling lips. All these signify her ‘sport fan femininity’ (Toffoletti, 2017) and the idea of ‘fit is sexy’ (Markula, 1995). Here, the flames, as a pictorial image, form a multimodal metaphor with the text ‘ $\square \square \square \square$  (high-efficiency fat burning)’. The intensity of the flames corresponds to the concept of ‘ $\square \square$  (efficiency)’—the more vigorously the flames burn, the faster and more efficiently energy is consumed. This also aligns with the text in the bottom of the image, which indicates that slow jogging requires significantly more time than jumping rope to burn the same number of calories, further emphasising the exercise efficiency of jumping rope.

In addition, the term ‘burning’ in ‘fat burning’ is itself a metaphorical expression, associating the process of fat consumption to burning, which is visually reinforced by the flames in the pictorial image. In this example, the metaphorical use of flames not only conveys the physical intensity and efficiency of jumping rope but also attempts to express an uplifting and energetic spirit of exercise, encouraging the audience to participate in physical activity. By comparison, ‘fat women’ are represented with certain bias when they do sports, as seen in Figure 2.



**Figure 2.** Woman playing hula hoop in the gym (2021-June-13)

In Figure 2, we see a cartoon woman doing hula-hoop, a stereotypically feminised sport (few posts depict women doing the normally man-related sports, such as basketballs). The figure somewhat carries sneering effects in describing the obviousness of the woman’s obesity, such as her big abdomen, round cheeks and bulging thighs. The mixture of real-life photos of the gym and the cartoon figure delivers a contrasting sense of the image. The gym, big as it is, only has the woman in the near shot with the reader, delivering a sense of marginalisation and isolation. The woman seems to be excluded from the gym, or she could not take part in group activities with others. This may also come with the fact that individuals with obesity often experience embarrassment in doing sports with the presence of others (Ball et al., 2000). The body posture, while can mean the woman is exercising strenuously, resembles a surrender posture with her arms upholding. Her

screwed eyes and clenched mouth are evidence of the difficulties she faces in doing exercise. The woman's clumsy and unflattering posture of doing the hula hoop contrasts sharply with the vibrant 'rope-skipping woman' we see in Figure 1. Grappling with the juxtaposition of images of the thin woman and fat woman, readers may get the impression that thin and fit people are also 'healthy and happy' people. In terms of lexical content, the words, taking the form of a slogan, seem to be screamed from the woman herself, depicting a battle between the woman and the fat in her body (which is termed 肥肉, or 'fatty meat' in Chinese). Battle metaphors can be motivating for individuals who want to fight with their bodies, but they can also be unproductive in leading to a sense of guilt of failure that one has not fought hard enough (Semino et al., 2018). In the case of obesity, Atanasova & Koteyko (2020) caution that when there are no foreign viruses, or an external agent to be fought with, the enemy easily becomes oneself. In this sense, what the woman really fights with is herself. As Leung et al (2001) argue, such weight anxieties stem from the hegemonic and cultural expectations of thinness in Chinese women, which upholds a female beauty standard which emphasises thinness (e.g., the key role of appearance and beauty as a motivation to do sports among the Chinese women, Sit et al., 2008).

It is noteworthy that in these posts, female figures dominate the imagery. Although these 25 posts do not contain any explicit expressions of sexism in the textual content, and provides general promotion or scientific information, overwhelming majority of the illustrations (36 out of 70 images) exclusively represent women as social actors (by comparison, only 8 images feature men), subtly suggesting the underlying notion that 'weight loss is a women's matter.' Interestingly, the female images in these visuals are often deliberately linked to the concept of self-betterment. In the context of weight loss,



women appear to be positioned as primary practitioners of neoliberal ideals. For example, Figure 1 highlights self-efficiency during fat-burning exercises, while Figure 2 demonstrates the significant voluntary effort made in workouts for achieving better physique and self-improvement.

