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Sustainable Body Positivity Movement: Analysis of the Discourse on Body Image in Korean Society

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Abstract: In contemporary society, the discourse on body image is increasingly emerging as a notable social issue. In particular, the body positivity movement is promoting healthy body image and self-esteem through various means. This study was conducted to analyze the discourse on sustainable body image in Korean society. User-generated content from 1 January 2014 to 31 July 2023 underwent data refinement and term frequency (TF), TF–inverse document frequency (TF–IDF), and Latent Dirichlet Allocation (LDA) analyses. The number of blog posts in 2020 was nearly triple the number in 2019. Thus, the analysis period was divided into first (from 2014 to 2019) and second (from 2020 to 31 July 2023) periods. The TF–IDF analysis showed that shooting, photo, diet, exercise, goal, and challenge were among the top words in the first period, while Instagram-related words were mosr frequent in the second period. This finding suggested that social distancing policies significantly affected social media usage. The LDA analysis revealed five topics that were common in the first and second periods and three topics that emerged in the second period. Overall, while Western societies tend to idealize specific body types, body image discourse in Korea is centered around exercise as a means to achieve "photography" or "photo shoot"-related goals. Exercise is perceived as an activity performed for pleasure rather than attaining a particular body shape. Furthermore, there is a desire to document one's body beautifully and maintain exercise habits in the long run. The results of this study could serve as foundational material for establishing and sustaining a positive body image culture.

Keywords: body image; body positivity movement; body profile; social networking service; sustainable body positivity; topic modeling; user-generated content

Citation: Choi, N.-Y.; Kim, Y.-V.; Ahn, H. Sustainable Body Positivity Movement: Analysis of the Discourse on Body Image in Korean Society. *Sustainability* **2024**, *16*, 6555. https://doi.org/10.3390/su16156555

Academic Editors: Miguel Crespo, Rafael Martinez-Gallego and Jesus Adrian Ramon-Llin

Received: 6 June 2024
Revised: 25 July 2024
Accepted: 29 July 2024
Published: 31 July 2024

1. Introduction

In contemporary society, the discourse on body image is emerging as a notable social issue, with the body positivity movement gaining attention as a means to promote healthy body image and self-esteem. The concept of sustainability has traditionally been rooted in environmental and economic realms, but it has recently evolved to include a social dimension that emphasizes well-being and the quality of life within communities. Social sustainability related to the body positivity movement includes creating an inclusive culture that encourages self-acceptance and the acceptance of diverse body types. This paradigm shift challenges traditional beauty standards and advocates for a holistic approach to health and well-being.

Differences in the perceptions of the ideal body image, body esteem, and self-esteem between East Asians and Westerners have been widely researched. Among Asians, perceived well-being is influenced by external factors, whereas Westerners base their perceptions on internal standards [1]. This phenomenon has also been observed in studies comparing

Korean and American cultures. Koreans tend to have a more collectivistic orientation than Americans. That is, Koreans form their perceptions and behaviors by referring to other people's thoughts and feelings to conform to social standards [2]. Park [3] examined the effects of subjective beliefs about one's body and body characteristics on one's body esteem among Korean and American female college students. The results showed that body esteem shapes self-esteem in Korean women, while body esteem and body control beliefs influence self-esteem in American women. In Korea, physical self-concept is emphasized from a group perspective, and body esteem can be shaped by group standards. In contrast, individual autonomy and intrinsic values are emphasized in the West, and body esteem is shaped by one's internal standards and autonomy. The differences in body perception and respect between East Asians and Westerners can be explained by the differences in the values and mindset in their cultures and social environments. However, the emergence of Social Networking Services (SNSs) has enabled communication across regions and cultures, allowing interaction between the East and the West. SNSs have made it possible to communicate globally, share knowledge, exchange opinions, and foster mutual understanding. An SNS is a platform that allows users to communicate and share information through the Internet. Users can post and share not just textual information but also photos and videos to interact with other users. Consequently, hashtags (denoted with the # symbol) have become popular on SNSs. Users add the # symbol before a keyword to make their posts more visible, indexing the "topic" or "keywords" of the content and making it easier to find content on specific topics [4].

The "body positivity" movement emerged on SNSs in 2012 and, since then, has been popularized by celebrities and influencers [5]. This movement, characterized by its emphasis on self-love, inclusivity, and empowerment, has gained traction on various social media platforms, serving as a catalyst for reshaping societal norms and fostering sustainable attitudes towards body image. Similarly, the term #Fitspiration, a portmanteau of fitness and inspiration, emerged as a body image term on social media in the late 2000s and early 2010s. This hashtag has been used to post images and content promoting exercise and healthy living. Other similar hashtags have also emerged, for instance, "#thinspiration" and "#bonespiration". The former has been used to post content promoting thinner and leaner bodies, while the latter has been used to depict bodies with low muscle mass and protruding bones [6]. Alberga et al. [7] compared fitspiration and thinspiration content and found that fitspiration content emphasizes a more muscular body, while thinspiration content emphasizes a thin and lean body. However, both keywords tend to emphasize weight control and restricted diets, which can contribute to anorexia [6] and body dissatisfaction, owing to discrepancies between one's actual body shape and the body shape seen on social media [8,9]. The goal of "Fitspiration" content has been to encourage people to achieve a confident body through a healthy lifestyle. However, studies have shown that "Fitspiration" content has a negative effect on body satisfaction, self-esteem, dietary habits, and mental health [10–13], especially among younger generations (as they are more likely to use social media) [14–16]. Therefore, the body positivity movement aims to promote the acceptance of all body types and to dismantle the societal pressures to conform to specific beauty standards. This movement aligns with the principles of social sustainability that enhance mental and physical well-being, inclusivity, and self-love. By encouraging individuals to embrace their natural bodies, the body positivity movement contributes to fostering a sustainable body image culture that values diversity and self-acceptance.

Social exchange theory (SET) posits that social behavior is the result of a process of exchange aimed at maximizing benefits and minimizing costs in interactions. In the context of social media and body image, individuals engage in the exchange of information, support, and recognition. Thus, posting body image content and receiving positive feedback can enhance self-esteem and help form a supportive community. The existing literature has demonstrated that positive reinforcement from social networks significantly impacts body image and self-perception [17,18]. Social comparison theory (SCT), proposed by Festinger [19], argues that individuals assess their social and personal value through

comparisons with others. This theory is particularly relevant in the social media era, where constant exposure to curated and edited images of others on social media and other platforms can impact an individual's body image and self-esteem. According to previous research, upward social comparison (comparing oneself with those perceived as superior) often leads to body dissatisfaction and negative self-image [19,20]. Several studies have explored the impact of social media on body image from the perspectives of SET and SCT. For example, Alberga et al. [7] compared fitspiration and thinspiration content on social media, finding that these trends can lead to either positive or negative body image outcomes depending on the context of social exchange and comparison. Additionally, Ryding and Kuss [21] emphasized that, while social media can be a source of body dissatisfaction, it can also provide body positivity and supportive networks that enhance self-esteem and body acceptance. While many of the effects of social media on users may be universal, the way that they are perceived by users may vary based on their culture. The term "Fitspiration", which is used in the West to search for body image content on social media, is somewhat unfamiliar to Koreans. Koreans use the term "body profile" on social media to search for body image content. Even if the body images sought are similar, the difference in terminology could contribute to cultural differences in attitudes and values concerning body image.

This study aims to analyze the discourse on sustainable body image in Korean society, focusing on user-generated content (UGC) through SNSs. Against the above-described backdrop, this study endeavors to dissect the discourse surrounding body image within Korean society through the lens of the "sustainable body positivity movement". Central to our investigation is the exploration of how the body positivity movement, with its core principles of self-acceptance and inclusivity, contributes to fostering sustainable attitudes towards body image. We seek to unravel how this movement challenges traditional beauty standards and promotes a more holistic understanding of beauty that transcends conventional norms, thereby fostering a culture of sustainability in self-perception and societal expectations. Moreover, we aim to delve into how the discourse on body image in Korea reflects and shapes broader cultural values and societal norms, particularly concerning sustainability.

