Consumer Perceptions of Fibers with Respect to Luxury and Sustainability: An Exploratory Study

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Abstract This chapter contributes to the literature by examining an under-researched area: consumer perceptions of fibres with respect to luxury and sustainability. Theory-grounded questions are proposed, and an exploratory survey is designed and administered to a sample of young consumers. Results suggest that young consumers tend to perceive most fibres as *either* luxurious *or* sustainable and —with the exception of two fibers—*not both* luxurious *and* sustainable. In addition, sustainability was ranked last in importance with respect to characteristics deemed as important by consumers when considering fibres in clothing and apparel decisions. Findings have implications for how fibres—and the clothing and apparel made from them—can be designated and marketed.

1 Introduction

Over the past several years a growing body of literature has been emerging on consumer perceptions of luxury and sustainability with respect to fashion. In these studies, fashion has been defined in terms of clothing and apparel [1, 6, 22]. While sustainability and consumer perceptions of sustainability are being explored in the fashion luxury sector [15], little research exists on consumer perceptions of luxury and sustainability with respect to fibres, which are also defined as fashion goods [19]. Therefore, the purpose of this chapter is to contribute to the literature in this area and, in particular, to examine consumer perceptions of luxury and sus-

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tainability with respect to natural animal hair fibres. The chapter also contributes to the literature by examining whether consumers perceive the same fibres to be both luxurious and sustainable. Results of the study can contribute to the state of the art on how fibers—and the clothing and apparel that are made from them—are perceived by consumers, and how fibers, clothing and apparel can be marketed. Study results also have implications for usage of the terms "luxury" and "sustainability" with respect to fibres, clothing, and apparel.

The chapter begins by drawing upon the more recent literature to examine definitions of luxury and sustainability, and to summarize current findings on consumer perceptions of luxury and sustainable fashion. Then, questions—that are grounded in the literature on clothing and apparel—are proposed about consumer perceptions of natural animal hair fibres with respect to luxury and sustainability. Since our topic is under-researched, with little existing data or bases for hypotheses, we choose to propose exploratory questions rather than propose hypotheses. An exploratory study is designed and administered to address our questions and learn more about consumer perceptions of luxury and sustainability with respect to animal hair fibres. The data are analyzed and discussed and the limits of this exploratory study are considered. Finally, recommendations for future research are discussed.

2 Recent Literature

Both "luxury" and "luxury fashion" have been defined in several different ways [8, 17, 19]. One of the earliest and most widely cited luxury scales was developed by Kapferer [14]; he identified four different types of luxury consumers—those who look for: (1) beauty and excellence; (2) creativity and innovation; (3) rareness; and (4) brand reputation and timelessness [17]. DeBarrier et al. [3] combined the three most quoted luxury scales: Kapferer [14], Dubois et al. [4] and Vigneron and Johnson [26]. From these three scales, they derived and proposed a hybrid scale of eight dimensions of luxury: (1) elitism; (2) distinction and status; (3) rarity; (4) reputation; (5) creativity; (6) power of the brand; (7) hedonism; and (8) refinement. According to Dubois and Laurent [19], when luxury is linked to fashion goods, it often falls into categories—such as fur and leather goods, perfume, jewelry, apparel, and raw materials such as fine fibres, gold and diamonds. For example, Franck's [9] list of luxury animal hair fibres includes mohair, cashmere, pashmina (fine type of cashmere wool), camel hair, alpaca, llama, vicuna, angora and qiviut (the underwool of the Arctic muskox).

Both "sustainability" and "sustainable fashion" have been defined in several different ways, and researchers have cited the large number of definitions as problematic [1, 6]. One of the oldest and most cited definitions of sustainability is that offered by the Brundtland Commission of the United Nations in 1987. Their definition of sustainability or sustainable development is very broad, and can be

paraphrased as that which meets the needs of the present generation without compromising the ability of future generations to meet their needs [27].

Another widely cited, more specific and more easily applicable perspective on sustainability is the triple bottom line (TBL). This study uses the concept of TBL to define sustainable fibres, and this definition will be presented and further explained later in the chapter. TBL was developed by Elkington [5] as a decision-making framework for sustainability in organizations, but has been extended to include decisions about sustainability in products, services and other entities. TBL holds that impacts with respect to three dimensions—economic/financial, social and environmental—must be considered equally in the decision-making process. This perspective differs from more traditional organizational decision making which typically considers mainly economic/financial impacts.

