

OUTDOOR SPORTS BRANDS' STRATEGIES FOR BUILDING
INSTAGRAM BRAND COMMUNITY

BY

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THESIS

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ABSTRACT

Over 56% of the world's population now live with social media ("Digital in 2019," n.d.). Most direct-to-consumer brands are now using social media as a market tool to communicate with consumers, and the outdoor industry is no exception. Instagram, as the second most popular social networking medium globally, is a popular place to share photos and videos within the online brand community. Most outdoor brands maintain Instagram accounts as a part of their online brand community to interact with followers. This research examines 957 Instagram posts from three leading outdoor sports brands, namely, Arc'teryx, Patagonia, and Salomon via content analysis. The purpose of this study is to investigate post orientations and sports types across the three target brands, and gain insights into their Instagram practices by examining visual elements, textual attributes, and technical factors. Results suggest that outdoor brands with different followers took diverse strategies to build either a transactional or relationship Instagram brand community. Findings from this study offer important implications for researchers as well as practitioners in the domain of social media brand management.

In loving memory of my father, Junqin.

You are my hero.

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CHAPTER 1

INTRODUCTION

“The mountains are calling and I must go.” The short but compelling quote from one of America’s most influential naturalists, John Muir, is enshrined by many outdoor lovers and has encouraged increasingly more people to travel outside for fun. Nowadays, the outdoor recreation field is a huge market and a fast-growing industry. According to a 2017 report issued by Outdoor Industry Association (OIA), a leading trade organization for the outdoor industry, almost half of Americans participated in at least one outdoor activity in 2017, contributing \$184.5 billion to the outdoor recreation economy. Additionally, the Bureau of Economic Analysis indicated that the whole outdoor recreation economy generated \$427.2 billion, which accounted for 2.2% of US gross domestic product in 2017. However, few existing studies focusing on this field are still in the initial phases. For example, there is no distinctive definition of outdoor sports brands so far as it is typically closely associated with sports brands. Sports brands include sports products manufacturers, professional sports organizations and clubs, sports events, athletes and their sponsors (Milligan, 2009, p.234). Technically, outdoor sports brands are subordinate to the sports and outdoor market, which includes sport and outdoor activities, clothing, shoes, and assorted outdoor equipment (“Sports & Outdoor,” n.d.). In this novel study, outdoor sports brands refer to brands with their main businesses in manufacturing and selling of clothing, footwear, gear or equipment to be used in outdoor recreation such as camping, fishing, snow sports, trail sports, water sports, and wheel sports.

Arc’teryx, Salomon, and Patagonia are selected for this study since they are all leading international outdoor sports brands and similar-size competitors in the outdoor recreation market. Arc’teryx is well-known for its high-end outdoor wear and equipment especially in climbing and

alpine sports. This Canadian clothing brand was the first to join Instagram in February 2012, among the three outdoor sports brands. Salomon, a French outdoor sports equipment manufacturer, focuses on offering innovative snow sports and trail sports gear. The first post from Salomon's Instagram account was in October, 2014. Currently, Arc'teryx and Salomon are both subsidiaries of Amer Sports. According to Amer Sports' 2017 Annual Report, Salomon and Arc'teryx, along with six other smaller brands, comprising the "outdoor" segment of Amer Sports were valued at 1,670.9 million euros (\$1,805 million) in total. However, Patagonia was founded by a climber and surfer in California, USA. The clothing and gear company is known for its environmental focus. Patagonia opened its Instagram account in May 2012. In 2017, Patagonia was estimated to be valued at over \$705 million (Nace, 2017). Above figures demonstrate both the growing economic value and social media impact of these outdoor brands. Consequently, it is necessary to examine the modes of communication which these three brands utilize in the current marketplace.

On the other hand, with the development of communication and media technologies, brand managers are faced with an increasing number of marketing channels in addition to traditional means. Nowadays, it is prevalent for companies to launch branding campaigns on social media because consumers increasingly rely on the Internet for purchasing decisions (Kim, Bae, & Kang, 2008a; Shankar, Smith, & Rangaswamy, 2003). As a top business buzzword, "social media" is conceptualized as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and which allow the creation/exchange of user-generated content" (Kaplan & Haenlein, 2010, p.61). Social media marketing is favored by brand managers for optimal time and financial effort, and numerous benefits to companies such as engaging consumers, developing loyal fans, providing marketplace insight, and improving

sales (Stelzner, 2018; Zaglia, 2013). As a result, various social media platforms are critical for companies to establish an online brand community. Instagram, which was launched in October 2010, is one of them. Brand marketers favor Instagram for its high engagement rate (1.22%) among social media platforms (Rival IQ, 2020). According to a report from the University of Massachusetts Dartmouth Center for Marketing Research (2018), over 63% of Fortune 500 companies were consistently using Instagram now. Chang (2014) argued that a brand's Instagram presence includes both images posted by the brand on its official site and images posted by consumers with "hashtags" (#) of the brand's name. Knowing how to build an online brand community on Instagram and specific branding strategies are essential for both scholars and practitioners.

Many studies take fashion brands or sports brands—such as Prada, Levi's, Nike, and Liverpool Football Club (LFC)—as examples to investigate online communities because such brands are generally prominent in social media branding with numerous followers (e.g., Çukul, 2015; Parganas, Anagnostopoulos, & Chadwick, 2015; Loureiro, Serra, & Guerreiro, 2018). The current research contributes to the literature by extending the online research community's research to the promising outdoor sports market. Most previous studies took consumer's side to understand consumer engagement on online brand communities via surveys or interviews (e.g., Sung, Kim, Kwon, & Moon, 2010; Dessart, Veloutsou, & Morgan-Thomas, 2015), while less literature viewed this issue from the brand's perspective. This study fills the void by examining the three target brands' Instagram strategies from technical attributes, visual elements, and text attributes dimensions. The purpose of this study also includes investigating major post orientations and presenting sports types across three target brands. To do this, content analysis is

adopted in examining the content posted by outdoor brands on Instagram. The findings of this study also provide implications for brand marketers.

CHAPTER 2

LITERATURE REVIEW

2.1 Online Brand Community and Consumer Engagement

Numerous studies regarding the online brand community have emerged after Muniz and O'Guinn (2001) first thoroughly examined the brand community and brought this topic to scholars' attention. They defined the brand community as "a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand" (p.412). In the era of Web 3.0, the notion of brand community has extended to the virtual world. It is prevalent for brands to build their virtual brand community through various social media such as blogs, social networking sites (e.g., Facebook), content communities (e.g., Instagram), and so on (see also McWilliam, 2000; Kaplan & Haenlein, 2010).

The online brand community (OBC) has consisted of multiple types. Generally, online brand communities are either consumer-initiated or brand-created (Arnone, Colot, Croquet, Greerts, & Pozniak, 2010; Sung et al., 2010). Armstrong and Hagel (1996) categorized four types of online (brand) community/virtual community in terms of consumers' needs: transactional communities (which encourage commercial exchange), interest communities (allowing members to communicate about shared topics), fantasy communities (in which members get involved in a virtual world), and relationship communities (where consumers can share life experiences and find emotional and social support). (More details about how different OBCs related to post strategies will be discussed later.)

Many scholars noticed that brands preferred online brand communities to offline brand communities for several reasons. First, the interaction with consumers on OBCs are more efficient given that they are unconstrained by location and time (Wirtz et al., 2013). The cost

including time, effort, and expenses for brands to communicate with consumers in OBC has tended to decrease. Second, virtual communication with consumers has enabled marketers to collect consumer's feedback such as perceptions and feelings toward the brand asynchronously. For example, users can click the "like" or "share" button on Facebook to facilitate brands to testify about their marketing plans (Brogi et al., 2013). As a result, brands are able to adjust marketing strategies quickly and accurately (McWilliams, 2000; Quinton & Harridge-March, 2010). Third, consumer engagement with a brand community can range from low to high. Wirtz et al. (2013) highlighted that brands could exert extrinsic benefits to lure consumers for desired behaviors (e.g., offering discounts for consumers who bring new consumers to the OBC).

In order to understand the online brand community, it is necessary to elaborate the idea of consumer engagement. Not only has consumer engagement become a popular buzzword in brand management research, but many scholars have noticed the interactive relationship between consumer engagement and brand community (Gambetti & Graffigna, 2010; Brodie, Hollebeek, Jurić, & Ilić, 2011; Brodie, Ilić, Jurić, & Hollebeek, 2013). For example, building an online brand community enables brands to monitor different consumer engagement behaviors (Van Doorn et al., 2010). In general, consumer engagement can increase involvement of the brand community (Vivek, Beatty and Morgan, 2012). Algesheimer et al. (2005) introduced a more specific term, "community engagement"—defining the concept as "the consumer's intrinsic motivation to interact and cooperate with community members" (p.21)—which most accurately fits the behaviors demonstrated in this study. As Brodie et al. (2011) proposed, community engagement entailed "specific interactive experiences between consumers and the brand, and/or other members of the community" (p.106).

Additionally, some studies posited that consumer engagement was associated solely with the transaction (Brodie et al., 2011). However, Van Doorn et al. (2010) argued that customer engagement behaviors could go beyond mere purchase behaviors. These customer engagement behaviors can include word-of-mouth (WOM) activity, recommendations, and writing reviews. Consumer engagement behaviors (CEB) were studied from various approaches. Pentina, Guiloux, and Micu (2018) determined ten specific CEB on social media into a quadrant by engagement efforts and creativity, and engagement audience. Gummerus, Liljander, Weman, and Pihlström (2012) used six dimensions to operationalize consumer engagement on an online gaming community: frequency of brand community visits, content liking, commenting, news reading, frequency of playing, and money spent on the internet gaming site. Later, Barger, Peltier, and Schultz (2016) classified consumer engagement from weak to strong according to the strength of actions undertaken by consumers: reacting to content, commenting on content, sharing content with others, and posting user-generated content.

2.2 Instagram as an Online Brand Community Vehicle

People use Instagram to view photos and videos, share content, and create social networks. As a photo-sharing social platform, Instagram has become one of the most popular social networks around the world, especially for Millennial users. Instagram is also a significant platform for marketers to promote their brands. Today, Instagram has become the second most significant social media marketing tool for brands after Facebook (Stelzner, 2018). After Instagram introduced business profiles in 2016, over 200,000 business-to-consumer (B2C) companies created their Instagram accounts (Dalton, Akinc, & Kane 2016). Business users can gain access to a built-in analytic tool called “Instagram Insights” to compile their followers’

behavioral information (Instagram, 2020). According to Instagram, over two million advertisers share and promote their products and stories on Instagram.

Instagram users have three distinctive characteristics which differ from its counterparts. First, Instagram users are typically young adults: 71% of the global Instagram population worldwide is aged 34 years or younger (Clarke, 2019). Additionally, Instagram users exhibit a high take-action rate: 75% of Instagram users take actions such as visiting a website, searching, shopping or sharing with a friend after being exposed to a brand post (Mansfield, 2018). Finally, Instagram users engage with content at a higher rate: nearly 68% of Instagram users engage with brands regularly (Mansfield, 2018). Per-follower engagement on Instagram is 58 times higher than on Facebook and 120 times higher than on Twitter (Little, 2016).

According to Alhabash and McAlister (2015), engagement behaviors can be categorized as three types: *viral reach*, *affective evaluation*, and *message deliberation*; the latter two of which map directly onto “like,” and “comments,” respectively. With over 500 million daily active users, Instagram generates 95 million posts and 4.2 billion “likes” per day (Clarke, 2019). “Likes” can be contextualized as the action where “one gives a thumb up for comment, pictures, videos, etc” on social networks (Gummerus et al., 2012, p.862). On Instagram, the “thumb up” equivalent is tapping a small heart icon to explicitly express one’s affective response to a post (Alhabash and McAlister, 2015). On the other hand, Instagram “comments” refer to adding a direct response to a post (Anagnostopoulos, Parganas, Chadwick, & Fenton, 2018). User comments can facilitate brands to know emerging trends and occurring topics (Khan, 2018). Many factors affect liking and commenting behaviors. For example, De Vries, Gensler and Leeftang (2012) found that a vivid brand post, medium-level interactive post (i.e., “call to act”), a post at top position, and a post sharing positive comments are associated with more likes.

Conversely, comments are often inspired by a high-level interactive post (i.e., “question”), a top position post, and a post sharing either positive or negative comments.

Liking reflects one’s affective evaluation and commenting encapsulates message deliberation, which are both components of content virality within online brand communities and have been used as indicative of different degrees of consumer engagement (Gummerus et al., 2012; Kabadayi & Price, 2013; Casaló, Flavián, & Ibáñez-Sánchez, 2017; Alhabash and McAlister, 2015). Commenting reflects a higher level of engagement and community building than simply “liking” a post, because it involves both message evaluation and new content creation on social media platforms and it requires more cognitive efforts than liking (Gangadharbatla, 2012; Alhabash and McAlister, 2015). Thus, this unique study analyzes the number of likes and the number of comments as one method to gauge community engagement.