2. Literature Review

User-generated content (UGC) refers to the content created and shared by ordinary users on the Internet or digital platforms and includes a variety of content, such as text, images, videos, and music. More specifically, UGC is defined as internet-based online reviews and comments describing users' experiences [22]. It can also be described as "objects created in the moment of social presence, where social activity occurs [23]", and it is a new method of communication. UGC is characterized by a fast production speed, and it can attract a large number of participants compared to the effort involved in the production process [24]. UGC appears to be dominated by motivations for information exchange and entertainment, but it is also grounded in elements of personal and social identity [25]. The social identity theory is a theoretical framework concerning group and intergroup behavior, and it explores how an individual's self-concept is influenced by values, emotional significance, and group knowledge [26,27]. Therefore, UGC platforms can be considered communities in which social identity formation can be understood from cultural and social perspectives [28,29].

The development of social networking platforms has allowed individuals to freely post text, images, and videos of themselves, and they can also view others' images and videos at any time [30]. This behavior is interpreted from the perspective of the social exchange theory, according to which people seek to exchange their expertise or efforts for intangible benefits, such as status and respect [31]. Social distancing policies implemented during the COVID-19 pandemic bolstered the use of social networking platforms, which have now become a key element of social interactions [32,33]. The use of social networking platforms has been notably focused on appearance, resulting in decreased self-esteem and

negative body perceptions as individuals compare their bodies to those of others [9,34]. This interpretation aligns with the "social comparison theory", which posits that individuals assess themselves by comparing their abilities, opinions, or characteristics with those of others. This theory elucidates the behavior of comparing one's abilities or worth with that of others to alleviate one's internal insecurities [19]. Gathering information about others leads to an unconscious comparison between oneself and others, particularly those perceived as superior in appearance or intelligence. This "upward social comparison" often results in dissatisfaction with oneself [35].

The ultimate aim of this study was to analyze the discourse on sustainable body image in Korean society through user-generated content (UGC). This research focuses on understanding the cultural attitudes and behaviors related to body image in Korean society and aims to contribute to the fields of body image and sustainable health practices. The study addresses overall trends and themes in Korean society without differentiating by gender.

3. Materials and Methods

3.1. Data Collection

This study aimed to analyze how the discourse on sustainable body profiles has been shaped in Korean society, and Figure 1 illustrates the research procedure. It is important to note that the analysis performed in this study did not differentiate between genders. The data were collected from Naver Blog (blog.naver.com), the most-used UGC platform among Koreans for nearly 20 years (2003–2023) with 33 million blogs and 2.8 billion posts. UGC contains content that is voluntarily developed and distributed by individuals and organizations on social networks and digital platforms [22,36]. We collected posts from Naver Blog using the Requests and BeautifulSoup libraries in Python. "Body profile" was used as the search keyword on the Naver portal and blog posts were searched day by day from 1 January 2014 to 31 July 2023. The data analysis was conducted in three stages. First, the collected data were refined by removing duplicate entries and excluding incomplete data. Second, word normalization and noun extraction were performed using the KoNLP and NIADic libraries in RStudio. Third, key themes were derived from the extracted nouns through TF–IDF analysis and LDA analysis. Multiple researchers participated in the data analysis to enhance the reliability of the results. During the data refinement and analysis process, two co-researchers each reviewed the data, and discrepancies were adjusted through mutual review.

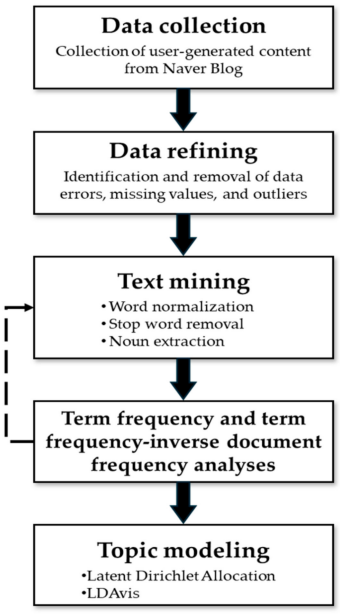

Figure 1. Research procedure.

3.2. Data Refining and Text Mining

Since UGC encompasses content developed and shared by individuals and organizations, posts can appear under a popular hashtag (#) even if they are not directly related to the keyword. Therefore, we refined the collected data by identifying and removing posts that were not relevant to body profiles, eliminating duplicate data entries, and excluding posts with missing data values. After data refinement, word normalization was performed on the remaining blog posts using Rstudio's KoNLP and NIADic libraries to eliminate unused words, such as special symbols and punctuation marks. Single-letter words and numbers whose meaning was difficult to grasp were also excluded, and only nouns were extracted through Korean morphological analysis. After reviewing the extracted nouns, we removed the names of regions and gyms that were irrelevant to this study. As the data collected comprised blog posts rather than academic studies and news articles, we examined spacing patterns and corrected misspelled words to refine them. Table 1 presents an example of this process.

Table 1. Examples of text mining.

Before Refinement	After Refinement	Unnecessary Words
Personal trainers, trainers, coaches, etc.	Trainers	Summer, fall, time, hour, minute, yesterday, today, Monday, Tuesday, weekend, year, month, day, etc.
Healthstagram, bodystagram, unstagram, etc.	Instagram	
Center, gym, and more	Gyms	
Amounts, prices, etc.	Cost	
Squat, squat, etc.	Squats	
Words used as a shorthand, such as helchang/helin	Health junkie/health novice	

3.3. Term Frequency and Term Frequency–Inverse Document Frequency Analyses

Term frequency–inverse document frequency (TF–IDF) is a statistical method that indicates the importance of a particular word within a document and is commonly used in text mining [37]. Term frequency (TF) refers to the frequency of the occurrence of a particular word in a given document. It allows the identification of frequently appearing words and indicates the importance of a word within a document. Inverse document frequency (IDF) is a metric that indicates how frequently a word appears in multiple other documents. It is the reciprocal of the number of documents containing the word and indicates the word's uniqueness among other documents. To determine the frequency of the occurrence of a word in a document and its uniqueness among other documents, we calculated the TF–IDF. In other words, the more frequently a word occurs in a given document and the less frequently it occurs in other documents, the higher the TF–IDF value of the word and the relative importance of the word in the given document [38]. We extracted TFs and TF–IDF values using the Test Mining (TM) package, and the cleaned data were converted into a document–term matrix.

3.4. Topic Modeling: Latent Dirichlet Allocation Analysis

Latent Dirichlet Allocation (LDA) is a probabilistic generative model utilized in natural language processing to conduct topic modeling. LDA determines the topic of a document based on the distribution of the words appearing in the document [39,40]. Topic modeling is a statistical technique that represents a probability distribution between topics and words through an algorithm that considers the relational structure of topics by analyzing the corpus of words present in a document rather than relying on researchers assigning topics [39,41,42]. The number of topics was determined using the Harmonic Mean value after repeatedly measuring coherence and perplexity [40,43]. After extracting the topic-term matrix through LDA analysis, we visualized the results using LDAvis.

4. Results

4.1. Data Collection and Data Refining

To explore the evolution of body image discourse in Korean society, we collected blog posts from Naver Blog from 1 January 2014 to 31 July 2023. Out of a total of 469,203 blog posts, we excluded those unrelated to "body profile" and those with missing data values. After data refinement, we had 635 blog posts from 2014, 1090 from 2015, 2240 from 2016, 3037 from 2017, 4736 from 2018, 11,809 from 2019, 42,147 from 2020, 71,370 from 2021, 118,190 from 2022, and 82,329 from 2023, making a total of 337,583 blog posts. It was observed that the number of posts increased significantly from 2020 onwards and nearly tripled from 2019 to 2020. To investigate the factors contributing to this surge, we divided the analysis period into two distinct periods: the first period spanning from 2014 to 2019 and the second period spanning from 2020 to 31 July 2023. Data collection and data refining results are shown in Figure 2.