According to TBL, the impacts of any decision must be considered in terms of: (1) economic or financial sustainability, or the impact on the long-run survival of the organization, product, service, or entity; (2) social sustainability, or the impact on all members of society, including all members of the relevant supply chain plus other stakeholders (e.g., people living near manufacturing and/or disposal centers; future generations); and (3) environmental sustainability, or the impact on supply of natural resources and waste. TBL is sometimes referred to as the three Ps—profits, people and planets. Hence, makers of sustainable fibres must consider the impact of their supply chain with respect to: (1) economic or financial sustainability, or the long-run survival of their organization; (2) social sustainability, or all stakeholders in the supply chain, plus members of society in general; and (3) environmental sustainability, or use, waste and pollution of resources, including soil, air, water and other natural resources. Both the Brundtland Commission's definition of sustainability and TBL have been used by researchers in fashion and luxury [16, 10].

"Sustainable fashion" is often defined in terms of what it is not; that is, it is not fast fashion [1, 6]. Finn [6] observes that luxury fashion may have characteristics in common with sustainable fashion, since luxury clothing is more often passed down from generation to generation and not discarded. In Finn's words, "…amongst the mountains of clothing that are being discarded, why are there not more Channels, Vuittons or Saint Laurents?" (p. 2). Annamma et al. [1] suggest that luxury "can be both green and gold" (p. 289). They continue, "Luxury brands can become the leaders in sustainability because of their emphasis on artisanal quality" (p. 291). According to Van Nes and Cramer [25], consumers listed their primary requirements from eco-fashion to be durability, quality and style. According to Annamma et al. [1], durability, quality and style are also qualities of luxury brands. Hennigs et al. [13] reported that luxury brands are increasingly adopting sustainability as part of "the luxury essence" (p. 27). The majority of Kapferer and Michaut's [15] respondents reported that "luxury brands should be exemplary in terms of sustainability … and, given the price of luxury, it should be shocking to learn that these brands are not compliant" (p. 12). However, an empirical study by Kapferer and Michaut-Denizeau [16] suggested that luxury buyers are somewhat ambivalent, in that they consider luxury and sustainability to be contradictory.

Some consumers—especially young, fast-fashion consumers—often perceive sustainable fashion to be unstylish and undesirable [1]. In addition, Annamma et al. [1] found that a large number of young people support sustainability through purchasing sustainable products and services in other aspects of their lives, but separate sustainability from their fashion purchases. Furthermore, older consumers, such as female professionals who purchase clothing for themselves and their children, supported the idea of sustainability, but did not purchase sustainable clothing due to price and convenience issues (Ritch and Schroder [22]).

Luxury fibres have been defined and listed in several sources, with some of the most recent compilations by Karthik et al. [18] and Hassan [12]. Karthik et al. [18] include natural, luxury fibres from animals, insects and plants, and Hassan [12] includes natural fibres from animals and insects. Since our study is exploratory, we focused on nine natural, luxury fibres from animals, in the interest of keeping our focus limited. We drew from Franck's [9] list of natural animal hair fibres, which is generally consistent with the lists by Hassan [12] and Karthik et al. [18]. However, future studies should include luxury insect and plant fibres, as well as additional animal fibres—such as cervelt (rare natural down fibre from red deer) and guanaco —and this will be discussed later in the chapter.

3 Research Questions

The differing perspectives reflected above point to yet unresolved questions about consumer perceptions of luxury fashion, sustainable fashion and the relationship between luxury fashion and sustainable fashion. To shed further light on these issues, we propose four exploratory questions. Furthermore, we examine an under-researched topic within the fashion luxury products category, which is luxury fibres [7], since they are included in the category of fashion luxury products [19]. Since there is little research on consumer perceptions of luxury and sustainable fibres, our questions are grounded in recent research on this topic with respect to other luxury and sustainable fashion products. Our questions include:

Q1. Do consumers perceive fibres that are designated by experts as "luxury fibres" to be luxurious?

Q2. Why do consumers perceive a particular fibre as luxurious—or not luxurious?

The first question will help to determine whether consumer perceptions of luxury fibres are consistent with expert definitions of luxury fibers. Since researchers have cited definitional problems with the term "luxury", due to its subjective nature (Kapferer and Michaut-Denizeau [16]), it is important to know whether consumers define luxury fibres in the same way as the experts and researchers who develop the scales and lists. For example, Kapferer and Michaut-Denizeau [16] discussed the history of luxury, which was allied with rare, high-quality products that were made by hand, and with respect for tradition. They contrast this with the current era of mass luxury, whereby luxury may better resemble consumer or fashion goods,

which will quickly become obsolete and discarded. Hence, the answer to the first question can provide insight about consumer perceptions of luxury fibers, or the lack thereof, and may have implications for how luxury and luxury fibers are designated and marketed in the future.