In Figure 3, the concept of self-betterment also stands out prominently. The two images depict women exercising at home, presenting a daily routine that embodies an active, self-disciplined lifestyle. They are shown stretching their bodies with confidence and focus, and their facial expressions—marked by smiles and a sense of ease—convey a feeling of freedom and agency (Bouvier & Chen, 2021). This signifies women's pursuit of a healthier and more ideal body through yoga or strength training, reflecting the idea of achieving physical and mental improvement through self-management. In addition, the home environments are clean, cozy, and carefully arranged, with elements such as green plants, cats, and dumbbells, creating a relaxed and harmonious atmosphere that conveys the notion that self-betterment can seamlessly integrate into everyday life. This kind of representation frequently appears in the self-presentation of Chinese female fitness influencers on social media. Unlike messy or disorganised rooms, these backgrounds depict a 'highly managed, ordered, and codified' world, symbolising the living spaces of 'modern, active, and successful women' (Bouvier & Chen, 2021, p.447). This deliberate visual representation linking women to neoliberalism may be related to the rise of neoliberal post-feminism in China—a discourse that blends feminist language with neoliberal values, and it is often critiqued as a pseudo-feminist ideology because it promotes individual choice, empowerment through consumption, and personal responsibility, while downplaying structural inequalities (Peng, 2021). It defines Chinese women as 'autonomous', 'modern' individuals who seek to express their femininity (Liu,

2014, p. 22) and choose their desired lifestyles according to their own will. As a result, the female image becomes a key selling point for official promotional works, particularly in the context of weight management and obesity because solutions to obesity are predominantly framed as a matter of self-responsibility (Atanasova & Koteyko, 2017).

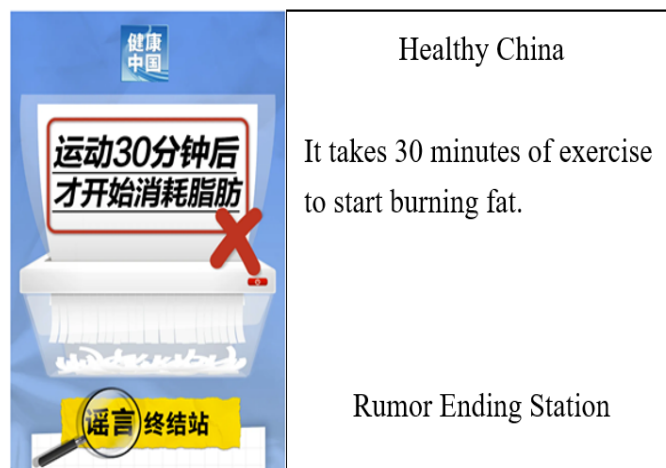


**Figure 3.** Woman doing Yoga (2024-March-29 & 2023-October-17)

***Scientific authority: advocating doing sports to weight loss through professionalism***

In the analysed posts, employing medical-style multimodal discourse to persuade the public to lose weight is a highly noticeable discursive feature. This discursive feature focuses on inclining individuals to take up sports, or to accept the view that ‘sports can help losing weight’. For example, in Figure 4, the entire post is based on a blue-and-white colour scheme. These two colours correspond to the most representative hues in the Chinese healthcare context. First, blue is often associated with trust, stability, and calmness—qualities that medical settings aim to convey, which can help alleviate stress to some extent, making it suitable for patient spaces (Bosch et al., 2012; Shepley et al., 2023). Moreover, white is the primary colour of doctors’ and nurses’ uniforms (also emphasised in Figure 5). White dress code for doctors rates their competence and credibility higher while also expresses greater comfort around them compared to doctors in traditional attire (Chang et al., 2011). This underscores the importance of colour choice in multimodal media productions. As a semiotic resource, colour can connect different

elements, create relationships or contrasts, and evoke viewers' emotions and associations (Ledin & Machin, 2018).