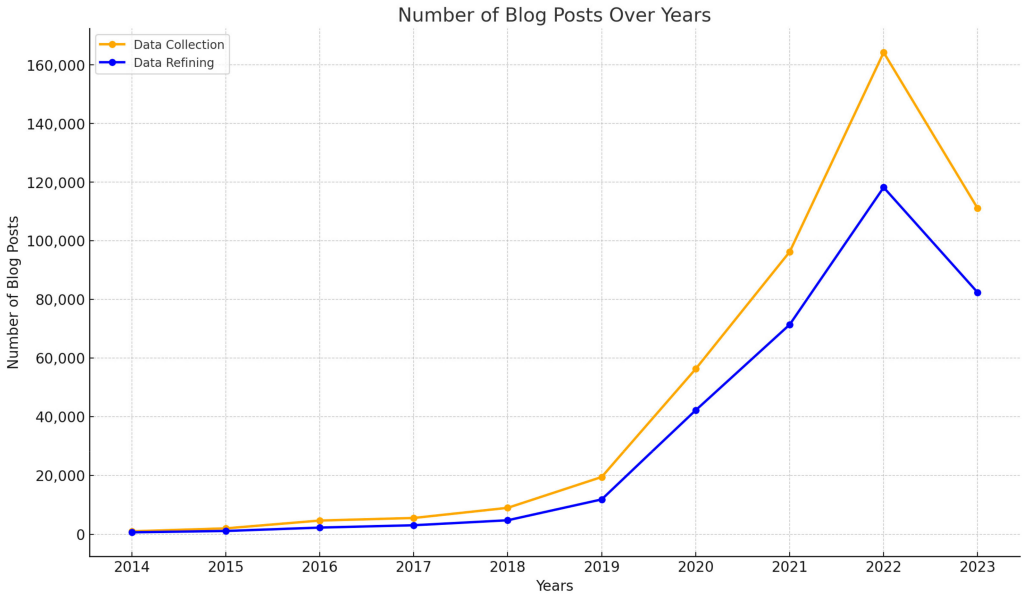

Figure 2. Results of data collection and data refining.

4.2. TF and TF–IDF Analyses

Table 2 displays the top 30 words with the highest TFs and the highest TF–IDF values in the first and second periods. The results of word frequency analysis revealed that the most frequent words in the first period (from 2014 to 2019) were "exercise" (27,427), "profile" (20,270), "diet" (13,813), "shooting" (12,446), and "photo" (10,651). In the second period (from 2020 to 31 July 2023), the most frequent words were "exercise" (44,490), "diet" (16,829), "body profile" (16,282), "gym" (11,448), and "photo" (10,053). In the first period, the top five words with the highest TF–IDF values were "Profile shooting" (108.54), "exercise" (143.09), "photo" (136.91), "diet" (132.39), and "training" (112.98). In the second period, the top five words with the highest TF–IDF values were "gym" (113.04), "fitness" (102.47), "Pilates" (98.4), "boxing" (96.53), and "photo" (94.73).

Table 2. Top 30 words with the highest TFs and the highest TF–IDF values in the first and second periods.

	Word (TF)		Word (TF–IDF Value)	
	First Period (2014–2019)	**Second Period (2020–2023)**	**First Period (2014–2019)**	**Second Period (2020–2023)**
1	Exercise (27,427)	Exercise (44,490)	Profile shooting (180.54)	Gyms (113.04)
2	Profile (20,270)	Diet (16,829)	Exercise (143.09)	Fitness (102.47)
3	Diet (13,813)	Body profile (16,282)	Photo (136.91)	Pilates (98.4)
4	Shooting (12,446)	Gym (11,448)	Diet (132.39)	Boxing (96.53)
5	Photo (10,651)	Photo (10,053)	Training (112.98)	Photo (94.73)
6	Diet (8060)	Diet (7879)	Diet (110.51)	Instagram (88.99)
7	Personal trainer (7214)	Shooting (5664)	Personal trainer (108.78)	Diet (87.02)
8	Training (5964)	Cost (5055)	Profile (98.78)	Shooting (86.61)
9	Gym (4909)	Fitness (4949)	Goal (85.37)	Diet (80.05)
10	Goal (4355)	Pilates (4892)	Gym (80.3)	Exercise (76.22)
11	Muscle (3737)	Thinking (4493)	Chicken breast (70.15)	Trainer (66.43)
12	Chicken breast (2588)	Trainer (4377)	Muscle (63.7)	Chicken breast (63.12)
13	Weight (2515)	Muscle (4349)	Abs (62.34)	Female (62.94)
14	Abs (2412)	Women (4103)	Challenge (61.12)	Cost (61.67)
15	Aerobic (2221)	Instagram (4007)	Weight (56.14)	Challenge (60.6)
16	Body fat (2188)	Goal (3910)	Body fat (55.48)	Goal (59.57)
17	Body (2032)	Manag (3153)	Sweet potato (54.39)	Muscle (57.54)
18	Teacher (1952)	Challenges (3084)	Body (53.88)	Yoga (56.73)
19	Personal training (1854)	Class (3038)	Personal training (52.71)	Videos (54.84)
20	Health (1841)	Videos (2817)	Teacher (51.85)	Class (52.02)
21	Challenge (1839)	Health (2812)	Aerobic (51.7)	Aerobic (51.92)
22	Health (1838)	Prepare (2699)	Health (51.47)	Thinking (51.09)
23	Protein (1781)	Aerobic (2690)	Concept (50.73)	Sweet potato (50.84)
24	Sweet potato (1772)	Yoga (2652)	weight loss (47.74)	Studio (50.74)
25	Food (1691)	Body fat (2428)	Pilates (45.2)	Weight (49.52)
26	Weight loss (1666)	Weight (2411)	Health (43.95)	Body fat (49.42)
27	Shoulder (1647)	Boxing (2305)	Meal (43.55)	Prepare (49.22)
28	Pilates (1622)	Change (2238)	Shoulder (43.44)	Manage (47.89)
29	Meal (1602)	Studios (2197)	Protein (41.69)	Squat (47.78)
30	Concept (1580)	Chicken breast (2183)	Success (39.98)	Health (46.77)

Observing the TF–IDF values in the first and second periods, the words "shooting", "photo", "diet", "exercise", "goal", and "challenge" were common in both periods. However, in the second period, we found some diverse types of exercises that did not appear in the first period, such as "fitness" (102.47), "Pilates" (98.4), "boxing" (96.53), and "yoga" (56.73). In addition, "Instagram" (88.99), which did not appear in the first period, emerged as a top word in the second period, indicating an increase in the use of social media. Words such as "videos" (54.84), "class" (52.02), and "squat" (47.78) appeared among the top words due to the influence of exercise instructional videos on UGC platforms, particularly in the context of home training.

4.3. LDA for the Period from 2014 to 2019

To determine the number of topics, we iteratively assessed the coherence and perplexity scores, ultimately selecting 5(N) topics for the period from 2014 to 2019. Table 3 presents the results of topic modeling performed using LDA for the first period. Topic 1 accounted for 25.8% of the data and included terms such as exercise, diet, profile, training, personal trainer, gym, goal, weight, muscle, body fat, photo, weight loss, and program. This topic was named "Purpose: Take photos". Given the inferred terms, this topic seemingly revolved around gym workouts under a trainer's guidance, focusing on weight loss and muscle gain to achieve the desired body profile. Accounting for 19.3% of the data, Topic 2 was labeled "Photo shoot concepts". It included terms like photo, pose, concept, diet, workout, hair, makeup, and tan. Topic 3 accounted for 18.9% of the data and pertained to "Self-development". It encompassed terms like goal, photo, blog, habit, bucket list, project, study, and success. Topic 4, accounting for 18.1% of the data, focused on "Diet management". It included terms such as chicken breast, sweet potato, protein, carbohy-

drate, calories, and lunchbox. Topic 5 accounted for 17.9% of the data and revolved around "sharing exercise methods". It included terms such as shoulders, motion, back, squat, legs, stimulation, abs, stretching, and dumbbell. The LDA for the period from 2014 to 2019 is presented in Table 3 and is visualized in Figure 3.

Table 3. Latent Dirichlet Allocation (LDA) for the period from 2014 to 2019.