The second question will help to determine whether consumer perceptions of luxury fibres are consistent with consumer perceptions of other types of luxury goods, as specified by the three most often quoted luxury scales: Kapferer [14], Dubois et al. [4], and Vigneron and Johnson [26]. For example, Kapferer [17] identified four different types of luxury consumers—those who look for (1) beauty and excellence; (2) creativity and innovation; (3) rareness; and (4) brand reputation and timelessness. DeBarrier et al. (2012) combined the three most quoted luxury scales (listed above) and derived a hybrid scale of eight dimensions of luxury: (1) elitism; (2) distinction and status; (3) rarity; (4) reputation; (5) creativity; (6) power of the brand; (7) hedonism; and (8) refinement. Since these luxury scales address luxury goods in general, and not luxury fibres per se, it is important to investigate consumer perceptions of luxury fibres with respect to these scales. The answer to this question may have implications for how luxury fibres are designated and marketed in the future.

Based on the literature discussed above, we can ask additional questions with respect to consumer perceptions of luxury fibres:

Q3: Do consumers perceive luxury fibres to be sustainable?

Q4: What variables influence consumer choices of fibres when shopping for fashion?

With respect to the third question, some researchers [2, 6] have suggested that luxury fashion and sustainable fashion have some characteristics in common. Annamma et al. [1] suggest that luxury "can be both green and gold" (p. 289). Likewise, Hennigs et al. [13] reported that luxury brands are increasingly adopting sustainability as part of the experience or value of their product. However, Kapferer and Michaut-Denizeau [16] reported that luxury customers are ambivalent, since they find luxury and sustainability to be contradictory. The third question will help to determine whether consumers perceive a relationship between luxury and sustainability with respect to fibers. The answer to this question may have implications for how luxury and sustainable fibers are designated and marketed in the future.

With respect to the fourth question, some researchers (Ritch and Schroder [22]) have suggested that variables such as sustainability are least important—and characteristics such as price and quality are most important—when consumers shop for clothing and apparel. Furthermore, older consumers, such as female professionals who purchase clothing for themselves and their children, supported the idea of sustainability, but did not purchase sustainable clothing due to price and convenience issues (Ritch and Schroder [22]). Annamma et al. [1] found that a large number of young people support sustainability by purchasing sustainable products and services in other aspects of their lives, but separate sustainability from their fashion purchases. The fourth question will help to determine which variables are

most and least important with respect to fibres in clothing and apparel when consumers are making purchasing decisions. The answer to this question may have implications for how fibers are designated and marketed in the future.

4 Methods

To address the four questions above, we designed an exploratory study and administered it through hard-copy (paper) survey instruments.

To address Q1, which set out to examine consumer perceptions of luxuriousness of natural animal hair fibres, we used the luxury animal hair fibres in Franck's [9] list of luxury natural animal hair fibres: alpaca, angora, camel hair, cashmere, llama, mohair, pashmina, qiviut, and vicuna. Frank's list was generally consistent with more recent compilations of natural fibres, such as Hassan [12] and Karthik et al. [18]. We chose Franck's list since it enumerated animal hair fibres only, unlike the more recent lists that included insect and plant fibres [12, 18]. We focused on luxury natural animal hair fibres only, as opposed to including luxury insect or vegetable fibres, in order to keep this exploratory study manageable and to a manageable length to maximize responses. Future research should include luxury insect and vegetable fibres; this will be discussed later in this chapter.

In addition to Frank's (2001) list of luxury natural animal hair fibres, we added merino wool to our list, giving a total of 10 types of natural animal fibres. We added merino wool due to recent efforts by industry groups and designers to recognize and use merino wool as a luxury fibre [20]. For example, The No Finer Feeling ad campaign informs consumers about the natural benefits and attributes of merino wool. Fashion leaders, including Vivienne Westwood, have become ambassadors for the initiative and for merino wool as a luxury fibre. Hence, this study will measure consumer perceptions of merino wool with respect to luxury.

For Q1, we listed the 10 types of luxury natural animal fibres with a Likert-type scale of choices and asked respondents to check the one response that described how luxurious they considered each type of fiber to be: not luxurious, a little luxurious, luxurious, very luxurious or unfamiliar with this fibre. Q1 and results are illustrated in Table 1 and discussed in the next section, "Results".