**Figure 4.** A rumor on exercise (2024-May-7)

At the top of Figure 4, there is a large text that reads, ‘运动 30 分钟后才开始消耗脂肪 (it takes 30 minutes of exercise to start burning fat)’, with a prominent red cross at the bottom right of the text, indicating a rejection of this statement. Interestingly, this sentence appears to be written on a piece of paper, which is placed inside a shredder, waiting to be completely destroyed. This pictorial image strengthens the denial of this statement and corresponds to the ‘谣言终结站 (Rumor Termination Station)’ at the bottom of the image, forming a multimodal metaphor (Forceville, 2006). Here, the target domain is the termination of the rumor, represented verbally, while the source domain is the shredder, represented visually. It is worth noting that the phrase ‘谣言终结站 (Rumor Termination Station)’ itself also forms a monomodal metaphor (ibid.), meaning that the RUMOR ELIMINATION IS A JOURNEY (the ‘终结站 (termination station)’ generally refers to the endpoint of a train or bus route, symbolising the end of the journey). The journey metaphor makes the rumor termination more concrete and easier to understand,

e.g., the experience of encountering and overcoming obstacles along the way (e.g., rumors spread fast) and that one needs a roadmap (here can be reasonably referred to medical knowledge from doctors) to get to the right destination (terminating the rumor). To highlight the concept of the rumor, the word ‘谣言 (rumor)’ in the image is enlarged, being larger than the other three words next to it, with a magnifying glass placed directly above it. The magnifying glass here functions as a metonymy. Typically, magnifying glasses are placed in laboratory or science-related settings. In this context, however, the use of the magnifying glass seems to transcend its mere symbolic representation as a scientific tool. Instead, it signifies an action—an in-depth scrutiny of information. This scrutiny is not limited to scientific validation but extends to a broader critical examination of the weight-loss related discourses circulating in society. Accordingly, this image conveys an authoritative tone of official discourse. This tone mirrors the official stance of “Healthy China”, which is characterised by the act of shredding or debunking health myths that lack scientific support, thereby upholding the authority of facts and truth.



**Figure 5.** Doctor’s suggestion on walking (2024-March-14)



**Figure 6.** Jumping rope: It is hard not to lose weight (2024-August-29)

The style of scientific authority is also prominent when the posts directly present the image of a doctor (Figure 5) as well as a medical consultation scenario (Figure 6). For example, in Figure 5, we can see a cartoon image of a female doctor, dressed in white medical uniform. The doctor does not set her feet on the ground, which suggests her being otherworldly and divine. This aligns with the traditional doctors' images of mysterious healers and life rescuers in China (Hardiman, 2006). Turning her head to the right and looking into the distance from high in the sky, the doctor floats in the air, significantly larger than the surrounding green vegetation, positioned at the centre of the image. This composition emphasises her as an authoritative figure, implying truth, facts, and science. While not directly visually addressing us reviewers, the doctor does 'communicate' with us, seen in the textual parts which impliedly address 'you'. The doctor's suggestions on walking are written in green, implying peace and safety (Cerrato, 2012), with the background of the suggestions in pink, a typical feminine, caring and engaging colour (LoBue & DeLoache, 2011). Additionally, the image of the female doctor, with blushing cheeks and long hair, subtly conveys femininity, representing softness and approachability. The colours help to build the benign and benevolent image of the doctor, which is important given the strained doctor-patient relationship in China in recent years

(Nie et al., 2018). In the posts, doctors are represented as calm, professional, trustworthy, and attentive about patients' wellness.

Notably, the background setting of Figure 5 is in an idyllic and pleasant outdoor environment. According to Machin & Mayr (2023), settings play an important role in signifying discourse and also in giving meaning to the participants and actions that are found in the settings. By setting the doctor in outdoor green spaces (presumably, representing a natural park), dotted with lively grasses and flowers, Figure 5 connotes ideas of naturalness and light-heartedness. It illustrates a joy element of walking, which makes sense given the common self-exclusion from sports and exercise avoidance among individuals with obesity (Thedinga et al., 2021). The natural background also appears in health-related promotional materials worldwide (Maller et al., 2006). However, the relaxing setting does not demolish the 'expert tone' of the doctor, verbally reflected in lexical texts. For instance, in the textual elements of Figure 5, deontic modality appears multiple times, such as '要 (should)', which employs language to instruct and call for actions, conveying a sense of obligation (Halliday & Matthiessen, 2014). Moreover, the precise expression of numbers, such as '一万步 (10,000 steps)' and '一次 (one time)' in diagnostic tones, further enhances the sense of scientific rigor and precision in the medical suggestions, thereby effectively reinforcing their persuasive impact.