Topic Number	Token Allocation (%)	Topic–Term Matrix Output Based on Overall Term Frequency	Inferred Terms
1	25.8	Exercise (0.018), profile (0.011), diet (0.009), dieting (0.008), chicken (0.006), chicken breast (0.005), photo (0.005), profile shooting (0.004), sweet potato (0.004), gym (0.004), personal trainer (0.009)	Exercise, diet, profile, training, diet, personal trainer, gym, goal, weight, muscle, body fat, photo, lose, weight loss, health, body, profile shooting, fat, program, personal training, etc.
Purpose: Take photos			
2	19.3	Exercise (0.039), profile (0.013), personal trainer (0.009), diet (0.008), diets (0.006), training (0.006), photos (0.006), muscles (0.006), gym (0.005), goals (0.004)	Profile shooting, profile, photo, personal trainer, concept, diet, pose, exercise, competition, hair, makeup, tan, model, challenge, outfit, body, woman, abs, face, memory, pump, expression, line, etc.
Photo shoot concepts			
3	18.9	Profile shooting (0.032), profile (0.029), photo (0.019), exercise (0.016), personal trainer (0.006), training (0.006), diet (0.006), concept (0.004), gym (0.004), diet (0.003)	Workout, profile, goal, photo, diet, blog, life, friend, challenge, travel, habit, bucket list, project, gym, record, portrait, gift, study, success, skin, personal trainer, weight, etc.
Self-development			
4	18.1	Diet (0.020), exercise (0.016), profile (0.016), meal (0.009), photo (0.006), profile shooting (0.005), personal trainer (0.005), goal (0.005), chicken breast (0.003), training (0.003)	Diet, exercise, dieting, chicken breast, profile, sweet potato, protein, meal, aerobic, salad, carbohydrate, food, weight, intake, abs, egg, fasting, calories, vegetables, banana, weight, photo, lunchbox, etc.
Diet management			
5	17.9	Exercise (0.019), diet (0.016), profile (0.012), Photo (0.005), diet (0.005), training (0.004), goal (0.003), weight (0.003), protein (0.003), personal trainer (0.003)	Exercise, muscle, personal trainer, training, profile, shoulder, motion, gym, waist, squat, leg, stimulation, diet, Pilates, abs, buttocks, stretching, lower body, dumbbell, photo, knee, chest, cardio, weight, etc.
Sharing exercise methods			

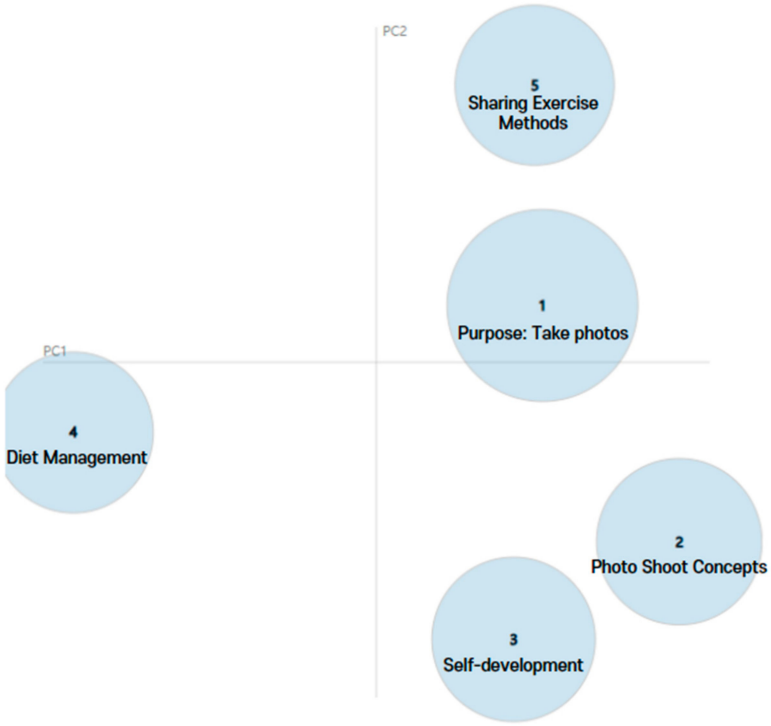

Figure 3. LDAvis: 2014–2019.

4.4. LDA for the Period from 2020 to 31 July 2023

We selected 8(N) topics for the period from 2020 to 31 July 2023. Topic 1 accounted for 17.6% of the data and was named "Purpose: Take photos". It included terms such as body fat, photo, goal, weight, muscles, change, weight loss, results, challenge, Inbody, thoughts, classes, habits, and success. Topic 2, accounting for 16.5% of the data, was named "Body change certification". It included terms such as trainer, diet, fitness, photo, management, program, Instagram, class, event, challenge, before, after, and body change. Accounting for 15% of the data, Topic 3 was named "Diet management" and included terms such as chicken breast, sweet potato, body profile, cardio, protein, salad, and shake. Topic 4, labeled as "Self-development", included terms like thoughts, goals, habits, exercise, challenges, study, growth, plans, projects, experiences, records, and process. Topic 5 accounted for 11.7% of the data and was named "Sharing exercise methods". It comprised terms such as

exercise, muscle, squat, shoulder, back, stimulation, butt, home workout, pelvis, and upper body. Accounting for 10.2%, Topic 6 was called "Photo shoot concepts" and included terms like photo, shoot, hair, makeup, waxing, concept, posing, underwear, outfit, preparation, tanning, retouching, and photoshopping. Accounting for 8.8% of the data, Topic 7 was named "Promoting types of exercise" and included terms such as exercise, Pilates, yoga, boxing, spinning, Zumba, shaping, and program. Finally, Topic 8 was named "Health care" and comprised terms such as health, immunity, disinfection, virus, care, maintenance, intake, food, body shaping, ingredients, and worry. Table 4 presents the terms associated with each topic. The LDA for the period from 2020 to 31 July 2023 is presented in Table 4 and is visualized in Figure 4.

Table 4. Latent Dirichlet Allocation (LDA) for the period from 2020 to 31 July 2023.

Topic Number	Token Allocation (%)	Topic–Term Matrix Output Based on Overall Term Frequency	Inferred Terms
1	17.6	Exercise (0.087), diet (0.071), body profile (0.042), dietary (0.032), boxing (0.018), goal (0.018), challenge (0.016), body fat (0.014), change (0.014), weight (0.013)	Exercise, diet, body profile, dieting, body, body fat, photo, goal, weight, muscles, gym, change, loss, shooting, results, challenge, Inbody, thoughts, women, trainer, management, classes, habits, success, health, cardio, abs, etc.
Purpose: Take photos			
2	16.5	Exercise (0.061), gym (0.051), body profile (0.046), Instagram (0.046), fitness (0.040), diet (0.033), trainer (0.020), video (0.016), photo (0.015), cost (0.013)	Exercise, gym, body profile, trainer, diet, cost, fitness, photo, management, program, training, Instagram, class, event, challenge, goal, lesson, before, after, preparation, body change, etc.
Body change certification			
3	15	Dietary (0.032), diet (0.028), exercise (0.024), chicken breast (0.024), sweet potato (0.019), body profile (0.015), egg (0.014), waxing (0.014), protein (0.014), cardio (0.012)	Exercise, diet, dietary, chicken breast, sweet potato, body profile, cardio, protein, egg, salad, meal, eating, fasting, thinking, abs, carbohydrates, calories, veggies, bananas, weight, apples, brown rice, protein, shake, etc.
Diet management			
4	12.2	Thoughts (0.018), goal (0.014), exercise (0.009), habit (0.008), body profile (0.007), friend (0.007), challenge (0.006), blog (0.006), study (0.006), growth (0.005)	Thoughts, goals, habits, workouts, challenges, body profile, friends, blogs, study, growth, plans, life, travel, success, health, projects, lessons, photos, YouTube, senior, bucket list, experiences, records, process, memories, achievements, etc.
Self-development			
5	11.7	Exercise (0.211), squat (0.023), body profile (0.017), shoulders (0.016), gym (0.014), diet (0.014), muscle (0.013), lower body (0.013), abs (0.013), posture (0.012)	Exercise, muscle, squat, posture, shoulder, motion, bodybuilding, female, gym, waist, leg, stimulation, hip, trainer, diet, knee, lower body, stretch, video, chest, weight, dumbbell, home training, pelvis, upper body, etc.
Sharing exercise methods			
6	10.2	Photo (0.096), shoot (0.066), body profile (0.052), studio (0.033), hair and makeup (0.026), concept (0.017), profile (0.017), conceptual (0.017), profile (0.017), cost (0.017), photographer (0.012), pose (0.010)	Photo, shoot, body profile, studio, hair, makeup, waxing, cost, concept, Instagram, profile, photographer, posing, underwear, image, male, video, outfit, preparation, tanning, women, retouching, etc.
Photo shoot concepts			
7	8.8	Exercise (0.086), gym (0.058), Pilates (0.058), yoga (0.026), fitness (0.026), cost (0.020), class (0.018), diet (0.017), program (0.014), equipment (0.013)	Workout, Pilates, diet, gym, boxing, yoga, fitness, spinning, group, women, bodybuilding, classes, Instagram, equipment, cost, program, shaping, videos, Zumba, rehabilitation, gym, etc.
Promoting types of exercise			
8	8	Exercise (0.050), muscle (0.032), diet (0.011), trainer (0.010), women (0.009), kickboxing (0.009), cost (0.008), self (0.008), pain (0.008), posture (0.008)	Exercise, gym, diet, fitness, health, immunity, disinfection, virus, body profile, prevention, mask, muscle, care, maintenance, quarantine, intake, food, product, self, shapeshifting, ingredients, worry, yoga, etc.
Health care			