Meanwhile, the number of followers has been regarded to indicate the credibility of online information (Westerman, Spence, & Van Der Heide, 2012). As a component of viral reach, the number of followers was directly determined by how many people were exposed to a brand’s message; which thus, affected the absolute number of potential consumer engagement (Araujo, Neijens, & Vliegenthart, 2015; Alhabash and McAlister, 2015). From this perspective, one would expect smaller-scale brands and large-scale brands to focus on different approaches to develop their online brand communities. In this study, the followers of Arc’teryx and Salomon were below one million (671,000 and 575,000, respectively) while Patagonia had a large following of 3,900,000¹ on Instagram. This leads to the first hypothesis:

***H1:** Outdoor sports brands’ Instagram branding strategies varied by the number of followers possessed.*

¹ Data of following was collected on May 7th 2019 from their Instagram accounts.

2.3 Heuristic Systematic Model in Instagram Community

The Heuristic Systematic Model (HSM) has a unique impact on the overall influence of Instagram posts in the case of outdoor recreation brands. HSM is a classic dual-process model that accounts for information processing (Wang, Chen, Shi, & Peng, 2019; Kim, Maslowska, & Malthouse, 2018). Proposed by Chaiken (1980), HSM posits that information can be processed either systematically or heuristically. Systematic processing occurs when individuals are highly motivated to seek out and process information; they use a top-down approach to do so (Wang et al., 2019). When a topic is important and fits one's interests, people are more highly involved, so they process the issue-relevant information consciously and systematically (Kim, 2018; Katz, Erkkinen, Lindgren, Hastukami, 2018). On the contrary, heuristic processing occurs when people lack motivation to scrutinize information so they depend on peripheral cues to understand messages and make decisions (Wang et al., 2019; Chan & Park, 2015). In essence, systematic processing stresses how content itself dominates information processing, whereas multiple peripheral cues play more important roles in heuristic processing (Chaiken, 1980).

Content factors, such as topics and quality of textual content, play significant roles in systematic processing (Wang et al., 2019). On Instagram, the post's topic can be encapsulated through the post's categories and types. Much research has examined the typology of brands' posts from the brands side. For example, one article determined fashion brands' nine types Instagram posts: product, promotion, advertising, social responsibility, special days, workplace, use of sales promotion, content provided by consumer, and PR (Çukul, 2015). Another study analyzed posts main topic across Facebook, Twitter, and Instagram to determine fifteen often-used content categories—event, new product, product sighting, celebrity sighting, stockiest,

sneak peak, promotion, style, quote, current event, repost, lifestyle, hashtag promotion, blog, and coverage (Mizobe, 2014). Other scholars presented three types of message strategies that brands used on their Facebook pages, including the use of corporate brand names, emotional content, and direct calls to purchase (Swani, Milne, & Brown, 2013). Likewise, posts on Renren and Weibo were classified as brand content, brand-extended content, or non-brand content messages (Gao and Feng, 2016).

Some brand-focused researchers more specifically examined the content typology. Ashley and Tuten (2015) analyzed top 100 brands' social networking utilization and raised the issue of creative message strategies which were commonly used, including functional appeal message, resonance appeal message, emotional appeal message, and so on. Kim, Spiller, and Hettche (2015) referenced a Sheth (1976) study focused on salesmanship literature and applied salesmanship communication framework to the social media context. They believed that brands' posts published on social media platforms mainly served three orientations: task (which is to generate revenue), interaction (which would enhance customer engagement), and self-orientation (with a purpose of increasing brand awareness).

This current outdoor brand study adopts the typology of Kim et al. (2015) to classify outdoor sports brands' posts since this classification considered communication objectives, which were missing in other typologies. A successful outdoor sports Instagram brand community requires specific and explicit communication strategy as guidance. Based on the previous work, the first research question is put forward:

***RQ1:** How do outdoor sports brands utilize three post orientations and how do these Instagram strategies differ across three brands?*

Post orientations and types can serve to determine the OBC category. As mentioned earlier, OBC can be classified as transactional communities, interest communities, fantasy communities, and relationship communities (Armstrong & Hagel, 1996). This particular study believes the three target brands belong to either the transactional community or the relationship community. On the one hand, Instagram enables consumers to buy products directly from an Instagram embedded link which fulfill consumers transactional needs (Armstrong & Hagel, 1996). On the other hand, Instagram is an ideal platform for business to foster relationship communities since consumers can find emotional support via interacting with brands and other users (Armstrong & Hagel, 1996). Furthermore, Clark, Black, and Judson (2017) found that consumers who participated in the OBC had higher satisfaction with the brand. Following the RQ1, one could assume that consumer engagement differs in online brand community types. Specifically, the average number of likes and/or comments per post will vary across different OBCs. Thereby, the second hypothesis is stated as:

***H2:** Consumers in relationship communities are more likely to “like” and “comment” on posts than those in transactional communities on Instagram.*

The OIA classified the outdoor recreation economy into ten major activities, namely, camping, fishing, hunting, motorcycling, off-roading, snow sports, trail sports, water sports, wheel sports, and wildlife viewing (Outdoor Industry Association, 2017). Instagram users are able to determine what kind of sports a post presents based on the visual content. There is no doubt that a fishing post greatly differs visually from a motorcycling post. The current study is also interested in answering the following question:

***RQ2:** What are the major types of sports which outdoor sports brands usually publish on Instagram?*

Visual cues, along with vocal cues, and olfactory cues, are peripheral cues to affect human behaviors via heuristic processing (Wang et al., 2019; Stiff et al., 1989). Visual content is crucial because humans devote 30% brain capacity to process vision (as cited in Chan & Park, 2015). Along with post orientations and types, visual content can also reflect the OBC category. Recent studies have found that visual representations facilitate information processing and enhance message elaboration (Lazart & Atkinson, 2015; Cvijikj & Michahelles, 2013). Instagram users are encouraged to share photographic content, videos, memes, infographics, and inspirational quotes presented via images. Hence, the next research question is:

RQ3: What are the major visual elements of outdoor sports brands used in their Instagram posts?

Linguistic resources, which deliver textual information in the caption, were determined as an essential part of successful social networking communication (Veum and Undrum, 2018). An Instagram caption usually incorporates explanatory phrases, background information, photo credits, quotations and so on. This current study only examines peripheral factors of textual content such as photo credit, brand-sponsored athlete reference, quotation, and caption length, which are all regarded as heuristic cues. Although giving credits to photographers/videographers is not required on Instagram, researchers stressed the importance of photo crediting in misuse or non-legitimate contexts (Valsesia, Coluccia, Bianchi & Magli, 2018). In a recent study, Shen, Lever, and Joppe (2020) treated photo credits as a marginal reference point in order to trigger viewers' interests on a webpage.

Sponsorship has been defined by Meenaghan (1983) as “provision of assistance either financial or in kind to an activity by a commercial organization for the purpose of achieving commercial objectives” (as cited in Hansen & Scotwin, 1994, p.279). In the outdoor sports

context, brands seek to endorse distinguished athletes in order to achieve various marketing objectives. Brands sponsored athletes are not new and can be traced back to the 1920s.

Thieringer (2018) pointed out three benefits of endorsing outdoor athletes: (a) telling a story regarding brands and sponsored athletes to generate more attention; (b) delivering the right message to a target group; and (c) utilizing influencer marketing to increase message reach, consumer engagement, and ultimate sales.

The length of content would also impact consumer engagement. For example, Lee (2014) found that tweets ranging in length from 71 to 100 characters had the highest retweet rate, and Facebook posts with less than 40-character received significantly more likes and comments. Jiang, Guo, Chen and Yang (2019) examined the title length of news with click rate. They found that increasing text length properly facilitated audience's understanding of news; long headlines had the best rate performance. Unlike Twitter which sets a limit for a tweet within 280 characters, Instagram allows users to publish up to 2,200 characters in captions.

Additionally, adding a quote to an Instagram caption to pair with the visual image is regarded as a clever practice (Moreau, 2020). Past research found various functions of using direct quotation in texts, including gaining attention from readers, strengthening the reliability of a message source, and enriching a post's expression (Bonabi and Jafarigohar, 2012; Petrić, 2007). Thus, the fourth research question is presented as below:

***RQ4:** What are the main characteristics of text attributes that outdoor recreational brands' posts on Instagram (e.g., photo credit, brand-sponsored athlete reference, quotation, caption length)?*

Along with post content, multiple built-in Instagram communication tools are important heuristic cues to affect information processing. These technical features, such as media, emojis,

and Uniform Resource Locator (URL), help brands to raise their content's popularity on Instagram (Zolkepli, Hasno, Mukhiar, & Nadiah, 2015). The type of uploaded media and the number of media items matter on Instagram because users can share both photos and videos on Instagram (Instagram, 2020). They are allowed to upload no more than ten photos and videos within a single post. Literature revealed that embedded media plays a role in consumer engagement (Chung, 2017). For instance, Ruedlinger (2012) claimed the length of a video mattered since shorter videos were better at capturing viewers' attention and further had a higher engagement level than longer videos.

The extensive use of emojis has drawn growing attention from researchers. Emojis are defined as “pictorial symbols that show faces, people, animals, places, activities, or objects” (Hauthal, Burghardt, & Dunkel, 2019, p.1). Similar to emoticons (combinations of punctuation marks, numbers, and letters), emojis exert the function of expressing nonverbal information besides textual message (Hauthal et al., 2019; Pavalanathan and Eisenstein, 2015). Na’aman, Provenza, and Montoya (2017) identified roles that emojis usually serve: first, as a replacement of a similar sounding word; second, as lexical words or phrases; third, an indicator of emotion.

According to both Khan (2018) and Araujo et al. (2015), URL identifies website addresses and is "redirecting informational cues" to provide consumers external resources. Instagram allows businesses to embed URLs into visual content to facilitate brand's promotion and consumer's purchase (Su, Scheufele, Bell, Brossard, & Xenos, 2017). Media items of Instagram (e.g., videos or photos) are automatically presented with the post; however, embedded purchase links of visual content requires users to click to open for additional information. Thus, understanding the use of purchase links in Instagram posts is important since it aids information dissemination.

Instagram users can look up contents from different entries of keywords and hashtags. Each hashtag can be converted into links which makes the hashtag a traceable cue. Hashtags (#), which were innovated to facilitate looking up messages under the same topic, are widely used on SNS platforms (Araujo et al., 2015; Su et al., 2017). On Instagram, a post can add up to thirty hashtags in the caption (Instagram, 2020). Hashtags serve as searching, coordinating and promoting functions (Erz, Marder, & Osadchaya, 2018). Due to its accessibility and visibility, Instagram users are able to find relevant photos by a hashtag; thus, hashtags contribute to Instagram's online community (Sheldon & Bryant, 2016). For example, Arc'teryx adds a hashtag "#arcteryx" to its post. If consumers tap the hashtag directly or enter the hashtag in the search bar, they will turn to the "#arcteryx" hashtag page, which includes all posts from both the brand itself and other users that add the "#arcteryx" hashtag.

Along with hashtags, geotags also serve the search function. Instagram users are encouraged but not mandated to indicate where the post was shot or choose geographic points by locations nearby (Chen, Parkins, & Sherren, 2018; Bergström & Bäckman, 2013). General Instagram users cannot create a new location on Instagram but business accounts are able to add their address so that consumers are aware of where a brand is located (Instagram, 2020). Data revealed that Instagram posts had a higher percentage of indicating a location (15%) than Twitter (5%); thus, this geotag enabled researchers to conduct comprehensive and larger-scale research by connecting Instagram posts and other social media platforms contents (e.g., Giridhar, Wang, Abdelzaher, Al Amin & Kaplan, 2017).

Meanwhile, distinctive features such as mentions and tags enable Instagram users to make a connection with other accounts. "Mentions" are defined as "the occurrence of a person, place, or thing over social media by name" (Khan, 2018, p.207). Instagram users can make a

mention by typing the “@” symbol in the caption in front of a username. Previous literature indicated that the use of “mentions” contributed to retweet ability of brand’s information (Lahuerta-Otero, Cordero-Gutiérrez, & De La Prieta-Pintado, Fernando, 2018). In health communication context, mentions were determined positively associating with the structural virality of retweet network (Wang et al., 2019). Similarly, tags are “the act of assigning or linking extra pieces of information to social media content (such as photographs and bookmarks, among others) for identification, classification, and search purposes” (Khan, 2018, p.206). In other words, tags are an equivalent function of mentions, but on visual components.

In order to fully contextualize the phenomena of outdoor brands’ online community and branding on Instagram, the last research question is posited:

***RQ5:** What are the main characteristics of technical attributes that outdoor sports brands post on Instagram (e.g., embedded media, emoji, purchase link, hashtag, geotag, account mention, and account tagging)?*

CHAPTER 3

METHODS

3.1 Sample and Data Collection

Given the lack of authorized outdoor brands ranking, this research started with Wikipedia for gaining a comprehensive overview of brands that are closely related to the outdoors. In total, 76 brands were listed under “outdoor clothing brands” (Wikipedia, 2018), which was used as a launchpad to determine target brands. However, some brands from the list mainly manufacture apparel or footwear but are not involved in the outdoor equipment business.