For Q2, we set out to examine consumer perceptions of why fibers are luxurious. We drew upon Kapferer's luxury scale, which describes four types of luxury customers, or those who look for: (1) beauty and excellence; (2) creativity and innovation; (3) rareness; and (4) brand reputation and timelessness. We also drew upon the hybrid, eight-variable luxury scale developed by DeBarnier et al. [3] which is based upon the three most cited luxury scales: Kapferer [14], Dubois et al. [4] and Vigneron and Johnson [26]. Drawing upon these luxury scales—and in order to make the survey easily understandable by respondents—we included six different categories as possible explanations for why consumers perceive fibres to be luxurious. Respondents were instructed to check as many boxes as applied. It is important to note that our six categories map onto both Kapferer's luxury scale and

DeBarnier's hybrid luxury scale, as illustrated in Appendix. Our six categories to explain consumer perceptions of why fibres are luxurious are: (1) Costly (economically expensive); (2) Rare/Unique (scarce, limited, uncommon); (3) Good Feel (on the skin/body); (4) Status Symbol (respected, admired, indicative of high social standing); (5) Beautiful (pleasing to the senses or mind); and (6) Always in Style (timeless).

For Q2, we listed the 10 natural animal fibres from Q1 and asked respondents to check all categories that applied to explain why they considered each fibre to be luxurious. In addition to the six categories listed above, we also added a category of N/A, if respondents were unfamiliar with the fibre. Q2 and results are illustrated in Table 2 and discussed in the next section, "Results".

To address Q3, which sets out to examine whether consumers perceived luxury fibres as sustainable, we used the list of 10 natural animal fibres from Q1 and Q2. We also used a Likert-type scale of choices and asked respondents to check the one response that described how sustainable they considered each type of fiber to be: not sustainable, a little sustainable, sustainable, very sustainable or unfamiliar with this fiber. We provided the following definition of sustainable fibres: "Sustainable fibers can be defined as fibres that are produced with minimal negative impact on the environment and society". For example, they use resources efficiently during production and processing (minimal waste), avoid use of harmful chemicals during production and processing and treat workers and animals ethically (no sweatshops or animal cruelty). This definition includes applications of economic, environmental and social sustainability and, hence, captures the TBL perspective on sustainability that was explained earlier in this chapter. The first part of the definition (efficient use of resources and minimal waste) most strongly addresses economic and environmental sustainability. The next part of the definition (avoiding use of harmful chemicals) most strongly addresses environmental sustainability. The last part of the definition (treating workers and animals ethically) most strongly addresses social sustainability. The definition is purposely brief in the interest of conciseness and maximizing the number of survey responses.

In addressing Q3, we are testing whether consumers perceive luxury fibres as both luxurious and sustainable; this issue is currently being explored in the literature and, thus far, findings are not conclusive. For example, Finn [6] observed that luxury fashion may have characteristics in common with sustainable fashion, since luxury clothing is more often passed down from generation to generation and not discarded. Annamma et al. [1] suggested that luxury "can be both green and gold" (p. 289). According to Van Nes and Cramer [25], consumers listed their primary requirements from eco-fashion to be durability, quality and style. According to Annamma et al. [1], durability, quality and style are also qualities of luxury brands. Hennigs et al. [13] reported that luxury brands are increasingly adopting sustainability as part of "the luxury essence" (p. 27). The majority of Kapferer and Michaut's [15] respondents reported that "luxury brands should be exemplary in terms of sustainability … and given the price of luxury, it should be shocking to learn that these brands are not compliant" (p. 12). However, an empirical study by Kapferer and Michaut-Denizeau [16] suggested that luxury buyers are somewhat

ambivalent, in that they consider luxury and sustainability to be contradictory. Q3 and results are illustrated in Table 3 and discussed in the next section, "Results".

To address Q4, which sets out to examine consumer ranking of importance of variables when choosing fibres for clothing and accessories, we used a list of nine variables, and asked respondents to number the variables from 1 to 9, to reflect their importance in considering fibres, when shopping for clothing and accessories (1 was most important and 9 was least important). Four of the variables for Q4 were drawn from our luxury scale from Q2 (attractiveness, feel/comfort, rareness/uniqueness, status). We also used the variables of price, quality, durability and whether the product was in style at the time (of choice) since these variables were perceived as important in earlier studies to explain clothing choices by consumers [22]. We also added the variable of sustainability, so that we could measure the importance of sustainability when consumers choose fibres for clothing and accessories. We used the same definition of sustainability/sustainable fibres as was used in Q3. Therefore, the variables for Q4 were price, quality, durability, attractiveness, whether it is in style at the time, feel/comfort, rareness/uniqueness, status and sustainability (meaning sustainable fibre). Q4 and results are illustrated in Table 4 and discussed in the next section, "Results".