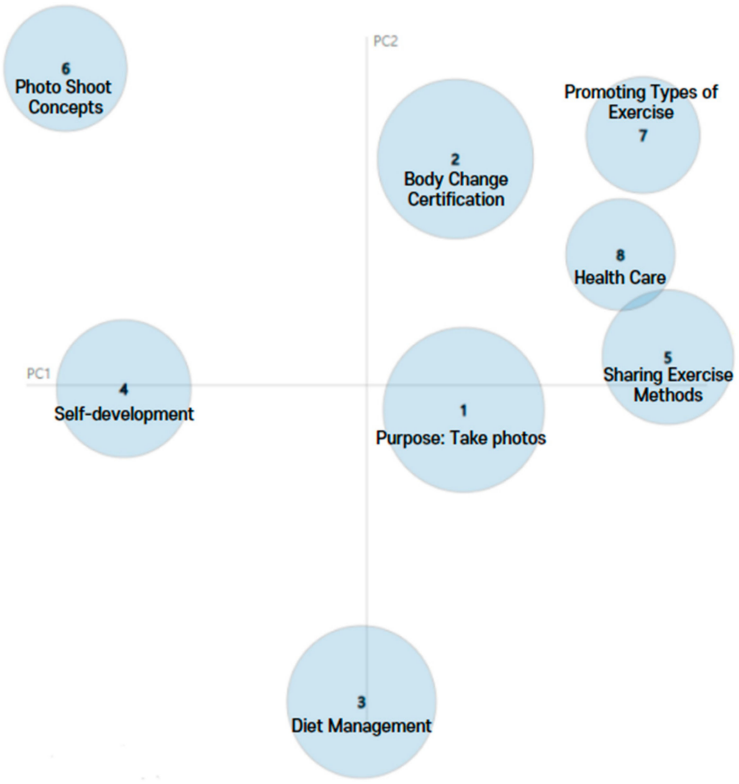

Figure 4. LDAvis: 2020–2023.

4.5. LDA for the Period from 2014 to 31 July 2023

The results of LDA for the first and second periods revealed that the five themes of "Purpose: Take photos", "Photo shoot concepts", "Self-development", "Diet management", and "Sharing exercise methods" remained the same, while the themes of "Body change certification", "Promoting types of exercise", and "Health care" emerged in the second period. Under "Purpose: Take photos", several terms were common in both periods: workout, diet, profile, gym, goal, muscle, body fat, photo, weight loss, health, and shoot. Prevalent terms such as personal trainer, personal training, and gym in the first period demonstrated a focus on using exercise facilities and receiving personal training for fitness and health maintenance. However, the emergence of terms such as photo, results, challenge, and change in the second period suggested a shift from fitness and health maintenance to the goal of capturing body profile photos. Additionally, the emergence of terms like thoughts, care, and habits reflected an increased awareness about personal health, body care, and management.

Under "Photo shoot concepts", terms such as photo, shoot, hair, makeup, concept, tanning, and outfit were common in both periods. Terms like personal trainer, diet, pose, workout, competition, challenge, body, abs, pump, expression, and line were prevalent in the first period and indicated a focus on exercise and competition. Words such as Instagram, photographer, image, and retouching emerged in the second period, and they suggested an emphasis on clicking pictures of one's body profile to post on SNSs. Under "Self-development", terms remained largely consistent between the two periods, with terms such as goals, habits, bucket lists, exercise, success, and records being common. However, the emergence of terms like YouTube, senior, travel, and growth in the second period suggested that the "body profile" challenge became a part of many individuals' bucket lists and that participants' ages diversified.

Terms under "Diet management" remained largely consistent across the two periods, with words such as diet, chicken breast, protein, egg, fasting, and carbohydrates being common. Under "Sharing exercise methods", terms such as exercise, muscle, back, leg, stimulation, dumbbell, and lower body were common, and they suggested that the blog posts provided guidance on exercise routines. However, the emergence of terms like video and home training in the second period suggested that people were sharing exercise videos while adhering to social distancing measures.

Appearing only in the second period, the topic of "Body change certification" included terms such as photo, management, event, challenge, goal, lesson, before, after, and body change. These terms suggested an increase in users showcasing their physical transformation by posting before and after photos on social media and UGC platforms. The emergence of the topic "Promoting types of exercise" in the second period suggested that users were participating in diverse types of exercises. Exercise types were previously limited to weight training and Pilates, but they included boxing, yoga, spinning, and Zumba in the second period. This expansion can be attributed to the search term "body profile" rather than the COVID-19 pandemic.

Finally, emerging in the second period, the topic of "Health care" included terms such as immunity, disinfection, virus, prevention, mask, and quarantine. These terms indicated a focus on preventing the spread of COVID-19. Meanwhile, terms such as intake, food, product, body shaping, and ingredients can be considered to be related to maintaining wellness. Based on our analysis of UGC on "body profile" from 2014 to 31 July 2023, the discourse on body image in Korea can be summarized as follows (Figure 5).

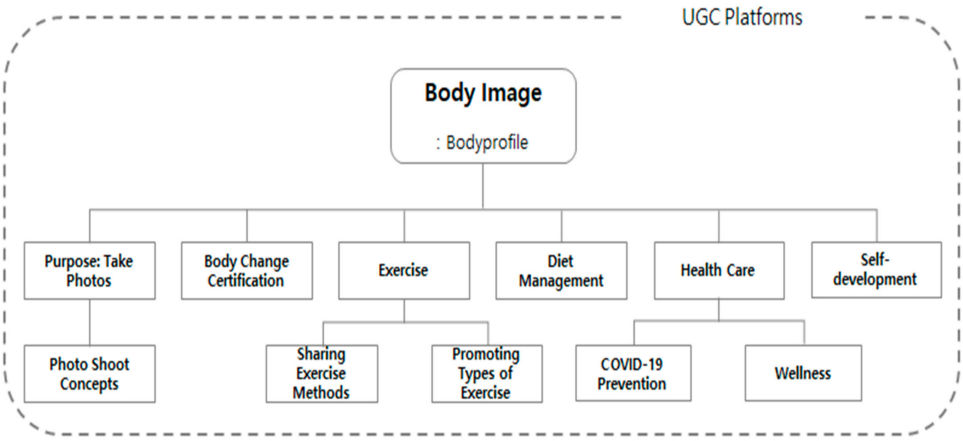

Figure 5. Summary of the discourse on body image in Korea.

5. Discussion

This study analyzed the discourse on sustainable body image in Korean society, specifically investigating the impact and evolution of the body positivity movement through UGC on social networking services. By examining trends and key themes that have emerged over nearly a decade, the study seeks to reveal how social attitudes toward body image have evolved and how these changes are reflected in online discourse.