To make the sample brands more representative and comprehensive, this study turned to [trailspace.com](https://www.trailspace.com), one of the oldest and most mainstream gear review websites, to extract popular outdoor brands’ names. Similar to its counterparts, the Trailspace site allows users to write and share reviews about outdoor-related products (e.g., outdoor clothing, footwear, and equipment). What makes Trailspace stand out is that users can browse reviews organized by brands. The list of fifty popular brands under the navigation bar overlapped with twelve of the brands on the Wikipedia apparel list. The resulting pool of twelve outdoor brands can be considered as famous based on their appearance in the first and second page in Google searches for “outdoor brands,” “famous outdoor clothing brands,” “famous outdoor gear companies,” etc. The sample brands and their numbers of Instagram posts and followers can be found in Table 1.

After undertaking this study, the researcher realized twelve brands were too many for the current research. In order to make the study more manageable, a decision was made to select representative brands within the pool. The selection procession followed four criteria. First, whether the brand had a verified Instagram account. Although all brands from the list conduct social media marketing, some brands’ accounts exist without the blue verification online badge

and therefore cannot necessarily be regarded as an official Instagram account. In this round, Lowe Alpine and Marmot were excluded since they did not possess the verification badge. The second criteria used for the selection process was concerned with whether the brand was influential on Instagram, which was measured by the number of followers. Patagonia, The North Face, and REI were ideal counterparts as large-scale brands since these brands were followed by over a million users. Consequently, this study excluded the brands whose followers were less than 500,000, which included Columbia Sportswear, L.L.Bean, Mammut, and Outdoor Research. The third criteria evaluated whether or not the brand was committed to building a strong online brand community, which can be seen from the number of brand's posts. The North Face was ruled out because the brand deleted its over 2,000 posts in April 2019 for an unknown reason. Finally, among the remaining brands, REI differs from others because it is not only an independent outdoor brand but also the biggest outdoor retailer in the USA. Therefore, REI was removed from the list. However, Mountain Hardwear deleted all Instagram posts in August 2019, making partial samples no longer accessible. Therefore, Arc'teryx, Salomon, and Patagonia were selected as target outdoor sports brands in this study.

Data collection occurred over a period of a calendar year, from January 1st, 2018 to December 31st, 2018. In sum, 957 Instagram posts were collected from Arc'teryx (323 posts), Salomon (358 posts), and Patagonia (276 posts).

3.2 Codebook Development and Coding Variables

A typical Instagram post consists of a textual caption and a visual element. Accordingly, a text codebook and a visual codebook were established independently since June 2019. The text codebook provided guidance to analyze post captions from four levels, namely, working link,

text analysis (including post types, brand-sponsored athlete references, photo credit, mentions, hashtags, emojis, and quotation), geotags, and text length. The complete text codebook can be found in the Appendix A. The visual codebook incorporated five levels to evaluate visual content: media types, sports types, visual attributes, tags, and purchase link, which are presented in the Appendix B.

Engagement. Community engagement was operationalized as the number of likes per post and the number of comments per post. They can be traced from the three brands' Instagram page. Data was scraped by Python on September 12th 2019.

Post types. For outdoor brands, it is frequently necessary to involve similar visual features such as outdoor scenery and sporting individuals. From this viewpoint, the textual caption is more reliable than using the visual message to determine the type of the post. By adapting the typology of Kim et al. (2015) and referring to studies of Çukul (2015) and Mizobe (2014), each post was placed into one of three orientations and one of nine categories: task-orientation: (a) product sighting, (b) promotion, and (c) celebrity sighting; interactive-orientation: (d) special days, (e) epigram, and (f) education; self-orientation: (g) event, (h) social responsibility, and (i) workplace/workers/product manufacture.

Sports types. Sports type was determined by the first visual image (i.e., a photo or a steady screenshot of the opening scene in a video) to the following seven categories: (a) rock climbing, (b) mountain sports, (c) walking sports, (d) running sports, (e) mountain biking, (f) outdoor recreation, and (g) water sports. Notably, if the sports type of a post cannot be determined or do not appear on the list, the post was categorized as “others.”

Visual elements. Coding a video's visual attributes have more complex requirements than coding a photo, so the idea of analyzing motion portions of a video were discarded in this

particular project. To facilitate analyzing, this study coded only the first photo within multiple media items of one post. In other words, if the first media item was a video, the post was not coded with any visual elements. If the first media item was a photo, the post was coded whether it included the following eleven visual elements: (a) human face, (b) body snap, (c) whole body, (d) kids, (e) animals, (f) brand logo, (g) product-only, (h) pure landscape, (i) indoor setting, (j) embedded text, and (k) combined image.

Text attributes. Four text attributes were examined in this study. **Photo credit** was coded by whether a post gave credit to its photographer or the producer. **Brand-sponsored athlete reference** was determined by whether a post referred to one of more of the brand's sponsored athletes. **Quotation** was coded by whether a textual caption included a quotation. **Caption length** was coded as either short caption (125 characters), medium caption ($125 \leq$ characters < 200), or long caption ($200 \leq$ characters).

Technical features. Seven technical features were examined in the current study. **Embedded media** was recorded as the type of uploaded media (i.e., photos or videos), and the number of media items within one post. **Emoji** was recorded as the number of emojis used in the caption and specific emojis, and coded the usage of emojis into nine emoji types (including pure positive facial expressions, pure negative facial expressions, other objects, etc. The complete emoji types can be found in the Appendix A). **Purchase link** was coded by whether a URL was embedded to the visual content. **Hashtag** was recorded as the number of hashtags used in the caption and noted specific hashtags. **Geotag** was coded by whether a post added a location². **Account mention** was recorded as the number of working mentions in the caption, each account

²Referencing or indicating a geotag could either refer literally to the location of the person publishing the post, or the location of the photo in the post. However, most of them referred to the photo's location.

handle and their number of followers and their number of following, and each mentioned account's classification (e.g., author of the post, sponsored athletes, photographer of the photo, etc. A full list can be found in the Appendix A). Similarly, **account tagging** was coded with the same items but applied to the visual content.

3.3 Coder Training and Reliability

For this research project, two coders (including this author) gained training before coding the Instagram posts. The training process started in July 2019, lasting for five months. Each coder received a codebook with the operationalization of key categories and examples of each item. They were instructed to code textual and visual content independently following different codebooks. Coders coded fifteen posts each round according to the current codebook. Coding results were then compared. They were told to write down unsure samples during coding and discuss the ambiguities with one another later to improve the codebook. The last round of coder training including 200 posts, most variables reached acceptable levels of reliability, with Krippendorff's alpha ranging from 0.62 to 1.0. After eleven rounds of training, the codebooks were finalized in November 2019 (see Appendix A and B). In the following three months, two coders independently coded 479 posts and 478 posts. However, distributions of a few variables were highly skewed; thus, this study used intercoder agreement instead. Reliability were determined for the following variables: (1) working link (agreement = 1.0), (2) post types ($\alpha = .80$), (3) sponsored athletes ($\alpha = .75$), (4) photo credit ($\alpha = .81$), (5) mentions ($\alpha = .97$), (6) hashtags ($\alpha = .98$), (7) emojis ($\alpha = .96$), (8) emojis types ($\alpha = .98$), (9) quotations ($\alpha = .92$), (10) geotag ($\alpha = .92$), (11) caption length ($\alpha = .92$), (12) media type ($\alpha = .98$), (13) number of media items ($\alpha = .83$), (14) sports types ($\alpha = .76$), (15) visual element—face ($\alpha = 1.0$), (16) visual

element—body snap ($\alpha = .62$; agreement = .91), (17) visual element—whole body ($\alpha = .67$), (18) visual element—kids ($\alpha = .66$; agreement = .99), (19) visual element—animals ($\alpha = 1.0$), (20) visual element—brand logo ($\alpha = .48$; agreement = .96), (21) visual element—product-only ($\alpha = -.02$; agreement = .97), (22) visual element—pure landscape ($\alpha = .31$; agreement = .91), (23) visual element—indoor setting ($\alpha = -.01$; agreement = .97), (24) visual element—embedded text (agreement = 1.0), (25) visual element—combined image ($\alpha = -.01$; agreement = .98), (26) tags ($\alpha = .95$), and (27) purchase link ($\alpha = .66$; agreement = 1.0).

3.4 Data Analysis

The SPSS 22.0 was used to analyze descriptive statistics in this study. For H2, two one-way analyses of variance (ANOVA) were run with brands as an independent variable, and the like rate and the comment rate as dependent variables. For RQ1, RQ2, RQ4, and RQ5, the Chi-Square test was run with corresponding variables.

CHAPTER 4

RESULTS

From January 1 to December 31, 2018, three promising outdoor brands—Arc’teryx, Patagonia, and Salomon—collectively posted a total of 957 times on their official Instagram accounts. The quantitative samples cumulatively yielded 15,108,523 likes and 61,574 comments (see Table 2 for specific figures).

In terms of the like rate—the number of likes a post achieved divided by the number of brand’s followers—one follower of Arc’teryx or Salomon generated very close likes per post ($M_{Arc'teryx} = .0088$, $M_{Salomon} = .0091$ respectively); while Patagonia had an average like rate of .0105 likes per follower per post. To test H2, a one-way ANOVA indicated that there was a significant difference of like rate among Arc’teryx, Salomon, and Patagonia: $F(2, 868) = 11.37$, $p = .000$. Also, Arc’teryx and Patagonia were significantly different in the like rate ($p = .000$); Salomon and Patagonia were significantly different in the like rate ($p = .001$); pairwise comparison between Arc’teryx and Salomon was not significant ($p = .61$). In terms of the comment rate (the number of comments a post achieved divided by brand’s followers), however, the differences among three brands were not significant ($p = .22$). In fact, one follower of three brands generated less than .0001 comments per post.

4.1 Prevalence of Post Types

For RQ1, the distribution of post orientations and specific types was inspected (see Table 3). The nine types of posts fall into three primary forms of orientation: task-, interaction-, and self-orientations. Interaction-orientation and task-orientation posts accounted for similar percentages among total 957 posts (42.3% and 41.5%, respectively); followed by self-orientation

posts (16.3%). A Chi-Square test suggested significant orientation differences across brands, $\chi^2(4, N = 956) = 147.31, p = .000$, and a significant difference in terms of specific category across brands, $\chi^2(16, N = 956) = 316.16, p = .000$.

The distribution of Patagonia posts mirrored the general distribution: 65.9% of interaction-orientation, 20.8% of task-orientation, and 13.5% of self-orientation. Most posts from Patagonia were interaction-orientation-epigrams (60%). The proportion of task-orientation-celebrity sightings and self-orientation-social responsibility were also over 10% each (12.4% and 10.9%, respectively). It was notable that none of Patagonia's posts was promotional.

By contrast, task-orientation was the most common post-orientation of Arc'teryx and Salomon, accounting for 45.2% and 53.9%, respectively. Among nine post types, task-orientation-celebrity sighting was most commonly used by Arc'teryx (34.1%) and Salomon (36.6%); interaction-orientation-epigram posts were the third most common type for Arc'teryx (18%) and the second most common type for Salomon (27.9%). Overall, Salomon had a higher percentage of interaction-orientation posts than Arc'teryx had.

However, the two brands differed in their second-most common type of orientation: Arc'teryx was self-orientation (28.5%) and Salomon was interaction-orientation (38.5%). Within self-orientation, though, only one of Arc'teryx' posts, and none of Salomon's posts, related to social responsibility (compared to Patagonia's 10.9% of total posts). Regarding promotion, Arc'teryx only had one promotional post, compared to Salomon's seventeen promotional posts.

4.2 Prevalence of Sports Types

RQ2 was to probe the distribution of sports types. Two-thirds of total posts featured precise, identifiable sports types (N = 637). All three brands most frequently posted about

mountain sports (e.g., mountaineering, ice climbing, alpine skiing, and snowboarding), accounting for nearly half of all identifiable posts (46.2%). Climbing and running sports (e.g., trail and marathon running) ranked next, constituting 17.7% and 17.6% of all sports-type posts, respectively (see Table 4). A Chi-Square test indicated significant sports type differences across the three brands, $\chi^2(12, N = 637) = 240.01, p = .000$.

Though all brands posted most about mountain sports, approximately half of Arc'teryx' and Salomon's sports posts were mountain focused (48.3% and 55.9%, respectively); Arc'teryx' secondary focus was climbing (36.2%), whereas Salomon's was running (28.4%). Most importantly, none of their other sports-type posts breached above the 10% mark.

