### An Index is Worth a Thousand Words:
### Considering Consumer Perspectives in the Development of a Sustainability Label

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**Background and Purpose**. In May of 2021, the Sustainable Apparel Coalition and Higg began to publicly disclose the environmental impact of select apparel brands, including H&M and Amazon (Sustainable Apparel Coalition, 2021). This is a welcomed approach to transparency, as prior research has demonstrated an overall consumer interest in having access to production information when making apparel purchasing decisions (Sustainable Apparel Coalition, 2019). Specifically, many consumers want to know about the environmental impact of the materials being used, as well as the working conditions of laborers (Sustainable Apparel Coalition, 2019). Previous studies suggest that such information should be communicated in an explicit and intuitive manner (Hyllegard et al., 2012; Ma et al., 2017; Yan et al., 2012), and could be presented via hang tags, visual stories, and logos (Hyllegard et al., 2012), as well as social media, websites, product labels, and QR codes (Sustainable Apparel Coalition, 2019).

Although many studies have focused on the topic of communicating garment sustainability, findings suggest a myriad of possible communication modes and therefore there exists a lack of understanding about the mode of sustainability information preferred by consumers. Thus, the purpose of this study was twofold: (1) to explore consumer preferences for apparel sustainability communication (i.e., what and how) and (2) to integrate these preferences into the development of a mock visual index that would function as a label attached to a garment, much like a hangtag. Signaling theory was adopted to address the purpose, as this theory proposes that information asymmetry exists between consumers and brands which could be reduced through the use of signals (Connelly et al., 2011). For example, in the apparel industry, brands are aware of the social and environmental costs of the apparel they produce, however, this information is rarely fully disclosed to consumers (James & Montgomery, 2017). Signaling theory contends that information asymmetry can be reduced should a signaler (i.e., entity with information) use signals (i.e., mode of communication) to communicate information to the receiver (i.e., entity desiring the information) (Connelly et al., 2010).

**Method.** With IRB approval from the researchers' university, 22 participants were recruited via purposive sampling (Merriam & Tisdell, 2015) to take part in focus group interviews. A total of six focus group interviews were conducted. The sample consisted of 14 females and 8 males who varied in age from 18 to 56 years old (average age of 34). Most participants (55%) were Caucasian, followed by African-American (23%), Asian (18%) and Latino (5%). Focus groups were conducted both in-person and via Zoom. Focus groups lasted between 42 and 84 minutes, for an average of 62 minutes. Interview questions focused on how apparel sustainability information should be communicated to attract attention, as well as what aspects of apparel production were of interest to participants. Data were transcribed verbatim and iteratively analyzed for common themes (Spiggle, 1994). Signaling theory (Connelly et al., 2010) was used as a conceptual lens during the process to better understand how apparel consumers (i.e.,

receivers) preferred to receive apparel sustainability communication (i.e., signal) from apparel brands (i.e., signaler) to reduce information asymmetry when purchasing apparel. A mock index (see Figure 1) was developed in garment hang-tag format based on the findings that emerged. **Results.** Analysis of focus group data yielded four emergent themes: *Many Birds, One Stone*; *Show Me a Picture*; *Catch My Attention*; and *Earn My Trust*. *Many Birds, One Stone*: Participants displayed a varying interest in and knowledge of sustainability. Thus, they emphasized that apparel sustainability-related communication must enable those who are not well versed on the issues to understand the information being communicated, while also meeting the needs of consumers who prefer more detailed information. *Show Me a Picture*: As illustrated in Figure 1, to meet varying consumer needs and interests, participants preferred brands to use a visual that quickly communicates the desired information, i.e., an index comprised of graphics or icons. As Helen noted "Icons...I think are the easiest way to communicate across information barriers." For participants, the index should separately detail a garment's overall sustainability as well as the social and environmental costs of production and in a visually compelling way. A QR code should also be included to allow access to more detailed sustainability information. *Catch My Attention*: Many participants expressed that sustainability information should be easy to understand and quick to interpret. As such, the inclusion of green (i.e., high sustainability) to red (i.e., low sustainability) colors were favored as these colors are "…already a tradition in like, the [stop] lights. Green means go" (Justin). As such, the brand could easily signal to consumers "this is good, [or] this is bad" (Ophelia). Thus, as demonstrated in Figure 1, a green to red gradient was used on both the front and back of the index. Those interested in a more general idea can view the front of the index to determine how sustainable an item is, whereas those interested in more information can scan the QR code, and/or flip to the back where the sustainability of the apparel item is denoted along social (i.e., work conditions and wages) and environmental dimensions (i.e., energy usage and chemicals in fibers), as these characteristics of apparel production were of the most interest to participants. *Earn My Trust*: Notably, most participants indicated that they "…don't actually trust brands to give [this] information" (Jocelyn). Participants therefore noted that the index should communicate that a third party was responsible for determining an apparel item's sustainability. Participants suggested that this can be achieved with the inclusion of that party's logo. Figure 1 provides the apparel sustainability index that resulted from the interpretation of the focus group data followed by feedback derived from member checks (Merriam & Tisdell, 2015) conducted using the completed index. Figure 1 includes the front and back of the apparel sustainability index, illustrating both a sustainable (i.e., left side of front and back) and unsustainable (i.e., right side of front and back) apparel item. **Conclusion.** Findings indicate that to reduce information asymmetry regarding the sustainability of an apparel item, participants (i.e., the receiver) prefer brands (i.e., the signaler) to use an index (i.e., the signal) that visually communicates the extent to which an apparel item was sustainably produced as verified by a third party. A mock apparel sustainability index was then developed, which is among the first created in the literature. As findings are limited due to the sample size, future studies are needed to test the likelihood of the index being adopted by consumers and brands, as well as its effects on brand evaluations and attitudes via a larger sample size.

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