The analyzed research findings are grounded in SET and SCT, offering significant insights into the changes in social attitudes toward body image and the role of social media in shaping these attitudes. SET emphasizes how users exchange support and recognition on platforms like Instagram to enhance self-esteem and build supportive communities. This dynamic is essential for the sustainability of the body positivity movement, which is based on positive reinforcement and inclusivity. For example, Figure 1 illustrates the annual trend of blog posts, demonstrating how users share body profile-related content and receive positive feedback. This reflects the SET mechanism, where users gain social rewards through their body image, which in turn boosts their self-esteem. Additionally, the topic-specific word frequency analysis in Table 2 shows how certain keywords have changed over time. This explains how the themes of the content that users share and the feedback that they receive have evolved. At the same time, SCT provides a crucial framework for understanding the impact of social comparison promoted by social media. Figure 3 illustrates the changes in keywords, showing how users compare their bodies with others and how the discourse surrounding body image evolves. In the cases of upward comparison, platforms like Instagram tend to idealize certain body images, which can lead to body dissatisfaction. However, the body positivity movement is shifting the discourse towards accepting diverse body types, mitigating these negative effects.

Additionally, there was a notable increase in the number of blog posts related to "body profile" between 2019 and 2020. This suggests that, during the COVID-19 pandemic, the period of social isolation led to an increased focus on self-expression and body image. TF–IDF and LDA analyses revealed significant changes in key themes between 2014–2019 and 2020–2023. In the earlier period, terms such as "exercise", "diet", and "photography" were predominantly mentioned, indicating a focus on physical activities and dietary adjustments for body image improvement. In contrast, the later period saw the emergence of terms like "Instagram", "Pilates", and "boxing", reflecting increased engagement with social media and diverse fitness activities. In Western societies, there is a tendency to idealize specific body types, whereas in Korea, there is a more pronounced trend towards enjoying and documenting the process of exercise. This suggests a stronger desire to enjoy the exercise itself and maintain long-term fitness habits rather than merely achieving a particular body shape. In the later period, the role of social media platforms like Instagram became increasingly prominent, reflecting the spread of the body positivity movement. The use of

hashtags and sharing personal transformation stories highlight how social media plays a crucial role in supporting diverse body images and fostering community.

We obtained several insightful results after analyzing the discourse on sustainable body image in Korean society. First, there were fewer than 5000 blog posts on "body profile" from 2014 to 2018. In 2019, there were nearly 11,809 posts. However, in 2020, the number of posts nearly tripled from the previous year. This indicates a sustained increase in interest in body image searches and related information. In order to identify the cause of the surge in "Body profile" posts on UGC platforms, we divided the analysis period into the first period (from 2014 to 2019) and the second period (from 2020 to 31 July 2023). The TF–IDF analysis revealed that "Instagram" did not rank among the top words in the first period, but it ranked among the top words in the second period. This finding could be associated with the surge in social media use during the COVID-19 pandemic. Social connectedness is an inherent human need [44]. Social distancing policies during the pandemic have been found to be associated with heightened levels of isolation and loneliness, which are associated with a surge in social media use [33,45,46]. The surge in social media use during the pandemic can be attributed to the Social Exchange Theory. According to this theory, people are more inclined to share information, knowledge, and other content through social media platforms [47,48]. This study analyzed blog posts, a form of UGC, and found that the number of blog posts increased by a factor of more than three in 2020. This result suggests that a culture of expressing oneself and sharing one's daily life and hobbies through social media has been established [46]. These findings highlight the interconnectedness between online platforms and social well-being, highlighting the relevance of the sustainable body positivity movement.

Second, this study analyzed the impact of social media use on body image within Korean society. When users use SNSs to check the appearance of others, they feel dissatisfied with their own bodies [25,49,50]. In this study, the terms found under "Photo shoot concepts" were related not only to body image (such as "exercise" and "diet") but also to non-exercise aspects, such as waxing, tanning, hair, makeup, and clothing. In Western countries, body image-related photos uploaded on SNSs often omit the face and reveal only specific parts of the body [51]. However, in Korea, body image-related photos uploaded on SNSs are more photogenic and are not just focused on the body but also on the mood, hair, makeup, clothing, and poses. Additionally, body image photography in Korea involves the use of professional "retouching" to retouch areas with which one is dissatisfied. Practices such as calorie counting and intermittent fasting are common in both studies. While the content on "eating habits" in Western countries has shown negative outcomes, such as eating disorders, "diet management" in Korea exemplifies diet ingredients and the recording of diets with no particularly negative terms. However, a narrative study on body profile photo shoots [52] found that issues such as dieting compulsions and binge eating can occur immediately after the photoshoot, owing to compensatory psychology. The theme of "Quality of life", identified by Cataldo et al. [53], is similar to the "Self-improvement" topic identified in this study. The findings of Cataldo et al. [53] indicated that prioritizing an idealized body image over physical activities can lead to compulsive behaviors, resulting in negative emotions, such as alienation and maladaptation, and diminishing overall well-being. However, in this study, the topic of "self-development" encompassed positive words, such as goal, habit, challenge, growth, plans, experiences, records, and process. Moreover, a 2022 survey conducted among Koreans on the perceptions of studio photography for body profiles reported positive perceptions, with descriptions such as "self-care", "building memories", and "sense of accomplishment". The attitudes of Korean society towards body image are supported by positive cultures such as events. Similarly, a study centered on Generation MZ reported positive effects on health promotion and self-efficacy [54]. This holistic approach to body image reflects a cultural emphasis on self-care and aesthetic expression, indicative of a nuanced understanding of sustainability that extends beyond conventional beauty standards.

Finally, our analysis of the discourse on body image in Korea using UGC revealed the emergence of posts related to information sharing and promotion. As stated earlier, UGC is content that is created and shared by ordinary individuals and is often found in the form of reviews [17]. Given that UGC tends to evoke neutrality from other users, it is perceived as trustworthy content [55] and, thus, plays a key role in social media marketing. The results of this study indicate that various types of exercises have been introduced in the post-COVID-19 period, likely promoted through the popular search term "#bodyprofile". The emergence of terms related to videos, home training, and classes is particularly noteworthy. This suggests that, when there were restrictions on the use of facilities like gyms, gym and fitness center operators created content using their professional knowledge to increase awareness about their centers. UGC, characterized by its authenticity and trustworthiness, serves as a platform for disseminating diverse perspectives and promoting inclusive narratives within the body positivity movement. The proliferation of exercise-related content, particularly in response to post-pandemic challenges, highlights the adaptability of online platforms in catering to evolving societal needs, thereby fostering sustainable practices in health and well-being.

This study has some limitations. First, it collected blog posts from only one UGC platform. Because it did not collect data from other UGC platforms or social media posts, the generalizability of its results may be limited. Second, this study analyzed posts from only Korea. Future research should include data from different countries and cultures so that the results can be compared across countries and cultures. Third, this study derived its results by conducting TF, TF–IDF, and LDA analyses of nouns extracted from the collected data. Thus, it may have not sufficiently considered the psychology of Koreans concerning body image, nor did it account for variables such as social and economic changes. Therefore, future research should explore the psychological aspects of body image among Koreans by conducting sentiment analysis through big data and qualitative research methods. The discourse on body image in Korean society can be categorized as "Purpose: Take photos", "Photo shoot concepts", "Body change certification", "Promoting types of exercise", "Sharing exercise methods", "Diet management", "Health care", and "Self-development". Based on the results of this study, it may be possible to develop and implement educational programs on body image. The concept of a healthy body image can be established by encouraging and providing guidance on the adoption of healthy eating habits and exercise routines. The results of this study can also be used to increase positive perceptions of body image and address negative perceptions. Moreover, considering that the discourse on body image in Korean society is centered around "body profile photography", our results can be used as foundational data for devising marketing strategies for fitness centers, studios, hair, makeup, and related businesses. Considering the growing number of terms related to self-improvement and diet management, the development of personalized healthcare services is also possible. Specifically, individuals interested in health management can receive personalized advice and support based on their exercise level, dietary habits, and goals. Finally, online communities for individuals interested in health management can encourage users to share their experiences and motivate others to maintain a healthy lifestyle. Ultimately, leveraging the findings of this study, educational programs and marketing strategies can be devised to promote a holistic approach to body image, grounded in the principles of the sustainable body positivity movement, thereby fostering a culture of empowerment, inclusivity, and well-being in Korean society.