Medical-style discursive feature constructs the 'doctors-authority' and 'the public-laymen' identities, aligning with the government's goal in improving public health literacy (Liu et al., 2020). In this sense, doctors, with their health knowledge, take the role of disseminating the 'scientific' knowledge to the masses for their own good. By comparison,

the general public are regarded as laymen or ignorant, in need of guidance to update their knowledge, change their behaviours, and finally reach their goals.

***Motivating sports through neoliberalism: individual responsibility, effort, and competition***

Neoliberal discourses emphasise individuals' own agency in terms of obtaining their best bodies. Core values of neoliberalism include being self-sufficient, well-functioning in doing self-discipline and being rational in making responsible decisions for oneself (Ayo, 2012). Under the background of neoliberalism, sports have become a platform for the display of social competition and personal achievement, as seen in Figure 7.



**Figure 7.** Running competition (2021-June-13)

The image depicts four people competing in a running race amidst a picturesque natural setting. The first three people, positioned centrally in the frame, exhibit clear movements and facial expressions. They clench their fists, displaying a standard running posture and synchronised strides. The people's gazes are resolutely fixed to the right, seemingly

focused on the finish line, reflecting their determined efforts towards their goal. Behind these central figures is another person. Although his expression is slightly blurred, his similar actions to the first three suggest he is striving to catch up. His body language also conveys unwavering determination: his head is tilted slightly forward and downward, indicating his concentration and attempts to increase his speed by adjusting his posture. This subtle difference in posture may imply a higher intensity of effort to keep pace with his competitors. The actions and endeavours of this athlete reflect the fierce competition and individual spirit of struggle inherent in the race, embodying the neoliberal values of individual effort and self-improvement (Rose Spratt, 2023). Despite his current position behind, he does not give up, demonstrating the tenacity and self-driven spirit of athletes when facing challenges. This self-motivation and self-control are also indicative of the neoliberalism where individuals are seen as rational and autonomous, with success or failure primarily depending on personal effort, choices, and mindset (Davies, 2014). The people's performance on the track is a vivid demonstration of the concept of individual responsibility and self-management. In addition to the dynamic performance of the athletes, the colours and background of the image also play a significant role. Bright colours, such as the rainbow and mountains in the background, add vitality and a positive atmosphere to the image. Furthermore, placing the competitive sport in a more relaxed and pleasant natural environment not only reflects the advocacy of competition and the concept of striving but also conveys the message that the act of striving is inherently beautiful. This setting helps alleviate the tension brought about by competition, much like how a green background can reduce stress, while promoting a sense of calm and balance (Tyrväinen et al., 2014). Such background settings positively influence emotions, fostering a positive attitude towards sports among viewers and encouraging participation in and enjoyment of the fun and challenges that sports activities bring. Therefore, the



colours and background in the image not only beautify the scene but also deepen the understanding of concepts such as positive self-actualisation under neoliberalism, enhancing the emotional experience of the viewer and allowing the spirit of competitive sports to be widely disseminated and recognised. It is worth noting that the people in this image have a well-balanced physique, far from being obese. Moreover, this image is placed in a post advocating doing sports for weight loss. It seems to encourage people to maintain a good figure through self-motivated workouts, which involves shaping a healthy body through aerobic exercise.



**Figure 8.** Fitness schedule (2023-September-27)

In the centre of Figure 8 is a calendar for fitness. On the top of the calendar writes Chinese characters '健身计划表 (fitness schedule table)'. A man and a woman stand on both sides of the calendar. The two figures are visibly big, with their obvious muscles and by-comparison small heads, thus downplaying the importance of head compared with muscles. The two figures seem to look at each other, albeit there are no facial features depicted. It may lead readers to see the two characters as competing in dumbbell lifting. In this sense, the line between a competitive sport and a sport for general health becomes