The sample of respondents consisted of 45 undergraduate students in fashion merchandising and fashion design classes, who ranged in age from 17 to 23 years old. While these students may be more knowledgeable about fashion, luxury and sustainability than students from other majors, they represent future fashion professionals and/or the most engaged and knowledgeable fashion consumers. They also represent the Millennial Generation, which is the up-and-coming generation whose economic spending power will be growing over the next several decades. For these reasons, they are a good sample for our study, which is an initial, exploratory study. We had 42 complete responses to Q1, Q2 and Q4 of the anonymous survey—a response rate of 93 %. We had 36 complete responses to Q2 of the anonymous survey—a response rate of 86 %.

5 Results and Discussion

Results of the survey are reported in the tables below and are further explained below. Results in the form of answers to the four questions proposed in this study are also provided, as is discussion.

Results of Table 1

For Table 1 the numbers in each column represent the total number of respondents ($n = 42$) and the numbers in brackets in column V represent the total percentage of respondents ($n = 42$). As indicated in Table 1, consumers perceive some luxury fibres as more luxurious than others. Cashmere is clearly perceived as the most luxurious fibre, with 90 % of respondents rating it as luxurious or very luxurious. All respondents were familiar with cashmere, as well as llama and merino wool.

Table 1 (Q1): Consumer perceptions of luxuriousness of natural animal hair fibres (check one box)

Type of fiber	I. Not luxurious	II. A little luxurious	III. Luxurious	IV. Very luxurious	V. III. + IV.	VI. Unfamiliar with this fibre
Alpaca	1	15	20	4	24 [57]	2
Angora	2	8	16	8	24 [57]	8
Camel hair	5	16	9	8	17 [40]	2
Cashmere	0	4	17	21	38 [90]	0
Llama	8	14	12	4	16 [38]	0
Mohair	2	13	13	7	20 [48]	5
Pashmina	1	10	15	6	21 [50]	10
Qiviut	1	2	4	9	13 [31]	26
Vicuna	2	3	7	14	21 [50]	15
Merino wool	9	17	9	7	16 [38]	0

Note Numbers in each column represent the total number of respondents providing that answer (n = 42), and the numbers in brackets in column V represent the total percentage of respondents indicated by the non-bracketed number in column V (n = 42)

After cashmere, alpaca and angora were rated as luxurious or very luxurious by 57 % of respondents. Pashmina and vicuna were rated as luxurious or very luxurious by 50 % of respondents. In the case of pashmina and vicuna, 24 % and 36 % of respondents, respectively, were unfamiliar with the fibre. Qiviut was the least familiar fibre, with 62 % of respondents reporting that they were unfamiliar with it.

In contrast, all respondents were familiar with merino wool; however, only 38 % rated it as luxurious or very luxurious and the highest percentage of respondents (21 %) rated it as not luxurious. This may be because merino wool has not enjoyed traditional status as a luxury fibre, and efforts by the industry to label it as such are relatively new [20].

Results of Table 2

In Table 2 the number in each column represents the total number of respondents (n = 42). Table 2 illustrates why consumers in our sample perceived fibres to be luxurious. Cashmere, which was rated the most luxurious fibre in Table 1, received clearly the highest number of respondent ratings with respect to why it was perceived as luxurious. Consumers perceived cashmere to be luxurious because of its costliness, good feel, status, beauty, and consistent stylishness. Hence, in this sample, consumer perceptions of why cashmere is luxurious reinforced earlier rationales by Kapferer [17] and others for why consumers perceive goods as luxurious.

On the other hand, cashmere received much lower respondent ratings for rareness/uniqueness; in fact, cashmere received the second lowest respondent rating for rareness/uniqueness after merino wool. As reported in Table 1, 38 % of respondents rated merino wool as luxurious or very luxurious, while 90 % of respondents rated cashmere as luxurious or very luxurious. Therefore, this group of respondents perceives cashmere as an extremely luxurious fibre—for reasons of its

Table 2 (Q2): Consumer perceptions of why fibres are luxurious (check as many boxes as apply)

Type of fibre	Costly	Rare/Unique	Good feel	Status symbol	Beautiful	Always in style	N/A
Alpaca	16	10	20	6	16	5	5
Angora	16	12	18	6	15	3	11
Camel hair	12	20	7	6	12	3	5
Cashmere	32	6	32	28	30	30	1
Llama	5	12	8	4	11	1	6
Mohair	14	12	16	5	12	2	7
Pashmina	18	10	20	9	19	8	10
Qiviut	11	14	7	9	8	2	26
Vicuna	14	15	8	9	6	2	15
Merino wool	11	2	20	7	21	24	3

Note Numbers in each column represent the total number of respondents providing that answer ($n = 42$)

costliness, good feel, status, beauty and timelessness with respect to style—and their overall perception of the luxuriousness of cashmere is not negatively affected by their corresponding perception that cashmere is not a rare or unique fibre.