6. Conclusions

This study collected blog posts from 2014 to 31 July 2023, to analyze the discourse on body image in Korean society. The number of blog posts nearly tripled from 2019 to 2020. This sharp increase was likely due to an increased desire for self-expression through social media amid social distancing measures in the COVID-19 pandemic. Therefore, we divided the analysis period into the before COVID-19 period (from 2014 to 2019) and

the after COVID-19 period (from 2020 to 31 July 2023). In Korea, the body image-related photos uploaded on SNSs are more photogenic and are not just focused on the body but are also focused on the mood, hair, makeup, clothing, and poses. This cultural distinction underscores the need for nuanced approaches in understanding and promoting sustainable body positivity within diverse sociocultural contexts. These research findings indicate a growing positive perception of body image and suggest the continuation of a sustainable body positivity movement. In other words, these imply that continuous promotion and education utilizing UGC platforms and SNS are necessary to foster a healthy perception of body image. This study analyzed the discourse on body image in Korea using UGC; thus, it could not explore the psychology of users who engage in exercise with the goal of "body profiling". Therefore, future research should conduct sentiment analysis and narrative studies to investigate the psychology of users engaging in "body profiling". This endeavor could provide a deeper understanding of the relationship between exercise and body profiling. In light of the sustainable body positivity movement, which advocates for inclusive representations and self-acceptance, our findings underscore the importance of fostering a culture of empowerment and diversity within Korean society. By promoting sustainable attitudes towards body image, grounded in the principles of inclusivity and self-love, we can cultivate a more holistic and affirming environment for individuals of all body types and backgrounds. Through continued research and advocacy, we can strive towards a society where every individual feels valued, respected, and empowered in their own skin, irrespective of societal norms or external pressures.

Author Contributions: Study design: N.-Y.C. and H.A.; conceptualization, N.-Y.C. and H.A.; study conduct: N.-Y.C., Y.-V.K. and H.A.; data collection: N.-Y.C. and H.A.; data analysis: N.-Y.C. and H.A.; data interpretation: N.-Y.C. and H.A.; drafting manuscript: N.-Y.C., Y.-V.K. and H.A.; revising the manuscript content: N.-Y.C., Y.-V.K. and H.A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study was approved by the Institutional Review Board at Sookmyung Women's University, Seoul, Republic of Korea (SMWU-2307-HR-048).

Informed Consent Statement: Not applicable.

Data Availability Statement: The original contributions presented in the study are included in the article.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Suh, E.M. Self, the Hyphen between Culture and Subjective Well-Being. In *Culture and Subjective Well-Being*; Diener, E., Suh, E.M., Eds.; The MIT Press: Cambridge, MA, USA, 2000; Volume 38, pp. 9–41.
2. Lee, H.-R.; Lee, H.E.; Choi, J.; Kim, J.H.; Han, H.L. Social Media Use, Body Image, and Psychological Well-Being: A Cross-Cultural Comparison of Korea and the United States. *J. Health Commun.* **2014**, *19*, 1343–1358. [CrossRef] [PubMed]
3. Park, E.A. Cross-Cultural Study of the Effect of Body-Esteem to Subjective Well-Being: Korean and U.S. Female College Students. *Korean J. Psychol. Gen.* **2003**, *22*, 35–56.
4. Rauschnabel, P.A.; Sheldon, P.; Herzfeldt, E. What Motivates Users to Hashtag on Social Media? *Psychol. Mark.* **2019**, *36*, 473–488. [CrossRef]
5. Cwynar-Horta, J. The Commodification of the Body Positive Movement on Instagram. Steam. *Cult. Pol. Technol.* **2016**, *8*, 36–56.
6. Talbot, C.V.; Gavin, J.; van Steen, T.; Morey, Y. A Content Analysis of Thinspiration, Fitspiration, and Bonespiration Imagery on Social Media. *J. Eat. Disord.* **2017**, *5*, 40. [CrossRef] [PubMed]
7. Alberga, A.S.; Withnell, S.J.; von Ranson, K.M. Fitspiration and Thinspiration: A Comparison Across Three Social Networking Sites. *J. Eat. Disord.* **2018**, *6*, 39. [CrossRef] [PubMed]
8. Tiggemann, M.; Zaccardo, M. "Exercise to be fit, not skinny": The Effect of Fitspiration Imagery on Women's Body Image. *Body Image* **2015**, *15*, 61–67. [CrossRef] [PubMed]
9. Fioravanti, G.; Bocci Benucci, S.B.; Ceragioli, G.; Casale, S. How the Exposure to Beauty Ideals on Social Networking Sites Influences Body Image: A Systematic Review of Experimental Studies. *Adolesc. Res. Rev.* **2022**, *7*, 419–458. [CrossRef]