blurry as the latter also takes competition senses, tapping into the aforementioned idea of competition as a core neoliberal activity (Davies, 2014). Based on the competition, doing sports surpasses the goal of being thin, but further aims at building muscles and being physically strong. In other words, solely being thin is not sufficient, one needs to have an athletic and tight look as well (Bordo, 1993). The importance of muscles is also realised linguistically, such as seen in the title of the post where the figure is sourced from, i.e., ‘为什么说存钱不如“存肌肉”’(Why it is said that saving money is not as good as “saving muscle”), which employs a business-based logic to explain the health ‘interest’ muscles can earn for individuals. The ‘saving’ metaphor also suggests a discipline discourse, that is, just as one needs to save money to be more disciplined with one’s finances (e.g., in case of emergencies in the future), one needs to save health (here specifically focusing on building body muscles through regimented sports) to face one’s uncertain body in the future. Within this perspective, one will be at risk if he/she does not ‘save’ enough muscles. Physical inactivity hence becomes a risky behaviour. In this way, the neoliberal discourse produces a potentially fear-inducing rhetoric which enjoins the reader to be vigilant about their uncertain health status, to embrace risks and stay positive through doing sports. It is worth noting that this image interestingly presents both male and female muscular body types. Although there is only one such image in the dataset, it potentially suggests that within official health communication on obesity, the ideal body type may not be limited to thinness—muscular physiques are also promoted, as long as they are not associated with obesity. Moreover, since muscular bodies are typically built through a certain amount of anaerobic training, their representation serves as a desirable and promotable body ideal achieved through sports, effectively distancing itself from the obesity.

However, the artful depiction of doing sports in Figure 8 seems to send a message that as long as one can stick to the fitness plan, he/she can save the muscle and be physically strong. This, however, elides the often-difficult reality of doing exercise or in carrying out the plan. Social determinants of health and sports are rarely mentioned in the posts. People in different social positions face different health risks, further have different availabilities for doing sports (Stuij, 2015), which can include time, energy and also economic factors. The factors are backgrounded in the posts. As such, the real-life difficulties and social inequalities in carrying out the fitness plan are obscured. It further conveys normative ideas on having muscles for both masculinity and femininity, which would cause body anxiety for individuals who do not have muscles even though they are not overweight. While the Figure implies ‘women can do what men do’, or women can also have muscles, going against the traditional ideal on the ‘delicate and soft’ female beauty advocated in China (Man, 2019), the somewhat coercive performance discourse which aims at winning in the body competitions, especially on the body shape, manifests complicated gender norms.

### **Discussion and concluding remarks**

This study demonstrates how the Chinese official WeChat posts visually guide and motivate the public to do sports. Based on the discourses identified and analysed above, we can see sport has acquired multiple normative connotations in the official media: a state of health literacy, a competition in body performance, and (largely for women) a maintenance of gender identity, thereby rendering those who do not do sports (or do not do sports in a right way) as laymen in health, lacking competitiveness, and are in the risk of losing their gender identities. A key consequence of the discourses could be that sport has been constructed as a site where one needs to receive literacy education, knowledge

of which should be applied by individuals for improving themselves, particularly as a form of gender task for women as they are under continuous social and self-scrutiny on their bodies. The discourses indicate the co-existence of multiple health ideologies in the Chinese context, which sees the traditional authority of health professionals, twinned with the emerging individual agents on their own health influenced by the neoliberal ideologies. We hence see the nuance and complexity of public sports promotion in China, i.e., a mix of authority and agency, as well as allocation of problems and responsibilities accordingly. That is, poor sports participation and the linked health results are closely related to (and hence should be taken the responsibilities by) health popularisation from professionals as well as neoliberal work individuals have done on themselves.

For the authority (health popularisation on the side of professionals), as cautioned by Dahlstrom (2021), science popularisation sometimes could present distorted views of science, or misrepresentation. While it could be explained by the posts' motivation to encourage people to be physically active, it could be a possibly problematic representation in equating doing sports with losing weight. Indeed, weight management is complex because the factors involving the use and storage of physical energy and bodily fat are complex. Overstressing sport and the function of it in losing weight may oversimplify the 'easy and quick' solution ('just be more physically active'), thereby setting unrealistic expectations on sports and masking the challenges people can face in doing exercise, such as biological, social and environmental factors (ignoring the fact that many individuals with obesity have tried to lose weight through doing sports repeatedly). Additionally, rich studies have criticised the mistaken conflation between 'health' and 'thinness' (LeBesco, 2011). The simplistic depiction of sports may lead to unintended consequences of sports addiction and the risk of over-exercising (Colledge et al., 2020).