As indicated in Table 2, consumers in this sample tended to respond strongly with respect to cost, good feel and beauty when explaining why fibres were perceived as luxurious. These results for fibres echo results for other types of luxury goods [17].

Results of Table 3

In Table 3 the numbers in each column represent the total number of respondents ($n = 36$). The largest number of respondents (26 respondents or 72 %) perceived merino wool to be a sustainable or very sustainable fibre. Alpaca was perceived a

Table 3 (Q3): Consumer perception of luxury fibres as sustainable (check one box)

	I. Not sustainable	II. A little sustainable	III. Sustainable	IV. Very sustainable	V. III. + IV.	VI. Unfamiliar with fibre
Alpaca	5	5	17	8	25 [69]	1
Angora	8	7	9	8	17 [47]	3
Camel hair	9	8	12	6	18 [50]	1
Cashmere	7	8	13	5	18 [50]	0
Llama	7	2	17	7	24 [67]	0
Mohair	6	5	13	7	20 [56]	3
Pashmina	8	7	7	4	11 [31]	10
Qiviut	6	4	5	3	8 [22]	18
Vicuna	8	6	6	3	9 [25]	13
Wool (merino)	5	4	19	7	26 [72]	1

Note Numbers in each column represent the total number of respondents providing that answer ($n = 36$), and the numbers in brackets in column V represent the total percentage of respondents indicated by the non-bracketed number in column V ($n = 36$)

Table 4 (Q4): Consumer ranking of importance of nine variables when considering which fibres to choose while shopping for clothing and accessories (1 is most important and 9 is least important)

Variables/Importance	1	2	3	4	5	6	7	8	9
Price	11	7	7	7	4	4	1	1	0
Quality	9	5	7	10	6	5	0	0	0
Durability	0	4	6	5	10	10	4	3	0
Attractiveness	20	7	6	4	2	2	0	1	0
Whether it is in style at the time	2	2	5	2	7	6	11	6	1
Feel/Comfort	5	12	6	5	5	3	3	2	1
Rareness/Uniqueness	1	4	5	2	4	6	5	13	2
Status	0	1	0	3	0	3	8	9	18
Sustainability	0	0	2	3	4	3	7	5	18

Note Numbers in each column represent the total number of respondents providing that answer (n = 42)

sustainable or very sustainable fibre by 69 % of respondents, with the perception of llama as a sustainable or very sustainable fibre by 67 % of respondents. Other fibers that were perceived as sustainable or very sustainable by at least 50 % of respondents were mohair (56 %), camel hair (50 %) and cashmere (50 %).

Results of Table 4

In Table 4 the number in each column represents the total number of respondents (n = 42). The largest number of respondents (20 respondents or 48 %) rated attractiveness as the most important variable (#1) when considering which fibers to choose while shopping for clothing and accessories. The variable with the second largest number of #1 (most important) ratings was price (11 respondents, or 26 percent), and quality received the third largest number of number one ratings (9 respondents or 21 %). The fourth largest number of #1 ratings was feel/comfort (5 respondents or 12 %). These results for fibres echo results for other types of fashion [22] with respect to consumer perceptions of important variables when shopping.

Correspondingly, the largest number of respondents (18 respondents or 43 %) rated sustainability and status as the least important variable (#9) when considering which fibers to choose while shopping for clothing and accessories. The low ranking of sustainability with respect to its importance in fibre choices is consistent with earlier research on consumer perceptions of the importance of sustainability in clothing choices (Ritch and Schroder [22]; [1]).

5.1 Answers to the Study Questions

As stated above, this chapter proposed four exploratory questions about consumer perceptions of luxury and sustainability with respect to fibres. While the focus on

fibres is an under-researched area the questions were grounded in earlier research on luxury and sustainable fashion. Measures were designed and a survey instrument was developed and administered to a sample of young fashion consumers. Based on survey responses, each question (and response) will be addressed and discussed here, and discussed further in the following section, "Discussion":

Q1: Do consumers perceive fibres that are designated by experts as "luxury fibers" to be luxurious?

As discussed in detail in the "Results" section, some fibres were perceived as much more luxurious than others. Cashmere was clearly perceived as the most luxurious by these respondents, with alpaca and angora ranked as distant seconds. Respondents were unfamiliar with several of the fibres. Therefore, our respondents do not tend to perceive luxury fibres similarly to experts in the field [9].