10. Simpson, C.C.; Mazzeo, S.E. Skinny Is Not Enough: A Content Analysis of Fitspiration on Pinterest. *Health Commun.* **2017**, *32*, 560–567. [CrossRef]
11. Easton, S.; Morton, K.; Tappy, Z.; Francis, D.; Dennison, L. Young People's Experiences of Viewing the Fitspiration Social Media Trend: Qualitative Study. *J. Med. Internet Res.* **2018**, *20*, e219. [CrossRef]
12. Barron, A.M.; Krumrei-Mancuso, E.J.; Harriger, J.A. The Effects of Fitspiration and Self-Compassion Instagram Posts on Body Image and Self-Compassion in Men and Women. *Body Image* **2021**, *37*, 14–27. [CrossRef] [PubMed]
13. Jerónimo, F.; Carraça, E.V. Effects of Fitspiration Content on Body Image: A Systematic Review. *Eat. Weight Disord.* **2022**, *27*, 3017–3035. [CrossRef]
14. Keles, B.; McCrae, N.; Grealish, A. A Systematic Review: The Influence of Social Media on Depression, Anxiety and Psychological Distress in Adolescents. *Int. J. Adolesc. Youth* **2020**, *25*, 79–93. [CrossRef]
15. Hung, M. Content Analysis on Fitspiration and Thinspiration Posts on TikTok. *CURJ* **2020**, *1*, 55–62. [CrossRef]
16. Jones, M. From Fitspiration Posts to Food Shaming: Social Media's Jimpact on Adolescnets Girls' Body Image. Bachelor's Thesis, Bridgewater State University, Bridgewater, MA, USA, 2022.
17. Homans, G.C. Social Behavior as Exchange. *Am. J. Sociol.* **1958**, *63*, 597–606. [CrossRef]
18. Blau, P.M. *Exchange and Power in Social Life*; Wiley: New York, NY, USA, 1964; ISBN 0887386288.
19. Festinger, L. A Theory of Social Comparison Processes. *Hum. Relat.* **1954**, *7*, 117–140. [CrossRef]
20. Wood, J.V. Theory and research concerning social comparisons of personal attributes. *Psychol. Bull.* **1989**, *106*, 231–248. [CrossRef]
21. Ryding, F.C.; Kuss, D.J. The Use of Social Networking Sites, Body Image Dissatisfaction, and Body Dysmorphic Disorder: A Systematic Review of Psychological Research. *Psychol. Popul. Media* **2020**, *9*, 412–435. [CrossRef]
22. Saura, J.R.; Bennett, C.R. A Three-Stage Method for Data Text Mining: Using UGC in Business Intelligence Analysis. *Symmetry* **2019**, *11*, 519. [CrossRef]
23. Smith, A.N.; Fischer, E.; Yongjian, C. How Does Brand-Related User-Generated Content Differ Across YouTube, Facebook, and Twitter? *J. Interact. Mark.* **2012**, *26*, 102–113. [CrossRef]
24. Cha, M.; Kwak, H.; Rodriguez, P.; Ahn, Y.-Y.; Moon, S. I Tube, You Tube, Everybody Tubes: Analyzing the World's Largest User Generated Content Video System. In Proceedings of the 7th ACM Sigcomm Conference on Internet Measurement 2007, San Diego, CA, USA, 24–26 October 2007; pp. 1–14. [CrossRef]
25. Knoll, J.; Proksch, R. Why We Watch Others' Responses to Online Advertising—Investigating Users' Motivations for Viewing User-Generated Content in the Context of Online Advertising. *J. Mark. Commun.* **2017**, *23*, 400–412. [CrossRef]
26. Tajfel, H. Social Identity and Intergroup Behaviour. *Soc. Sci. Inf.* **1974**, *13*, 65–93. [CrossRef]
27. Trepte, S.; Loy, L.S. *Social Identity Theory and Self-Categorization Theory—The International Encyclopedia of Media Effects*; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 2017. [CrossRef]
28. Ntontis, E.; Drury, J.; Amlôt, R.; Rubin, G.J.; Williams, R. Emergent Social Identities in a Flood: Implications for Community Psychosocial Resilience. *J. Community Appl. Soc. Psychol.* **2018**, *28*, 3–14. [CrossRef]
29. Fujita, M.; Harrigan, P.; Soutar, G.N. Capturing and Co-creating Student Experiences in Social Media: A Social Identity Theory Perspective. *J. Mark. Theor. Parctive* **2018**, *26*, 55–71. [CrossRef]
30. Smock, A.D.; Ellison, N.B.; Lampe, C.; Wohn, D.Y. Facebook as a Toolkit: A Uses and Gratification Approach to Unbundling Feature Use. *Comput. Hum. Behav.* **2011**, *27*, 2322–2329. [CrossRef]
31. Hall, H. Borrowed Theory. *Libr. Inf. Sci. Res.* **2003**, *25*, 287–306. [CrossRef]
32. Robinson, A.; Bonnette, A.; Howard, K.; Ceballos, N.; Dailey, S.; Lu, Y.; Grimes, T. Social Comparisons, Social Media Addiction, and Social Interaction: An Examination of Specific Social Media Behaviors Related to Major Depressive Disorder in a Millennial Population. *J. Appl. Biobehav. Res.* **2019**, *24*, e12158. [CrossRef]
33. Nabity-Grover, T.; Cheung, C.M.K.; Thatcher, J.B. Inside Out and Outside in: How the COVID-19 pandemic affects self-disclosure on social media. *Int. J. Inf. Manag.* **2020**, *55*, 102188. [CrossRef] [PubMed]
34. Michele, D.D.; Guizzo, F.; Canale, N.; Fasoli, F.; Carotta, F.; Pollinin, A.; Cadinu, M. #SexyBodyPositive: When Sexualization Does Not Undermine Young Women's Body Image. *Int. J. Environ. Res. Public Health* **2023**, *20*, 991. [CrossRef]
35. Mussweiler, T.; Rüter, K.; Epstude, K. The Why, Who, and How of Social Comparison: A Social-Cognition Perspective. In *Social Comparison and Social Psychology: Understanding Cognition, Intergroup Relations, and Culture*; Guimond, S., Ed.; Cambridge University Press: Cambridge, UK, 2005; pp. 33–54.
36. McKenzie, P.J.; Burkell, J.; Wong, L.; Whippey, C.; Trosow, S.E.; McNally, M.B. User0generated Online Content 1: Overview, Current State and Contest. *First Monday* **2012**, *17*. [CrossRef]
37. Aizawa, A. An Information-Theoretic Perspective of tf-idf Measures. *Inf. Process. Manag.* **2003**, *39*, 45–65. [CrossRef]
38. Xiang, L. Application of an Improved TF-IDF Method in Literary Text Classification. *Adv. Multimed.* **2022**, *2022*, 9285324. [CrossRef]
39. Blei, D.M. Probabilistic Topic Models. *Commun. ACM* **2012**, *55*, 77–84. [CrossRef]
40. Griffiths, T.L.; Steyvers, M. Finding Scientific Topics. *Proc. Natl. Acad. Sci. USA* **2004**, *101* (Suppl. S1), 5228–5235. [CrossRef] [PubMed]
41. Blei, D.M.; Ng, A.Y.; Jordan, M.I. Latent Dirichlet Allocation. *J. Mach. Learn. Res.* **2003**, *3*, 993–1022.
42. Blei, D.M.; Lafferty, J.D. Correlated Topic Models. *Adv. Neural Inf. Process. Syst.* **2006**, *18*, 147.

43. Hasan, M.; Rahman, A.; Karim, M.R.; Khan, M.S.I.; Islam, M.J. Normalized Approach to Find Optimal Number of Topics in Latent Dirichlet Allocation. In Proceedings of the International Conference on Trends in Computational and Cognitive Engineering 2021; Springer: Singapore, 2021; pp. 341–354.
44. Reyes, M.E.S.; Morales, B.C.C.; Javier, G.E.; Ng, R.A.E.; Zsila, Á. Social Networking Use Across Gender: Its Association with Social Connectedness and Happiness Amidst the COVID-19 Pandemic. *J. Technol. Behav. Sci.* **2022**, *7*, 396–405. [CrossRef] [PubMed]
45. Gioia, F.; Fioravanti, G.; Casale, S.; Boursier, V. The Effects of the Fear of Missing Out on People's Social Networking Sites Use During the COVID-19 Pandemic: The Mediating Role of Online Relational Closeness and Individuals' Online Communication Attitude. *Front. Psychiatry* **2021**, *12*, 620442. [CrossRef] [PubMed]
46. Langstedt, E.; Hunt, D. Loneliness and Hobby Adoption:: Social Networking During the COVID-19 Pandemic. *J. Soc. Media Soc.* **2022**, *11*, 81–102.
47. Cheikh-Ammar, M.; Barki, H. The Influence of Social Presence, Social Exchange and Feedback Features on SNS Continuous Use: The Facebook Context. *J. Organ. End User Comput.* **2016**, *28*, 33–52. [CrossRef]
48. Xia, J.; Wu, T.; Zhou, L. Sharing of Verified Information About COVID-19 on Social Network Sites: A Social Exchange Theory Perspective. *Int. J. Environ. Res. Public Health* **2021**, *18*, 1260. [CrossRef] [PubMed]
49. Veldhuis, J.; Alleva, J.M.; Bij de Vaate, A.J.D.; Keijer, M.; Konijn, E.A. Me, My Selfie, and I: The Relations Between Selfie Behaviors, Body Image, Self-Objectification, and Self-Esteem in Young Women. *Psychol. Popul. Media* **2020**, *9*, 3–13. [CrossRef]
50. Vall-Roqué, H.; Andrés, A.; Saldaña, C. The Impact of COVID-19 Lockdown on Social Network Sites Use, Body Image Disturbances and Self-Esteem Among Adolescent and Young Women. *Prog. Neuropsychopharmacol. Biol. Psychiatry* **2021**, *110*, 110293. [CrossRef] [PubMed]
51. Tiggemann, M.; Zaccardo, M. "Strong is the new skinny": A Content Analysis of #fitspiration Images on Instagram. *J. Health Psychol.* **2018**, *23*, 1003–1011. [CrossRef] [PubMed]
52. Jung, E. Before and After Body Profile Photo Taking Experience. Master's Thesis, Sookmyung Women's University, Seoul, Republic of Korea, 2023.
53. Cataldo, I.; De Luca, I.; Giorgetti, V.; Cicconcelli, D.; Bersani, F.S.; Imperatori, C.; Abdi, S.; Negri, A.; Esposito, G.; Corazza, O. Fitspiration on Social Media: Body-Image and Other Psychopathological Risks Among Young Adults. A Narrative Review. *Emerg. Trends Drugs Addict. Health* **2021**, *1*, 100010. [CrossRef]
54. Yang, S. A Society That Recommends Body Profile Through Media Representation: Focusing on the MZ Generation. *J. Speech Media Commun. Res.* **2023**, *22*, 7–36. [CrossRef]
55. Saternus, Z.; Weber, P.; Hinz, O. The Effects of Advertisement Disclosure on Heavy and Light Instagram Users. *Electron. Mark.* **2022**, *32*, 1351–1372. [CrossRef]