Patagonia's mountain-sport posts (28.4%), however, were more evenly distributed with other sports types: climbing (20.1%); water sports (e.g., fishing, paddling, diving, or surfing (17.8%); running (11.2%), mountain biking 10.1%; and two others ranking under 10%. Because the posts from Arc'teryx and Salomon focused on two primary sports types while Patagonia's posts were more broadly spread out, Patagonia ended up outposting Arc'teryx and Salomon in several areas: water sports (17.8%, 0.5%, 2.3%, respectively); mountain biking (10.1%, 0%, and 0.4%); and outdoor recreation (6.5%, 1.4%, and 1.9%).

4.3 Visual Elements

The purpose of RQ3 was to explore major visual elements used by the three target brands on their Instagram posts. As mentioned earlier, coders did not code visual elements of posts whose first media item was a video; thus, only 739 posts' visual elements were analyzed (see Table 5). The dominant visual element was of humans. An overwhelming 80% of posts included imagery of humans—either their whole body (57.2%), a “body snap” (25.6%), or a human face

(1.5%). Whole body and body snap elements ranked highest for all three brands—Arc’teryx: 47.1% and 30.1%, Salomon: 64.1% and 25.3%, Patagonia: 62.3% and 20%. After human imagery, “pure landscape” accounted for 13.8% of posts. In the case of Arc’teryx, one-fifth of its posts depicted pure landscapes without other visual elements (19.3%). Since the majority of the total posts were shot outdoors, it is notable that only 6.9% of Arc’teryx’ and 2.4% of Salomon’s posts were taken indoors. Salomon’s tertiary-ranked visual element was the brand logo (10.6%). Comparably, 8.4% of Arc’teryx’ posts featured the brand logo, while Patagonia only published one post with displaying their logo. In addition, a few of Arc’teryx’ (1.8%) and Salomon’s (4.1%) posts displayed pure products without humans; it was notable that six out of Salomon’s ten pure-product posts also presented its logo. Conversely, Patagonia did not publish any pure-product post nor indoors post. However, Patagonia’s posts including kids or animals were a much higher percentage (9%) than the other two brands (Arc’teryx 0.8% and Salomon 1.6%).

4.4 Text Attributes

4.4.1 Photo Credits

The fourth research question was regarding textual attributes of the Instagram caption. In terms of photo credits, two-thirds of total posts credited their photographers or videographers. In terms of brands, Patagonia practiced this most frequently (78.6%), whereas 65% of Arc’teryx and 58.7% of Salomon posts credited their visual sources.

4.4.2 Brand-Sponsored Athlete References

All three brands sponsored elite athletes, with Arc’teryx sponsoring 64 athletes, Salomon sponsoring 112 athletes, and Patagonia sponsoring 104 athletes (full list can be found in the Appendix A). There were 328 total posts wherein the brands referenced one or more of their own

sponsored athletes (Arc'teryx: N = 142, Salomon: N = 155, and Patagonia: N = 31). Among these, 323 posts used the “mention” feature to link to the athletes’ accounts, while 5 posts only literally mentioned their names. In terms of the relationship with post types, interaction-orientation-celebrity sightings posts (67.4%) and self-orientation-events posts (10.7%) ranked top two types of referring sponsored athletes. A Chi-Square test indicated a significant difference in terms of sponsored athletes references across brands, $\chi^2(2, N = 957) = 91.45, p = .000$. Arc'teryx and Salomon referenced their sponsored athletes equally frequently (44% and 43.3%, respectively), compared to Patagonia’s referential posts (11.2%).

4.4.3 Quotations

Though few of the total posts contained a quotation (9.8%), Arc'teryx and Salomon dominated that number. They were both more than twice as likely as Patagonia to incorporate quotations into their posts (11.5%, 12.6%, and 4.3%, respectively). In terms of post types, roughly 80% of posts from Arc'teryx and Salomon tended to incorporate a quote in interaction-orientation ones (more specifically, in celebrity sighting posts and epigram posts).

4.4.4 Caption Length

In general, caption length ranged from 0 to 2,183 characters. The frequency of caption length, from highest to lowest, was: long caption (42.5%), short caption (32.5%), and medium caption (25%) (see Table 6). A Chi-Square test suggested significant differences in terms of caption length across brands, $\chi^2(4, N = 957) = 207.41, p = .000$. Both Arc'teryx and Salomon preferred using long captions, with a percentage of 42.4% and 62%, respectively. Arc'teryx published an equal amount of short and medium posts (28.8%), whereas Salomon published more medium posts (26%) than short posts (12%). Converse to Arc'teryx and Salomon, most

Patagonia posts were with short captions (63.4%), while long captions dominated Patagonia's posts (17.4%).

4.5 Technical Attributes

4.5.1 Media

RQ5 examined the three brands' utilization of Instagram built-in functions. As previously described, each published post on Instagram can include one or more photos and/or videos. Because most of the total posts contained only one media item—only 6.5% had more than one—coders only coded the first uploaded media item if a post included multiple photos and videos (see Table 7). Coders did not code the visual elements of videos, even if the video appeared as the first uploaded media item. A Chi-Square test indicated a significant difference in the media type of the (first) post across brands, $X^2(2, 956) = 27.61, p = .000$. The frequency of the post's first media item being a photo, from highest to lowest, was: Arc'teryx (84.4%), Patagonia (80%), and Salomon (68.4%). Although Arc'teryx ranked highest in uploading multiple media items within one post (9%), followed by Patagonia (5.4%) and Salomon (5%), the difference across brands was not significant ($p = .08$).

4.5.2 Emojis

Patagonia did not use any emojis in its posts. Between Arc'teryx and Salomon, they used 63 distinct emojis 513 times, across 301 posts. The most frequently used emoji was this camera—“📷” (N = 161). The next most frequently used emojis were: running person—“🏃” (N = 72); skier—“🏂” (N = 59); mountain—“🏔️” (N = 35); and snowflake—“❄️” (N = 25). Other emojis appeared no more than 10 times each.

Across the three brands, Salomon used emojis most frequently, with 77.9% of Salomon posts used at least one emoji per post. Most of Salomon's posts used non-facial emojis (94%, $N = 262$). Of the seventeen posts that did use facial emojis, thirteen of these were posts with one positive emoji, plus one or more other emojis. Less than 10% of Arc'teryx posts used emojis and none of them were facial emojis.

4.5.3 Purchase Links

Salomon embedded the most purchase links (8.1% of their total posts), followed by Arc'teryx (3.4% of their posts), whereas Patagonia only embedded a purchase link in one post.

4.5.4 Hashtags

Across the total 957 posts, nearly 80% of posts used at least one hashtag, resulting in 285 distinct hashtags that collectively appeared a total of 2,620 times. Thirty-two distinct hashtags appeared more than ten times (24 hashtags from Salomon, 7 from Arc'teryx, and one from Patagonia) (see Table 8). The top three most frequent hashtags were Saloman's "#TimeToPlay" ($N = 359$), "#Salomon" ($N = 341$), and "#arcteryx" ($N = 106$). The most frequent Patagonia hashtag was "#patagonia_MTB" ($N = 11$).

The amount of hashtag usage significantly differed among the three brands, which was suggested from a Chi-Square test: $X^2(6, 957) = 801.49, p = .000$ (see Table 9). The majority of Patagonia's posts did not involve any hashtag (76.8%). Nearly one-fifth of posts used only one hashtag; only 3.3% of posts used two or more hashtags. Conversely, almost all posts from Arc'teryx (96.9%) and Salomon (99.7%) included in-text hashtags. Over half of each brand's posts used three or more hashtags per post (Arc'teryx 54.8%, Salomon 88.5%). Whereas nearly 90% of Salomon's posts were of this kind (88.5%), Arc'teryx' posts were more evenly

distributed with 24.5% containing one hashtag, 17.6% containing two hashtags, and 54.8% using three-or-more hashtags.

4.5.5 Geotags

Over half of the total posts referenced or indicated a location (58%). For Patagonia, the percentage of posts indicating location was slightly higher than Arc'teryx (89.5% and 83.6%, respectively). Conversely, only 10.6% of Salomon's total posts referenced a location.

4.5.6 Account Mentions

Most of the total posts (83.9%) "mentioned" other Instagram accounts (see Table 10). In total, 1,293 discrete accounts were mentioned, though some were mentioned more than once. After excluding 55 inaccessible accounts, the majority of accounts mentioned promoted an individual (N = 1,041). Specifically, 46.2% of these accounts belonged to photographers, 28.4% were owned by sponsored athletes, and 9.7% was simply coded as "other individuals."

A Chi-Square test suggested significant differences in account mentions across brands, $X^2(4, N = 957) = 103.47, p = .000$. Half of the total posts "mentioned" one account, followed by posts mentioning two accounts (24.7%) and posts with no mentions (16.1%). When looking at individual brands, Arc'teryx and Salomon more often utilized multiple mentions rather than one or no mention. Most Patagonia posts mentioned only one account (68.1%), which was higher than Arc'teryx (33.4%) and Salomon (52.8%). By contrast, the percentage of Patagonia posts mentioning more than one account was lower (12.3%) than Arc'teryx (47.4%) and Salomon (36.6%).

4.5.7 Account Tagging

While publishers "mention" other accounts in a textual caption, nearly 400 of the total posts utilized the same function "tag" in the visual component to link other Instagram accounts

(see Table 11). These accounted for 41.4% of the total sample and yielded 820 tags. Over half of the accounts tagged were sponsored athletes (32.8%), followed by the brand and its subordinate account (22.8%).³

Arc'teryx used the tag feature most frequently; 66.6% of their posts included tags. One in four posts from Arc'teryx tagged two accounts, followed by tagging one account (18.3%) and tagging three accounts (12.1%). Salomon tagged accounts least frequently, with 22.3% of the posts containing at least one tag. Of those, half tagged only one account, and decreased as the number of tags per post increased. Patagonia's performance was closest to Salomon's; only 36.6% of Patagonia posts included tags. These posts tagged either two (68.1%) or one account (31.9%).

³ For example, Patagonia tagged an account called "Patagonia_climb," which was regarded as a "brand and its subordinate account."

CHAPTER 5

DISCUSSION

To my knowledge, this study is the first to examine how outdoor sports brands (e.g., Arc'teryx, Salomon, and Patagonia) use different strategies to manage their online brand community on Instagram. Earlier studies investigated how fashion brands, sports brands, and other mass-market brands used Instagram to interact with consumers (e.g., Çukul, 2015; Mizobe, 2014; Anagnostopoulos et al., 2018; Coelho, de Oliveira, & de Almeida, 2016). Findings suggest that brands with different influence have distinct management strategies. This study extends the knowledge of online brand community management to the outdoor industry, a relatively niche but promising industry. In particular, the results of the current study help identify the major themes of outdoor brands' posts and understand their practices by examining post types, sports types, visual elements, textual attributes, and technical factors. Findings aligned with the expectation (H1) that Instagram branding strategies differed across brands. Theoretically, although the current study failed to determine which information processing route most often occurred in which OBC, this study used content analysis to demonstrate that systematic and heuristic processing can co-occur, which agreed with prior research (e.g., Chaiken, 1980; Katz et al., 2018; Lahuerta-Otero et al., 2018).

Although total likes and total comments of Patagonia were six times higher than Arc'teryx and Salomon, it was noticeable that Patagonia's followers were approximately six times higher than the other two brands, which made the direct comparison of likes and comments less valid. Instead, this study calculated the ratio of post likes/comments to each brand's followers. The differences of like rate among the three brands were significant but minimal,

indicating Patagonia followers were more likely to “like” a post than other two brands. Thus, H2 was partially supported.

5.1 Post Orientation and Type Distribution

According to Metzger, Flanagin, and Medders (2010), individuals who took a systematic approach to process information were often based on content types. In this study, the content types were determined by the textual caption into three orientations and nine categories. As a leading social network site (SNS), Instagram reflected one goal of SNS: focusing on online social relationships among users (Khan, 2018). This focus may explain why interactive-orientation posts dominated the majority of three brands’ posts. Especially for Patagonia—one of two most influential outdoor sports brands on Instagram with nearly four-million followers—60% of its posts used epigram which was classified as an interaction-orientated type. Content analysis has shown that Patagonia often published posts regarding corporate values and sense of social responsibility (e.g., appealing to halt a dam construction in order to protect the local environment). Also, none of Patagonia’s posts was promotional ones. The results suggested that Patagonia primarily utilized Instagram as a communication tool to build a less commercial but more relationship-focused community.

On the contrary, as less influential brands on Instagram, Arc’teryx and Salomon’s Instagram space was more like transactional communities (Armstrong & Hagel, 1996). Arc’teryx stood out with the highest percentage of self-orientation posts—a communication strategy aiming to increase brand consumer awareness and Salomon stood out with the highest percentage of task-orientation posts—a communication strategy aiming to generate revenues (Kim et al., 2015). Arc’teryx hosts three annual academies every year: backcountry ski touring,

rock climbing, and alpine adventures. Thus, Arc'teryx published over one-fifth of its 2018 posts to publicize these events. Salomon was more salient to spur sales via Instagram posts. The percentages of three task-orientation posts (i.e., product sighting, promotion, and celebrity sighting) of Salomon were the highest among three brands. Additionally, although three brands all had sponsored athletes, both Arc'teryx and Salomon published three times more celebrity sighting posts than Patagonia.