Q2: Why do consumers perceive a particular fibre as luxurious—or not luxurious?

As discussed in detail in the "Results" section, consumers tended to respond strongly with respect to cost, good feel and beauty when explaining why fibres were perceived as luxurious. These results for fibres echo results for other types of luxury goods [17].

Q3: **Do consumers perceive luxury fibres to be sustainable?**

As discussed in detail in the "Results" section the luxury fibres in this study were not generally perceived as both luxurious and sustainable by high percentages of respondents. Alpaca was the only fibre that was perceived as both luxurious or very luxurious and sustainable or very sustainable by more than 50 % of respondents.

Q4: What variables influence consumer choices about fibres when shopping for fashion?

As discussed in detail in the "Results" section, respondents rated attractiveness, price and quality as first, second and third in importance, respectively. The largest number of respondents rated sustainability as the least important variable (#9) as they consider which fibres to choose when shopping for clothing. These results for fibres echo the results for other types of fashion (Ritch and Schroder [22]) with respect to consumer perceptions of important variables when shopping.

6 Discussion

Since this was a small, exploratory study on an under-researched topic—perception of luxury and sustainability with respect to fibres—our ability to generalize our findings is limited. However, despite the limits of this study, it asked some new questions and yielded some interesting results that may inform future research and practice.

With respect to luxury, our results tend to reinforce some of the earlier research on consumer perceptions of other types of luxury fashion and products. For example, in our study, consumer explanations for why they perceived fibres as luxurious were most often costliness, beauty and good feel (on the body). These

findings are consistent with earlier research and research frameworks for luxury goods [17].

However, when presented with a list of luxurious animal hair fibres, as articulated by Franck [9], respondents do not perceive all fibres on the list as luxurious. Only half the fibres on the list were perceived as luxurious or very luxurious by at least 50 % of respondents. This result may be partially due to lack of familiarity with some of the lesser known fibres (e.g., qiviut, llama). However, fewer than 50 % of respondents perceived some of the better known fibres (e.g., camel hair, mohair) as luxurious. These results—especially if replicated in a larger and more diverse survey sample—may have implications for how luxury fibres are defined and/or marketed in the future.

With respect to two of the best known fibres (cashmere and merino wool) in this study, there seems to be an inverse relationship between perceptions of luxury and perceptions of sustainability. That is, cashmere was perceived as luxurious or very luxurious by the highest percentage of respondents (90 %), but was perceived as sustainable or very sustainable by only 50 % of respondents. Merino wool was perceived as luxurious or very luxurious by 38 % of respondents, but perceived as sustainable or very sustainable by 72 % of respondents (the highest percentage ranking as a sustainable fibre among all fibres in the survey). Hence, none of the fibres in this study was perceived as both luxurious and sustainable by high percentages of respondents. This finding may be consistent with earlier findings (Annamma 2012) that younger consumers tend to perceive sustainable fashion as less desirable (and, by extension, may not perceive the same fashion or fibre as both sustainable and luxurious). This finding may also be consistent with the findings of Kapferer and Michaut-Denizeau [16]; they reported that luxury buyers consider luxury and sustainability to be somewhat contradictory. This relationship should be retested in a larger and more diverse sample of subjects.

In this study, it is also interesting that cashmere's high ranking as a luxurious fibre coexists with its relatively low ranking as a rare or unique fibre, especially since experts such as Kapferer [17] define one dimension of luxury as rareness or uniqueness. Perhaps this finding may be explained by the relatively plentiful supply of cashmere clothing and accessories over the past several years; however, this relationship should be retested in a larger and more diverse sample of subjects. Correspondingly, future studies should also examine the relationship between consumer perceptions of high volume (or plentiful supply) and luxury.

The only fibre that was perceived as both luxurious or very luxurious, and sustainable or very sustainable, by more than 50 % of respondents was alpaca. These results—especially if replicated in a larger and more diverse survey sample—may have implications for how fibres are designated and marketed and, in particular, how alpaca, cashmere and merino wool are designated and marketed in the future. For example, alpaca may be able to be designated and marketed as both luxurious and sustainable, especially to young consumers who made up this sample. This type of marketing may attract young, fast-fashion consumers, who are supportive of sustainability across their lifestyles, but do not buy sustainable or eco-fashion because they perceive it as unattractive or unfashionable [1]. Likewise,

this type of marketing may also attract consumers who oppose fast fashion but support sustainable fashion choices. Of course, if marketers decide to market alpaca as a fibre that is both luxurious and sustainable, they will have to address and integrate sustainable practices along the whole value chain—or risk accusations of greenwashing, and subsequent negative consequences.