Particularly, in this study, the posts by official media adopt medical-style professionalism in the images, representing obesity as a disease. Such representations are not uncommon (Cotter et al., 2021), but they contribute to the stigmatisation of obesity to some extent. Considering the weight stigma and harmful repercussions, reducing weight stigma has become a priority in health communication around obesity, as stated in world health organisations and academia (Bednarek et al., 2023; World Health Organisation, 2017). Therefore, it is crucial and urgent to call for actions from official media to use more objective and inclusive images to reduce the stigmatisation of obesity as China's official media are reaching an increasingly larger audience and playing an increasingly significant role in public health communication (Zeng & Li, 2020).

For the agent (neoliberal work on the side of individuals), studies have scrutinised the neoliberal approach to public health (e.g., Brookes & Baker, 2021), especially in terms of its tendency to place all responsibilities of ill-health on individuals, ignoring the structural and social determinants of health (Lupton, 2018). In the case of doing sports, when individuals do not participate in sports, this may not necessarily be due to their lack of health knowledge on sports (such as doing sports can help to build muscles); rather, their life environments (social, cultural, or economical) which they have little control on may make it challenging for them to transform their knowledge into real actions. In other words, the upheld 'free choice' (which indeed is not free for all) and 'fair competition' (which indeed is not fair for all) under neoliberalism fail to address the complexities involved in public health. In addition, the representation of women is particularly prominent in the posts, and these representations are often intertwined with the neoliberal concept of self-betterment. Interestingly, gender bias in obesity is not explicitly present in the text but is heavily embedded in the visual representations. This makes gender

discrimination in the context of obesity more covert. Such covert representations can be even more insidious, as images elicit emotional responses much faster than text. Images can directly engage with emotionally mediated imagery, which can serve as heuristics guiding people in decision-making without requiring extensive information processing or critical thinking (Dillard & Meijinders, 2002). The sexism within weight-stigmatising discourses of sports promotion would contribute to structural and public social injustices, as well as women's self-stigmatisation, which is manifested in discriminatory comments and behaviours, limited or expensive clothing options, inaccessible exercise equipment, and overly weight-focused messaging (Myre et al., 2021). However, the emergence of these covert gender-discriminatory discourses is not coincidental. It may be attributed to the rise of neoliberal feminism domestically, especially on social media, where many women—such as fitness influencers—leverage neoliberal ideals to conduct their self-representation (Bouvier & Chen, 2021). Official media might also be attempting to align with prevailing media trends to make their content appear attuned to public concerns, thereby advancing specific political agendas—such as advocating weight loss through physical exercise in this study.

It needs to acknowledge that the discourses revealed and discussed in this study are up to negotiation, that is, readers can identify or reject them, since readers may bestow their subjective meanings and understandings on the posts (Kress & Van Leeuwen, 2020). Yet, it is necessary for us to understand what they *mean* at least. Though it is not our intention to downplay the importance of sports in losing weight, neither do we own any malice towards the producers of the posts, based on the MCDA analysis on the images in the posts, it is a pity to state that the posts somewhat could lead to sports anxiety, through representing sports as a bundle of biomedical, neoliberal and gender issue. Revisions

could be made in offering alternative visual representations which depict individuals with obesity doing sports in a more positive way.

This study has identified gender differences in sports activities and health communication as an important issue. However, the impact of social class on these modes of communication has not been thoroughly explored. Future studies could further examine how different social classes engage with and respond to health communication messages. In addition, this study has already observed that much of the content in health communication is linked to fashion and trends. Future research could further explore how such trend-driven content shapes public perceptions of health and physical activity, and whether it genuinely contributes to changes in health behavior.

## Notes

1. Unless stated, the translations in this article are done by the authors.
2. While the authors know the potential discriminating effects of using the phrases of ‘thin women’ and ‘fat women’ compared with the people-first language, such as ‘women with(out) obesity’, we use the phrases in accordance with the stance of the posts as well as for lexical brevity.
3. The authors come up with the titles of the figures based on the gist of the images.

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