5.2 Sports Type Distribution

Brands' sports type distribution differences can be explained by comparing distribution to brands' particular corner of the outdoor market (i.e., chosen business sector). The evidence indicated that all three brands took the same strategy in sports types—each brands' Instagram posts reflected the business categories presented on their websites. For instance, Patagonia and Salomon categorized their products in terms of sports on their website homepages. For the sports type distribution, mountain sports was the most frequently mentioned sports type for all three brands. It is unsurprising because this type was a crucial sector of all three brands' business categories. After mountain sports, the sports type distribution per brand begins to differ; these differences are also congruent with self-image promoted on their websites.

For example, Arc'teryx' website focuses on sports in four categories: “alpinism & climbing, trail running, skiing & snowboarding, [and] hiking & trekking” (<https://blog.arcteryx.com/>). Correspondingly, 98.1% of its Instagram posts reinforced these areas of interest, by focusing on rock climbing, running sports, mountain sports, and walking sports. Furthermore, 84.5% of Arc'teryx' Instagram posts were specifically related to climbing

and mountain sports, which is reflected in the sports prioritized in Arc'teryx annual academy, as described above.

Meanwhile, Salomon boasts its commitment to “pushing the boundaries of mountain sports,” and over half of its posts do depict mountain sports (https://www.facebook.com/pg/Salomon/about/?ref=page_internal). Mountain sports overlap with winter sports, as Salomon defines it; four out of six sports featured on their website were of winter sports—“alpine (ski), nordic [ski], freeride [skiing] & [ski] touring, [and] snowboard”—the rest of two were “running,” and “outdoor” which referred to hiking (<https://www.salomon.com/en-us>). These sports—winter, running, and outdoor—align with Salomon’s Instagram sports types, namely, mountain sports, walking sports, and running sports.

Likewise, Patagonia’s website features product sectors spanning from snow, surfing, mountain biking, trail running, fly fishing, kite surfing, to climbing (<https://www.patagonia.com/home/>). Content analysis has shown that distribution of Patagonia’s Instagram sports type distribution was more evenly balanced than the other two brands; furthermore, the distribution was congruent with the sports featured on its website. An alternate explanation for Patagonia’s balanced distribution requires considering the advertised purpose of each brand. Arc'teryx and Salomon each present themselves specifically as an “outdoor & sporting goods company” on Instagram, whereas Patagonia presents itself more broadly as a “clothing (brand).” As a clothing brand, Patagonia may be attempting to appeal to a broader audience, which is not only targeting outdoor professionals, but also outdoor enthusiasts and amateurs.

5.3 Visual Elements

Outdoor sports entail two elementary factors: human beings and the outdoors. By extension, it is no surprise that human imagery and pure landscapes are the most frequent visual elements presented in outdoor recreational brands' Instagram posts. The results are consistent with Jaakonmäki et al. (2017), which found that pictures with people and scenery generated more likes and comments than other visual elements. The three targeted brands displayed the whole body of humans much more frequently than body snaps and human faces, perhaps because an image of a whole human body occupies more space and also embodies the interplay between humans and nature. This finding keeps coherent with Smith and Sanderson's (2015) work that the majority of athletes' self-presentation posts on Instagram was the entire body of an athlete.

Wilderness areas, including public lands and waters, are the outdoor industry's basic infrastructure (Outdoor Industry Association, 2017). A 2018 report from the Outdoor Foundation found that nearly half of outdoor recreation participants were motivated to "get outside" in order to "observe scenic beauty (48%)," "be close to nature (47%)," or "enjoy the sounds and smells of nature (46%)" (Outdoor Foundation, 2018). The percentage of Arc'teryx' indoor posts was the greatest (6.9%) among the three brands, followed by Salomon (2.4%) and Patagonia (0%). The indoor-post distribution may be best explained by observing that it roughly aligns with each brand's respective distribution of the post type for workplace/worker/product manufacture—all of which are most likely to be found indoors (Arc'teryx 5.9%, Salomon 1.1%, and Patagonia 1.8%).

As discussed earlier, Arc'teryx and Salomon—less-influential brands than Patagonia—created transactional Instagram communities by using Instagram for commercial exchange (e.g., consumers purchase products directly via embedded URL on Instagram). Their emphasis on

task-orientation posts such as product sighting increased brand exposure; they also published brand logos and pure product visual elements more frequently than Patagonia. However, these practices may have backfired. According to Lee, Lee, Moon, and Sung (2015), social interaction was the primary psychological motive of many Instagram users. Instagram encourages users to “maintain social ties and share content with people [with whom] they closely associate” (Khan, 2018, p.123). In other words, on Instagram, consumers anticipate establishing and maintaining relationships with their favorite brands; if advertisements are even present, they should at least be subtle.

Patagonia, on the other hand, was committed to establishing a relationship-focused community on Instagram perhaps because of Patagonia’ relatively greater brand recognition. Presenting images of kids and animals, not logos and products, may be a workable approach to maintain positive relationship with consumers

5.4 Text Attributes

Various text attributes, along with other peripheral cues, serve to elicit heuristic processing. Brands with different levels of influence had great discrepancies in textual content of their Instagram posts. Patagonia, on the one hand, usually published short posts and gave credits to visual sources. It rarely contained quotations or referenced its sponsored athletes. On the other hand, Arc’teryx and Salomon preferred long posts and had a relatively lower percentage of photo credits. Aligning with their strategy of constructing Instagram posts with greater amount of task-orientation-celebrity-sighting, both brands were likely to embed a quotation.

5.5 Technical Attributes

The current study examined seven technical factors of brands' posts: media, hashtags, emojis, purchase link, mentions, tags, and location indication, which played significant roles as individuals used heuristic strategies to process information. Regardless of company influence, three brands took an identical media strategy: one photo/video per post is predominant (93.5%) and most media items of the first post is a photo (77.3%). This finding reinforced that the attribute of Instagram is a photo-sharing content community; photo creation and uploading is paramount (Veum & Undrum, 2018; Khan, 2018). The three brands' utilization of technical attributes can be understood along a spectrum, from aggressive to conservative. Both Arc'teryx and Salomon fall on the aggressive side, embracing technical attributes, whereas Patagonia falls on the conservative side, with a minimal use of technical attributes.

In general, Arc'teryx and Salomon both embraced using technical attributes in their Instagram posts. Both brands used emojis in the caption to express non-verbal information, as well as using purchase links in the visual content to encourage direct transaction. However, the negative correlation between purchase link and engagement confirmed the finding from Swani et al. (2013)—consumers were less likely to respond to posts. Additionally, almost all posts from the two brands utilized at least one hashtag—usually their names (i.e., #Salomon and #arcteryx)—a frequent method for increasing post exposure. It was noteworthy that the top ten most frequently used hashtags identified by the content analysis were all from Arc'teryx and Salomon.

As technical attributes, both mentions and tags achieve the same referential purpose—to directly link to another Instagram account. The former does so in the text whereas the latter does so in the visual content. Salomon used mentions most frequently and often excessively;

similarly, Arc'teryx not only used tags the most often, but also included many tags per post. Additionally, Salomon rarely used geo-tags, which decreased the likelihood that their posts would be discovered based on proximity. To some extent, applying multiple technical attributes to their task-orientated posts obscured their sales intentions and made their posts look fancy and attractive, which could be seen as another strategy to maintain a good relationship with consumers.

Patagonia, by contrast, was conservative in its use of technical attributes. First, none of Patagonia posts contained emojis and only one post offered a purchase link. Second, most Patagonia posts didn't use hashtags; when present, only one hashtag was used. Third, the majority of Patagonia posts mentioned only one account and tagged no more than one account. The only exception of technical features was the use of geo-tags, of which Patagonia was the highest to indicate locations. As mentioned earlier, Patagonia self-identifies as a “clothing (brands)” on Instagram and appeals to a broader audience. Keeping its post concise is a good way to reach more people and maintain their relationship within its online community.

5.6 Limitation and Future Research Studies

The first limitation is based on the necessary exclusion of certain posts in the data set. Our visual-elements coding did not encompass all media items per post, but only the first, and only if the first was a photo, not a video. Thus, only 739 from 957 posts were analyzed for visual elements. In other words, over one-fifth of total posts were excluded from visual-element analysis, which may impair the validity of the relevant data. Furthermore, consumers' engagement actions, such as liking and commenting, can be triggered by multiple factors (De Vries et al., 2012). A like or comment could just as easily have been inspired by a secondary

photo, or a video in any position; in fact, compared with fixed photo images, motion images (e.g., video or GIFs) are more complex and contain more information. This current study is unfortunately limited to assuming some correlation between consumer actions and the first media item, and only if it is a photo. Future research should improve the visual-element coding construction to extend analysis to include videos.

The original subjects of this study were meant to include two large-scale and two smaller-scale companies, for a more balanced analysis. However, a suitable counterpoint to Patagonia—The North Face—suddenly deleted all of its previous Instagram posts right before the beginning of the data collection. Therefore, these two influential-level samples were not paired in the current study, which is the second limitation. For follow-up studies aiming to explore the broader interplay between consumers and brands, researchers should establish a more balanced sample selection.

According to Highfield and Leaver (2015), it is critical to consider the visual and textual aspects of Instagram posts together in analysis. However, the current textual and visual codebooks were each independently constructed, resulting in the third limitation—the separate nature of the codebooks likely obscures some potentially valuable relationships in the data. Due to different elements of captions and visual contents, one codebook cannot be applied to another. Therefore, future research should attempt to make even more direct connections between textual and visual contents.

As an exploratory study, this thesis primarily focuses on a descriptive approach to understand how outdoor sports brands build their Instagram community. This is an area which currently does not have extensive research. Future research can extend the present study to create

predictive models of user engagement using variables classified by the content analysis, in order to provide precise actionable suggestions to brand marketers.

CHAPTER 6

CONCLUSION

The current study is the first study to focus on outdoor sports brands from a social media perspective. Based on the HSM, a brand post on Instagram can be categorized as systematic cues, which refer to post orientations; and heuristic cues, which includes content factors (i.e., sports types, visual elements, and text attributes) and non-content factors (i.e., technical attributes). By analyzing posts from three leading outdoor sports brands, the results indicate that Instagram brand community types and posting practices are associated with their social media impact. Specifically, brands with a large amount of Instagram followers (i.e., Patagonia) utilize Instagram to create a relationship community. The large brand posts more interaction-orientation posts, uses more appealing visual elements such as kids and animals, keeps captions short and authentic, and applies fewer technical attributes. On the other hand, less influential brands (i.e., Arc'teryx and Salomon) have a higher percentage of task-orientation posts along with interaction-orientation posts, more product-related visual elements, and tend to use longer captions and various technical attributes. These approaches serve to develop transactional community on Instagram. Compared with transactional online communities, relationship online communities used fewer heuristic cues such as emojis, hashtags, and purchase links. The findings also suggest that followers of the relationship community are more likely to like a post than followers of the transactional community, but demonstrate similar commenting behavior in both communities.

This study contributes to the literature in several ways. First, this special study extends OBC research to a new field—the rapid growing outdoor recreation industry. Second, few studies conducted content analysis to examine an OBC and this study fills that partial void. By

analyzing various factors of Instagram posts, this study confirmed that both systematic and heuristic processing can occur simultaneously by different cues. Finally, this study proposes a distinctive definition of outdoor sports brand.

This study also provides practical implications. This research stresses that positioning a clear OBC goal is the first step for a successful Instagram brand community since it serves as a guidance of specific branding tactics. By demonstrating key tactics used by the outdoor sports brands to build different OBC, outdoor sports industry practitioners now have a big picture of different OBCs running strategies. These strategies facilitate brand marketers to identify their OBC objectives and they have examples to benchmark against in the domain of Instagram branding management. Findings suggest that brands' Instagram post content reflects their larger corporate values. This research study has implications for both the outdoor sports industry, in terms of social media and marketing, as well as within the larger academic field.

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TABLES

Table 1. Target Outdoor Sports Brands Candidates and Their Instagram Performance

Overlap Brands	Number of Instagram Posts	Instagram Followers
Arc'teryx	2,245	671,000
Columbia Sportswear	2,477	336,000
L.L.Bean	2,910	284,000
Lowe Alpine	794	418,000
Mammut	618	246,000
Marmot	1,825	322,000
Mountain Hardwear	2,645	661,000
The North Face	10	3,900,000
Outdoor Research	3,035	437,000
Patagonia	2,276	3,900,000
REI	4,175	2,100,000
Salomon	1,541	575,000

Note: data was collected on May 7th 2019 from their Instagram accounts.

Table 2. Comparison of Three Brands' Instagram Performance and Consumer Engagement

	Arc'teryx	Salomon	Patagonia
Followers	671,000	575,000	3,900,000
Posts	323	358	276
Avg. Likes	5,903	5,249	41,023
Total likes	1,906,734	1,879,289	11,322,500
Like rate	one follower generating .0088 likes	one follower generating .0091 likes	one follower generating .0105 likes
Avg. Comments	28	21	163
Total comments	8,966	7,533	45,075
Comment rate	one follower generating less than .0001 comments	one follower generating less than .0001 comments	one follower generating less than .0001 comments

Note: data was scraped on October 12th 2019 by Python. Like rate: $F(2, N = 868) = 11.37, p = .000$. Arc'teryx and Patagonia: $p = .000$; Salomon and Patagonia: $p = .001$; Arc'teryx and Salomon: $p = .61$. Comment rate: = the number of comments a post received /followers of the brand: $p = .22$.

Table 3. Prevalence of Post Types in Terms of Brands

Post Type	Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=275)	Total (N=956)
Task-oriented	45.2%	53.9%	20.8%	41.5%
Product sighting	10.8%	12.6%	8.4%	10.8%
Promotion	0.3%	4.7%	0	1.9%
Celebrity Sighting	34.1%	36.6%	12.4%	28.8%
Interaction-oriented	26.4%	38.5%	65.9%	42.3%
Special Days	1.9%	4.5%	1.5%	2.7%
Epigram	18.0%	27.9%	60.0%	33.8%
Education	6.5%	6.1%	4.4%	5.8%
Self-oriented	28.5%	7.5%	13.5%	16.3%
Event	22.3%	6.4%	0.7%	10.1%
Social Responsibility	0.3%	0	10.9%	3.2%
Workplace/Workers/ Product Manufacture	5.9%	1.1%	1.8%	2.9%

Note: one Patagonia's post did not contain any characters in its caption; thus, the post was excluded in this section. Orientation: $X^2(4, N = 956) = 147.31, p = .000, Phi = .39, p = .000$. Type: $X^2(16, N = 956) = 316.16, p = .000, Phi = .58, p = .000$.

Table 4. Prevalence of Sports Types in Terms of Brands

Sports Types	Arc'teryx (N=207)	Salomon (N=261)	Patagonia (N=169)	Total (N=637)
Rock climbing	36.2%	1.5%	20.1%	17.7%
Mountain sport	48.3%	55.9%	28.4%	46.2%
Walking sports	4.3%	9.6%	5.9%	6.9%
Running sports	9.2%	28.4%	11.2%	17.6%
Mountain biking	0	0.4%	10.1%	2.8%
Outdoor recreation	1.4%	1.9%	6.5%	3.0%
Water sports	0.5%	2.3%	17.8%	5.8%
Total	100%	100%	100%	100%

Note: 637 out of 957 posts could be identified sports types. $\chi^2 (12, N = 637) = 240.01, p = .000$.

Table 5. Prevalence of Visual Elements in Terms of Brands

Visual Elements	Arc'teryx (N=274)	Salomon (N=245)	Patagonia (N=220)
Human face	2.2%	0.8%	1.4%
Body snap	30.1%	25.3%	20%
Whole body	47.1%	64.1%	62.3%
Kids	0.4%	0	4.5%
Animals	0.4%	1.6%	4.5%
Logo	8.4%	10.6%	0.5%
Product-only	1.8%	4.1%	0
Pure landscape	19.3%	7.3%	14.1%
Indoor setting	6.9%	2.4%	0
Text-imbedded	0	0	0.5%
Combined post	0	2.4%	0.5%
Total	116.6%	118.6%	108.3%

Note: 739 out of 957 posts were analyzed visual elements.

Table 6. Distribution of Caption Length in Terms of Brands

Caption Length	Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=276)	Total (N=957)
Short caption	28.8%	12%	63.4%	32.5%
Medium caption	28.8%	26%	19.2%	25%
Long caption	42.4%	62%	17.4%	42.5%

Note: short caption (< 125 characters characters), medium captions ($125 \leq$ characters < 200), and long captions ($200 \leq$ characters). $\chi^2(4, N = 957) = 207.41, p = .000, Phi = .47, p = .000$.

Table 7. The Number of Media Items and The Media Type of The First Item in Terms of Brands

		Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=276)	Total (N=957)
The number of media item	Single item	91.0%	95.0%	94.6%	93.5%
	Multiple items	9.0%	5.0%	5.4%	6.5%
The media type of the first item	Photo	84.8%	68.4%	80.0%	77.3%
	Video	15.2%	31.6%	20.0%	22.7%

Note: Chi-Square for the media type of the first item: $X^2(2, N = 956) = 27.61, p = .000$.

Table 8. Top Ten Most Frequent Hashtags

Rank	Hashtag	Frequency	Author
1	#TimeToPlay	359	Salomon
2	#Salomon	341	Salomon
3	#arcteryx	306	Arc'teryx
4	#trailrunning	127	Salomon
5	#climb	99	Arc'teryx
6	#celebratewild	92	Arc'teryx
7	#arcteryxacademy	88	Arc'teryx
8	#skiing	81	Salomon
9	#freeski	77	Salomon
10	#ski	75	Arc'teryx

Note: There were 285 distinct hashtags appeared 2,620 times in the total of 734 posts.

Table 9. Distribution of The Number of Hashtags in Terms of Brands

	Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=276)	Total (N=957)
No hashtag	3.1%	0.3%	76.8%	23.3%
One hashtag	24.5%	6.7%	19.9%	16.5%
Two hashtags	17.6%	4.5%	2.9%	8.5%
Three-or-more hashtags	54.8%	88.5%	0.4%	51.7%

Note: $X^2(6, N = 957) = 801.49, p = .000$.

Table 10. Distribution of The Number of Mentions in Terms of Brands

	Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=276)	Total (N=957)
No mention	19.2%	10.6%	19.6%	16.1%
One mention	33.4%	52.8%	68.1%	50.7%
Two-or-more mentions	47.4%	36.6%	12.3%	33.2%

Note: There were 1,293 distinct accounts appeared 2,620 times in the total of 734 posts. $X^2(4, N = 957) = 103.47, p = .000, Phi = .33, p = .000$.

Table 11. Distribution of The Number of Tags in Terms of Brands

	Arc'teryx (N=323)	Salomon (N=358)	Patagonia (N=276)	Total (N=957)
No tag	33.4%	77.7%	63.4%	58.6%
One tag	18.3%	11.5%	31.9%	19.6%
Two tags	23.5%	8.4%	4.7%	12.4%
Three-or-more tags	24.8%	2.5%	0	9.3%

APPENDIX A. TEXT CODEBOOK

Coders should click on links of posts using a cell phone and follow the instructions to finish coding. When coding the text of the post, coders should concentrate solely on textual information and ignore the visual messages.

Level 1: Working link

For the first column, coders should code a post whether the link of the post is working or not. If the link works, code “1”, and if the link does not work, code “0”.

Level 2: Text analysis

Level 2.1: Post Types

For this column, coders should follow the working definition of each content type to determine the post’s orientations (task-, interaction-, or self-oriented) and classify it into one of ten categories.

- Coders should scrutinize textual content which include quotations and postscripts after a photo credit.
- If one post fits more than one type, coders should decide which one is the primary type/which type fits the best/appropriate.
- If a tweet mentions other accounts, coders should click on and check the account attribute (brand-related athlete or photographer, famous athlete, or normal user) and then determine the tweet’s category.
- Each post should be put into only one category.

Category	Type	Operational Definition	Example	Coding
Task-orientation	Product sighting	The purpose of the post is to introduce a classic or upcoming (a collection of) products or extol its product(s) implicitly or explicitly. Content usually includes functions, characteristics and usage settings of products, providing links to new (collection of) products, or instructional words to encourage to take informational actions for more details about products. As long as a post mentions the use of certain products in particular settings, it should be primarily considered as a product sighting post. If a post mentions a certain product with a quotation or an epigram as an opening, it should also be coded as “product.”	Timber framer Bodie Johansson at work in the Handcrafted Log & Timber yard. Learn more about our new Workwear denim through the link in our profile. Photo: @blake_gordon ; https://www.instagram.com/p/Bmd-aQKnFCm/ ; https://www.instagram.com/p/Bn4qCRigIMd/ ; https://www.instagram.com/p/BgT96ZTIL3t/ ; https://www.instagram.com/p/B151nDpFMlv ; https://www.instagram.com/p/BreAzobiirp/	1
	Promotion	The purpose of such posts is to encourage consumers to take direct purchase actions. Deals, prices,	Ho Ho Ho! 🎅 It looks like Santa @Salomon has put together a Christmas Gift	2

	<p>promotional sales or offers are always mentioned. If the link provided turns to a website or page that consumers are able to take the direct purchase action, it should be coded as “promotion.”</p>	<p>Guide to help you decide what to put under the christmas tree. 🌲</p> <p>Tap on the products or browse our full gift collection on: salomon.com/gift-guide (link in our profile)</p> <p>#Salomon #TimeToPlay #christmas #christmasgift</p> <p>https://www.instagram.com/p/BfqgJLTlZpm/</p> <p>https://www.instagram.com/p/BoeawlOAcO3/</p> <p>https://www.instagram.com/p/Bo4cfscgTNa/</p>	
<p>Celebrity sighting</p>	<p>This entails the name of one or more outdoor enthusiast with their experience in an outdoor setting. Photos taken on an event or posted on a special day should not be categorized in this division. Note that the names of the products or brands</p>	<p>@kyra_condiefield testing our #HardwearDenim out in the Buttermilks. Photo: @jpayne.</p> <p>https://www.instagram.com/p/Bo-QsdDgpVv/</p> <p>https://www.instagram.com/p/BnMJrmNFSnp/</p>	<p>3</p>

		are not necessarily presented in the text or in the hashtags.	https://www.instagram.com/p/BdiUdnAFcIs/	
Interaction-orientation	Special days	A post is either posted on a holiday (i.e., New Year, Christmas, Thanksgiving) and expresses holiday wishes, or the date mentioned in a post has special meanings such as a date/anniversary when (an) outdoor athlete(s) accomplish(es) a magnificent feat, or the commemoration of the death of a renowned athlete.	Welcome to the new year. Sunrise on El Cap. Photo: @samburns_photo. https://www.instagram.com/p/BmTXo6eFHpq/ https://www.instagram.com/p/BfeqVr1BvKA/ https://www.instagram.com/p/BfyfJWoB1Aq/	4
	Epigram	The caption is used to depict a moment, to comment on a moment, or to supplement the background or related thoughts of the visual by poetic phrases without mentioning specific outdoor athletes. Or a post only cites someone's quotes in the caption. Usually such posts are short and concise.	Pitter-patter, it's always time to get at 'er. Photo: @ericmpoulin#arcteryx #run; https://www.instagram.com/p/BoXzAA9HqC2/ https://www.instagram.com/p/BqghdJzD3DG/ https://www.instagram.com/p/BeB8I2ElqPn	5

	Education	<p>Posts aim to provide effective outdoor tips for viewers without disseminating any product details or brand-related information. If the text explicitly states it is a “tip” “hint”, coders should code it as “education.” The other purpose of such posts is to introduce a renowned person or team in general. It is not posted on a special day.</p>	<p>ARC'TERYX TIPS: Rope Organization With @silvia.moser. Trust us, this helps.</p> <p>#arcteryx #arcteryxacademy #climb @chamonixmontblanc @montblanc_nr @goretexeu @lyofood @peakdesign @suunto</p> <p>https://www.instagram.com/p/Bm6Yb78F6ZL/</p> <p>https://www.instagram.com/p/BgpPoX314Nv</p>	6
Self-orientation	Event	<p>Posts are used to publicize an event which is either organized by the brand or involved the brand. These include trade shows and exhibitions, or important industry summits (e.g., UTMB, Golden Trail Series, and mountain collective). One or more event special hashtags are usually used.</p> <p>If a post explicitly indicates that it is taken as a part of an event, the post</p>	<p>The Arc'teryx Backcountry Academy will return to Jackson Hole, Wyoming, Feb 7-10. Hit the link in our bio to explore all the clinics we offer.</p> <p>#arcteryxacademy #arcteryx</p> <p>https://www.instagram.com/p/BjC6v24gV9O/</p> <p>https://www.instagram.com/p/BmbU6NfHh66/</p>	7

	<p>should be categorized in this division.</p> <p>Note that posts regarding public events or popular public issues are not in the division. If only event’s hashtag is presented without any other information to indicate the event, such post should be excluded from this category (e.g., https://www.instagram.com/p/BlhDGBiHGjR/).</p>	<p>https://www.instagram.com/p/Bh9L-0kFVgG</p> <p>https://www.instagram.com/p/BnCekr-hshk</p> <p>https://www.instagram.com/p/Bkkip14lbrA/</p>	
Social Responsibility	<p>The aim of these posts is to disseminate the corporate values, and sense of social responsibility of the brand. Such posts usually call on the attention of sustainability, environmental protection, animal protection, the protection of the earth and national park systems, or broadcasting the brand’s effort to charity and other public affairs.</p>	<p>We're giving our \$10 million tax cut back to the planet. → Link in profile.</p> <p>Photo: @_drew_smith</p> <p>https://www.instagram.com/p/BggsDeRF9ZX</p> <p>https://www.instagram.com/p/BpA2lk1lh6h/</p> <p>https://www.instagram.com/p/BmhEDhTINHl</p>	8

Workplace /works /products manufacture	This kind of post usually introduces or advertises workplace, employees, teams and staff such as designers, management, stories behind a product, or other brand stories.	When conditions turn nasty you will be thankful for this seam taping machine. Learn more about the machines we use at our Design Centre through the link in our bio. #arcteryx https://www.instagram.com/p/Bqptt8UgCxl/ https://www.instagram.com/p/BfofrZply7S/	9
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Level 2.2: Brand-sponsored athlete references

Coders should determine whether sponsored athletes are referential in the post. Sponsored athletes of the three targeted brands are listed below. If yes, code “1”; if no, code “0”.

- Examples of sponsored athletes involved in a post:

<https://www.instagram.com/p/BqaN7y5g1KB/> Vikki Weldon is an Arc’teryx’s sponsored athlete.

Brand-sponsored athletes (collected on May 12th 2019):

- **Arc’teryx (64):** Ski (16): Austin Ross, Chad Sayers, Eric Hjørleifson, Forrest Coots, Greg Hill, Izzy Lynch, Johannes Hoffmann, Lucy Sauckbauer, Max Kroneck, Patrick Vuagnat, Michelle Parker, Seb Mayer, Silvia Moser, Stian Hagen, Stinius Skjøtskift, Thibaud Duchosal; Snowboard (2): Joey Vosburgh, Justin Lamoureux; Climb (25): Alannah Yip, Brette Harrington, Ines Papert, Jesse Huey, Jon Walsh, Katie Bono, Will

Gadd; Drew Ruana, Mark Smiley, Mina Leslie-Wujastyk, Quentin Roberts, Emilie Pellerin, Craig DeMartino, Raphael Slawinski; Jonathan Siegrist, Katy Whittaker, Jordan Cannon, Leslie Timms, Nina Caprez, Paul McSorley, Vikki Weldon, Will Stanhope, Paolo Marazzi, Sarah Hueniken, Shelma; Run and Trail Running (5): Adam Campbell, Eric Carter, Florian Reichert, Janelle Smiley, Tessa Strain; Mountaineering (1): Luka Lindic; Guide (9): David Sanabria, Gian Luck, José Carron, Lisi Steurer, Maciej Cieselski, Paul Mair, Pauli Trenkwalder, Peter Gujan, Walter Zoerer; In Memory Of (6): Guy Lacelle, Joelle Brupbacher, Marc-Andre Leclerc, Pau Escalé, Remy Lecluse, Res Baehler.

- **Patagonia (104):** Climbing (29): Alexander Megos, Arnaud Petit, Barry Blanchard, Anne Gilbert Chase, Brittany Griffith, Colin Haley, Dylan Johnson, Jasmin Caton, Josh Wharton, Kate Rutherford, Katsutaka “Jumbo” Yokoyama, Kelly Cordes, Kitty Calhoun, Majka Burhardt, Marko Prezelj, Matt Helliker, Mikey Schaefer, Nicolas Favresse, Pete Whittaker, Ron Kauk, Sean Villanueva O’Driscoll, Sonnie Trotter, Stéphanie Bodet, Steve House, Timmy O’Neill, Tommy Caldwell, Vince Anderson, Zoe Hart, Rolando Garibotti; Fly Fishing (17): Andy J. Danylchuk, Hilary Hutcheson, Jeff Liskay, Junichi Nakane, April Vokey, Millie Paini, Kate Taylor, Joshua Hutchins, Dave McCoy, Rachel Finn, Captain Sarah Gardner, Mikael Frödin, Dylan Tomine, Mikey Wier, Eric Paulson, Paul Bruun, Jasper Pääkkönen; Skiing (9): Braden “Pep” Fugas, Kye Petersen, Piers Solomon, Carston Oliver, Caroline Gleich, Leah Evans, Eliel Hindert, Zahan Billimoria, Max Hammer; Snowboarding (7): Josh Dirksen, Nick Russell, Taro Tamai, Ryland Bell, Forrest Shearer, Marie-France Roy, Alex Yoder; Global Sport Activist (4), Dave Rastovich, Ian Walsh, Greg Long, Ramón Navarro; Surfing Ambassadors (30): Gerry

Lopez, Paige Alms, Chris Malloy, Dan Malloy, Keith Malloy, Dan Ross, Kohl Christensen, Kimi Werner, Liz Clark, Wayne Lynch, Belinda Baggs, Otto Flores, Reo Stevens, Jason Slezak, Julien Fillion, Léa Brassy, Kyle Thiermann, Hank Gaskell, Eala Stewart, Mary Osborne, Gavin McClurg, Crystal Thornburg-Homey, Joe Curren, Jeff Denholm, Dave Ogle, Ben Wilkinson, David Kinoshita, Patrick Wilson, Quinten Rubalcava, Hayato Maki; Trail Running (8): Chloë Lanthier, Hiroki Ishikawa, Jeff Browning, Jenn Shelton, Krissy Moehl, Clare Gallagher, Rod Bien, Luke Nelson

- **Salomon (112):** Freeride & Touring (21): Mike Douglas, Nicolas Vuignier, Kaj Zackrisson, Drew Petersen, James Woods, Stanislas Rey, Tony Lamiche, Noah Bowman, Kalen Thorien, Fabien Maierhofer, Cody Townsend, Oscar Wester, Vincent Gagnier, Thomas Krief, Greg Hill, Alexi Godbout, Chris Rubens, Liv Sansoz, Victor Galuchot, Josh Daiek, Antoine Adélisse; Snowboard (22): Louif Paradis, Victor Daviet, Annie Boulanger, Nils Mindnich, Desiree Melancon, Jesse Paul, Bode Merrill, Taka Nakai, Josh Dirksen, Toni Kerkela, Tommy Gesme, Harrison Gordon, Nirvana Ortanez, Will, Wolfgang Nyvelt, Riley Nickerson, Artem Smolin, Max Buri, Judd Henkes, Maddie Mastro, Hans Mindnich, Chris Grenier; Running (13): Marc Lauenstein, Remi Bonnet, Courtney Dauwalter, Kilian Jornet, Ryan Sandes, Emelie Forsberg, Megan Kimmel, Rickey Gates, Mira Rai, François D’Haene, Stian Angermund-Vik, Mimmi Kotka, Ida Nilsson; Nordic (28): Maurice Manificat, Erik Lesser, Maren Hammerschmidt, Sebastian Samuelsson, Kari Oyre Slind, Andrew Musgrave, Richard Jouve, Lina Korsgren, Renaud Jay, Marte Olsbu, Mathias Fredriksson, Sjur Roethe, Francesco De Fabiani, Erlend Bjontegaard, Clément Parisse, Jessie Diggins, Baptiste Gros, Sophie Caldwell, Arnd Peiffer, Jens Burman, Marketa Davidova, Daniel Tynell, Viktor Thorn, Simon

Desthieux, Karl-Johan Westberg, Anouk Faivre-Picon, Jean-Marc Gaillard, Simi Hamilton; Racing & Piste (28): Victor Öhling Norberg, Bastien Midol, Katrin Ofner, Ana Bucik, Marielle Berger Sabbatel, Christoph Wahrstoetter, Sandra Naeslund, Marusa Ferik, Hannes Reichelt, Otmar Streidinger, Luca De Aliprandini, Francesca Marsaglia, Nastasia Noens, Matthieu Bailet, Robin Buffet, Adam Zampa, Meta Hrovat, Valentin Giraud Moine, Tamara Tippler, Margot Bailet, Andreas Zampa, Romed Baumann, Taina Barioz, Julien Lizeroux, Luca Aerni, Marta Bassino, Victor Muffat Jeandet, Giovanni Borsotti.

Level 2.3: Photo credit

Determine whether the author gives credit to the photographer or the producer.

- If photos or videos from other photographers are credited (e.g., “photo: @jxnfigs;” “the video is product by @redbull,” “along with filmer @studiofranzwalter,” “Check out @jan_novak_photography's photos ”) in the post, code “1”. Otherwise, code “0”.
- If the author uses emoji 📷 followed by the photographer’s name, this post should also be considered as photo credit.
- No matter whether or not the mentioned photographer’s link works, it should be coded as “1” as long as the brand explicitly articulates the name of the photographer or producers.

Level 2.4: Mentions

Count the number of working mentions (e.g., @redbull) in the post.

- If an account with the “@” sign cannot be accessed, this account should not be counted as a mentioned account.

- Repeated mentions of the same account should be treated as different mentions.
- If there are no mentions, code “0”.

Level 2.4.1: Account handle [on sheet 2]

Coders should record the account name which is mentioned.

- If one account is mentioned more than one time, coders should record the account multiple times.
- If no account is mentioned, leave level 4.1 to level 4.4 blank.

Level 2.4.2: Number of followers [on sheet 2]

Record the exact number of followers of the mentioned account. Example: if an account has 997 followers, please code “997” rather than “1,000” (“1k” shown on the page) for this level.

Level 2.4.3: Number of following [on sheet 2]

Record the exact number of following of the mentioned account. Example: if an account follows 997 accounts, please code “997” rather than “1,000” (“1k” shown on the page) for this level.

Level 2.4.4: Classification [on sheet 2]

If it is not coded as 0 on level 4, coders should identify the type of mentioned account.

- If coders cannot determine the classification according to pure texts, they can click on the links if provided or google it for more information.
- If the user fits more than one classification, coders should determine which identity is the primary. For example, if a sponsored athlete is mentioned at the photographer’s part,

coders should code the user as “3” rather than “2”

(<https://www.instagram.com/p/BiDXgJgFbjM/>). If @arcteryxacademy is mentioned, the identity of Arc’teryx Academy as an independent race or event is superior than its subdivided account of Arc’teryx brand in the context, so coders should code “@arcteryxacademy” as “6” rather than “1.”

- If a post mentions the same user more than once, coders should record them all and determine their identities.
 - If the link of accounts does not work or user does not exist, please code 0.
 - Brand or brand’s subordinate account—code “1”. Example: Salomon mentions “@salomonalpine.” @wornwear
 - Sponsored athlete (and their team)—code “2”. If a mentioned user is on the sponsored list above, the account should be coded as 2. Example: Arc’teryx mentioned Brett Harriton who is sponsored by the brand.
 - Photographer of the photo—code “3”.
 - Other individual—code “4”. People who are not listed above, but are mentioned in the post.
 - Place or venue—code “5”. Example: @montblanc_nr, @chamonixmontblanc
 - Race or event—code “6”. Example: @UTMBmontblanc; @arcteryxacademy.
 - Other outdoor brand or outdoor-related organization and community—code “7”.
Outdoor gear manufacturers. Corporations which provide outdoor products or service can be classified in this class. Online outdoor retailers such as REI and backcountry, extreme sports media and other outdoor-related organizations should be also classified in the division. Example: @goretexna, @tetongravity.

Girosnow. ATOMIC SKI. Magazine. However, food companies which produce outdoor foods should be excluded. Example: @gu energy; @lyofood:

<https://www.instagram.com/lyofood/>; @redbull:

<https://www.instagram.com/p/BozLbLfgLVj/>. melvinbrewing

- If a brand conducts general business which includes an outdoor sector, it should not be coded as 7.
- Other organizations, brands or companies which do not fit anyone as above—code “8”. Example: @iTunes @dirtbagmovie

Level 2.5: Hashtags

Count the number of hashtags (e.g., #arcteryx) present in the post. Coders should base hashtags on the exact number of hashtag handles used in a post, rather than hashtag content. For example, if a brand uses the same hashtag twice in one post, coders should code two hashtags. If no hashtag was used, code “0”.

Level 2.5.1: Notes on hashtags






















Document the hashtag(s) mentioned. If no hashtag is included, leave this column blank.

Level 2.6: Emoji accounts

Count the number of emojis in the post. If the post uses at least one emoji, please keep coding the level 7.1 and the level 7.2. If no emojis are used, code “0” for level 7.1 and leave the level 7.2 blank.

Level 2.6.1: Emoji types

Coders should determine the types of emoji(s) used in a post. If coders cannot determine the facial expressions' types, please check the link <https://emojipedia.org/people/> from Unicode emoji characters list, version 11.0 (state: November 2018) to decide.

Types	Subtypes	Examples	Code as
No emojis used			0
Pure positive facial expressions	Love	  ...	1
	Joy	  ...	
	Surprise	  ...	
Pure negative facial expressions	Anger	  ...	2
	Sadness	  ...	
	Fear	  ...	
Pure neutral facial expressions		   ...	3
Other objects		      ...	4
Combined only positive and negative facial expressions		1&2	5
Combined positive facial expressions and others rather than negative facial expressions		1&3; 1&4; 1&3&4	6
Combined negative facial expressions and others rather positive facial expressions		2&3; 2&4; 2&3&4	7

Combined neutral facial expressions and other objects		3&4	8
Mixed		1&2&3; 1&2&4; 1&2&3&4	9

Level 2.6.2: Notes on emoji

Coders are supposed to open the link on computers, laptops or tablets to paste the emoji(s) used in the post. Please record emoji(s) brands used in a post. In most cases, emojis will be shown in the table. If no emoji is involved, leave this item blank.

Level 2.7: Quotations

Coders should determine whether the text includes someone’s words, which are always shown in “”. If yes, code “1”. Otherwise, code “0”. Note that the name a route cited in citation marks should not be considered as quotation.

Level 3: Geotags

Indicate whether the post adds a location. If yes, code “1”. Otherwise, code “0”.

Level 4: Text length

Determine the length of text part (i.e., captions and hashtag) based on the number of characters.

- Short text: If a post is less than 125 characters (< 125), code “1”;
- Medium text: If the character of a post is between 125 to 200 ($125 \leq \text{characters} < 200$), code “2”;

- Long text: If a post is longer than 200 characters ($200 \leq \text{characters}$), code “3”.

APPENDIX B. VISUAL CODEBOOK

When coding the visual part of the post, coders should concentrate on visual information and ignore the textual messages.

Level 1: Media types

Coders should determine the media type of the post. If the post merely contains photo(s), code “1”; if the post only contains video(s), code “2”; if the post contains both photos and videos, code “3” (e.g., https://www.instagram.com/p/BkOYuODno_y/). Note if a play icon on the center of the visual content is present, this one is considered as a video.

Level 1.1: The number of uploading media

If coders are able to slide the post, coders should count how many photos or videos are included in this post. Note that one post can include both multiple photos and videos.

- If the first medium is a video rather than a photo, coders should code “0” in all visual attributes.

Level 2: Sports types

Coders should identify which outdoor sport involved in the image by equipment or attire.

- If the image is lacking information to determine the sports type, it should be coded as “others”. For example: https://www.instagram.com/p/Be_P3ughXtC/ should code as “others.” If the post is a pure landscape without any person, coders should base on visual elements presented in the post to determine whether the sport is determined. For example: <https://www.instagram.com/p/Biu71OZjtcl/> can be determined as kayaking so code as

“8”, while <https://www.instagram.com/p/BmltbBGnCPN/> can be either interpreted as presenting pure landscape or doing mountaineering/skiing sports so code it as “11”.

- If the sports type is not listed as below, please code “others” and make a note for it.
- If the post is a video, coders should determine the sports type based on the frame of the video shown on the screen.

Sports type	Code as	Example
Climbing (indoor climbing wall & rock climbing)	1	https://www.instagram.com/p/Blf4qXnn7LB/ https://www.instagram.com/p/BlapsFWnTnb/
Mountaineering/Ice climbing/Alpine skiing/Snowboarding	2	https://www.instagram.com/p/BoJuyGoA_-z/ https://www.instagram.com/p/BetyyixBEDH/ https://www.instagram.com/p/BnwDIEHn5LW/ https://www.instagram.com/p/BiXFW4ZH0in/
Hiking/Trekking	3	https://www.instagram.com/p/Bmd-aQKnFCm/ https://www.instagram.com/p/Bj-PHmOAZBA/
Trail running/Sky running/Marathon	4	https://www.instagram.com/p/BoRg2flAZjE/ https://www.instagram.com/p/BqsdXEwhkSZ/
Cycling/Mountain biking	5	https://www.instagram.com/p/Bnhy2-wAzby/ https://www.instagram.com/p/BgxIvjAFQ4S/
Camping (including camp life & campsite activities)	6	https://www.instagram.com/p/BnmqTWND0To/ https://www.instagram.com/p/BmJ9uocliMc/ https://www.instagram.com/p/BiuZUekH7wK/
Fishing	7	https://www.instagram.com/p/BfE8BO7FMRj/
Paddling/Kayaking/Canoeing	8	https://www.instagram.com/p/BbInhQYFA2_/

		https://www.instagram.com/p/Biu71OZjtcl/
Diving/Cliff diving	9	https://www.instagram.com/p/B1lz-J5lc6t/ https://www.instagram.com/p/BkbojvQAFNf
Surfing/Kite surfing/Swimming/Scuba diving	10	https://www.instagram.com/p/BnCvQAI3t9/ https://www.instagram.com/p/Bmr1RmyFWs1/
Other	11	https://www.instagram.com/p/BmHnhLGlj_q/

Level 3: Visual attributes

Coders should determine a post contains which element(s) listed as below. It is notable that a post may contain multiple elements.

- If there are multiple photos in the post, just code the first photo of the post.
- If the post is a video, code its static picture of the video as a regular photo instead of the video.
- Coders should make a note if there are other elements show in the post.








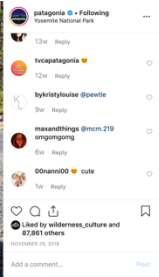


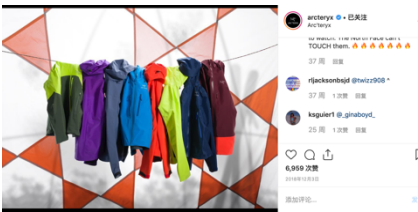
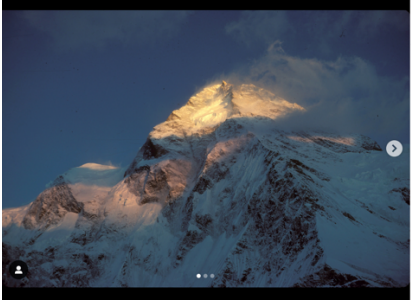


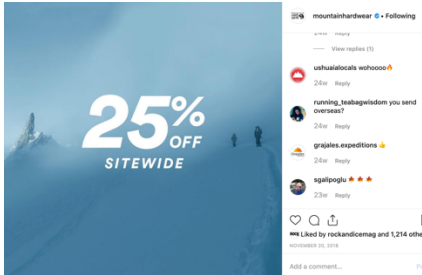
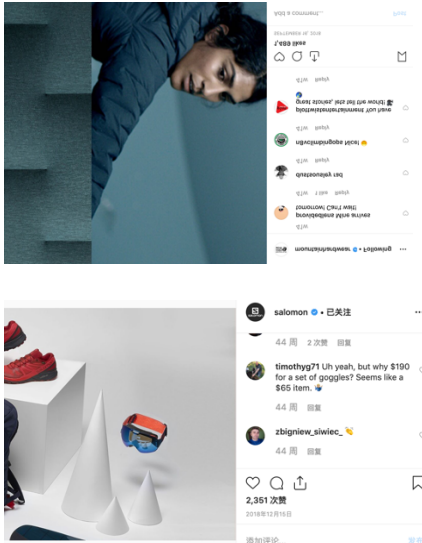
No	Elements	Description	Example	Rule
1	Human face	A close-up shot which captures and emphasizes an outdoors person's facial expressions either from the front or side. Usually the		If a post contains this element, code "1"; if not, code "0".

		photo captures a person’s shoulder or up.		
2	Body snap	A medium shot which shows an outdoors person up to 50% of their height or contains any body part. Note the second case where something like snow or waves blocks out a part of human body should be coded as “body snap” rather than “whole body.”	 	If a post contains this element, code “1”; if not, code “0”.
3	Whole body	A full shot with the full human figure in the frame. Usually a post provides a clear view of the environment or setting in which we find a character. However, if the person is too		If a post contains this element, code “1”; if not, code “0”.

		<p>inconspicuous to be seen (as small as a dot), it should not be counted in this category.</p> <p>(e.g.,</p> <p>https://www.instagram.com/p/Bg1dxfpAZLJ;</p> <p>https://www.instagram.com/p/Bfq0sRBHvd ;</p> <p>https://www.instagram.com/p/Bk-LV2on6KD)</p>		
4	Kids	<p>A child or children involved in the image.</p>	 	<p>If a post contains this element, code “1”; if not, code “0”.</p>
5	Animals	<p>Animals or pets such as dogs, birds, horses shot in the image.</p>		<p>If a post contains this element, code “1”; if not, code “0”.</p>

6	Brand logo	<p>A close-up shot of a product from three brands. As long as coders make sure a clear and complete targeted logo is presented in the image, it can be classified in this division. However, if the logo is too inconspicuous to be seen, it should not be coded as including a brand logo. (e.g., https://www.instagram.com/p/B18PQ7tgi5c/; https://www.instagram.com/p/BhhJXPdlHOW ; https://www.instagram.com/p/BnW1pQ4HyK7/)</p>		<p>If a post contains this element, code “1”; if not, code “0”.</p>
7	Product-only	<p>The image contains only outdoor products (e.g., backpacks, tents, etc.) without people. Such posts are not necessary to reveal any brand logo and can be</p>		<p>If a post contains this element, code “1”; if not, code “0”.</p>

		taken either in an indoor or outdoor setting.		
8	Pure landscape	It features only outdoor scenery without any human or outdoor product shown.		If a post contains this element, code "1"; if not, code "0".
9	Indoor setting	A photo can be assured as taken in the indoor rather than the outdoor setting.	 	If a post contains this element, code "1"; if not, code "0".

<p>10</p>	<p>Embedded text</p>	<p>Primarily uses text to create an image. It can consist of using only text or marry textual and visual messages by floating texts above the image.</p>		<p>If a post contains this element, code “1”; if not, code “0”.</p>
<p>11</p>	<p>Combined image</p>	<p>These posts can be either: 1) an image splices more than one picture together to convey the visual message, or 2) a post is a part of one “big image” and seems incomplete or lacking information if it solely observes the single post. Sometimes brands cut a normal image into three/six/nine pieces or ratios, and post them in order for a greater impression on users.</p>		<p>If a post contains this element, code “1”; if not, code “0”.</p>

Level 4: Tags

No matter what media type of the first visual post, coders should determine how many accounts are tagged by the author in the first photo of the post, which can be checked by tapping the photo. If the post tags accounts, there will be a small head icon shown at the left bottom. The account names will show on the screen if the author tags people. If there are no tags in the post, code “0”.

Level 4.1: Account handle [on sheet 2]

Coders should record account names which are tagged. If no tagged in the post, leave the level 4.1 to level 4.4 blank.

Level 4.2: Number of followers [on sheet 2]

Record the exact number of followers of the tagged account. Example: if an account has 997 followers, please code “997” rather than “1,000” (“1k” shown on the page) for this level.

Level 4.3: Number of following [on sheet 2]

Record the exact number of following of the tagged account. Example: if an account follows 997 accounts, please code “997” rather than “1,000” (“1k” shown on the page) for this level.

Level 4.4: Classification of tags [on sheet 2]

If it is not coded as 0 on level 4, coders should further record each tagged account and identify the users. If the user fits more than one classification, coders should determine which identity is the primary. For example, if a tagged sponsored athlete is mentioned at the photographer’s part,

coders should code the user as “3” rather than “2”

(<https://www.instagram.com/p/BiDXgJgFbjM/>). If “arcteryxacademy” is tagged, the identity of Arc’teryx Academy as an independent race or event is superior than its subdivided account of Arc’teryx brand in the context, so coders should code “arcteryxacademy” as “6” rather than “1.” If a post tags the same user more than once, coders should record them all and determine their identities.

- If the link of accounts does not work or user does not exist, code “0”.
- Brand or brand’s subordinate account – code “1”. Example: Salomon tags “salomonalpine.” @wornwear
- Sponsored athlete – code “2”. If a mentioned user is on the sponsored list above, the account should be coded as “2”. Example: Arc’teryx tagged Brett Harriton who is sponsored by the brand.
- Photographer of the photo – code “3”.
- Other individual – code “4”. People who are not listed above mentioned in the post.
- Place or venue – code “5”. Example: montblanc_nr, chamonixmontblanc
- Race or event – code “6”. Example: UTMBmontblanc; arcteryxacademy.
- Other outdoor brand or outdoor-related organization and community – code “7”.

Outdoor gear manufacturers, corporations which provide outdoor products or service can be classified in this class. Online outdoor retailers such as REI and backcountry, extreme sports media and other outdoor-related organizations should be also classified in the division. Example: goretexna, tetongravity. However, food companies which produce outdoor foods should be excluded. Example: gu energy; lyofood

<https://www.instagram.com/lyofood/>; redbull:

<https://www.instagram.com/p/BozLbLfgLVj/>. If a brand does general business which includes an outdoor sector, it should not be coded as “7”.

- Other organizations, brands or companies which are not fit anyone as above – code “8”.

Example: iTunes, dirtbagmovie

Level 5: Purchase links

Coders should use app on mobile devices for this level. Coders should determine whether the post is provided purchase links with item name and price so that users are able to purchase on Instagram. A small gift icon on the left bottom means it contain at least one purchase link.

Purchase link attached not in the first photo should be ignored. If no purchase links provided, code as “0”.