Given current consumer perceptions of merino wool as much more sustainable than luxurious—and recent efforts by the industry to market it as luxurious—the industry might consider strategies to change perceptions of merino wool so that consumers see it as both a luxury fibre and a natural/sustainable fibre. If these strategies are successful, merino wool may be able to be marketed to both luxury consumers and consumers who value sustainable fashion. Alternatively—and/or if strategies to market merino wool as a luxury fiber fall short of expectations—the industry may want to leverage current perceptions of merino wool as a sustainable fibre.

Based on the results of this exploratory study, consumers tend to choose fibres that are attractive, economical and high quality. If these results can be replicated with larger, more diverse samples, the industry may want to consider an educational campaign that focuses on the attractiveness, economy and quality of sustainable fibres. In addition, the industry may consider educational campaigns to better familiarize consumers with lesser known natural fibres such as qiviut and vicuna.

7 Conclusions and Recommendations for Future Research

The results of this study suggest that young consumers do not tend to define luxury animal hair fibres in the same way as the experts who construct the lists of luxury animal hair fibres. They also suggest that young consumers do not tend to perceive luxuriousness of fibres in the same way as the experts who construct the fashion luxury scales. Young consumers identify more strongly with the qualities of cost, good feel and beauty, in general. However, these same young consumers identify less strongly with the qualities of rareness/uniqueness, status symbol and always in style. While these findings may be at least partly a function of the relatively young age (17- to 23-year-olds) and the relatively small sample of respondents in this study, future studies should continue to investigate these issues and the corresponding implications for defining, labelling and marketing luxury animal hair fibres to the up-and-coming generation of millennial consumers represented in this study, in particular. According to the Pew Research Foundation, the Millennial Generation currently ranges in age from about 15 to 34 years old (those born from about 1980 to about 2000), so the economic purchasing power of this group will continue to grow over the next several decades.

These study results also suggest that young consumers tend to categorize luxury animal fibres as either luxurious or sustainable—and not both luxurious and sustainable. These results may confirm findings by other researchers, such as Annamma et al. [1], who reported that young, fast-fashion consumers perceive sustainable fashion to be undesirable and unstylish, and Kapferer and

Michaut-Denizeau [16], who reported that luxury buyers tend to view luxury and sustainability as contradictory. To follow up these results, future studies should continue to examine which fibres are considered luxurious, which are considered sustainable, and which are considered both—and why. In addition to the luxury animal fibres included in this study, other luxury animal fibres such as cervelt and guanaco should be included in future research. In addition to luxury animal fibres, luxury fibres from insects (silks) and plants (e.g., lotus, milkweed, pine, pineapple leaf, soy, and others) should also be included in future research.

Future studies should also employ diverse research methods. Richer methods such as interviews can help to uncover why, for example, cashmere receives high respondent ratings with respect to luxuriousness, despite the fact that consumers do not perceive it to be unique or rare. Follow-up surveys and richer research methods can also help to explain whether there is an inverse relationship between perceptions of luxury and perceptions of sustainability with respect to fibres—and better specify the relationship, if one exists.

With respect to young consumer rankings of variables when they are considering which fibers to choose for clothing and accessory purchases, respondents ranked price, attractiveness and quality as first, second and third, respectively. Sustainability was ranked last (#9). These results may confirm similar findings by earlier researchers with respect to other fashion goods (Ritch and Schroder [22]). While the results in this study may be partially due to the relatively young age and budget consciousness of respondents, they may also confirm earlier research by researchers such as Annamma et al. [1] that suggests that young people tend to support sustainability through purchases in other aspects of their lives, but separate it from their fashion purchases, perhaps due to the perception of sustainable fashion as unattractive and/or unstylish. It is vital that future studies more closely study and analyze these issues, particularly since they apply to the Millennial Generation, whose economic purchasing power will continue to grow in the future.

While this study focuses on consumer perceptions, future studies should also address sustainable practices and opportunities across entire fibre supply chains. Gardetti and Muthu's [11] examination and illustration of a business model canvas for sustainable apparel can serve as a template for similar application by fibre supply chains.

Equally importantly, the fashion industry needs to agree upon more standardized definitions for the terms "luxury" and "sustainability/sustainable". Research on sustainability from other industries [23, 24] has suggested that lack of a common industry definition of sustainability can confuse customers and, correspondingly, can dilute rewards (e.g., winning green customers) for industry members who pursue legitimate sustainable practices. In addition, Rusinko's findings suggest that lack of a common industry definition for sustainability can hamper efforts to expose industry members who are greenwashing. Similar arguments can be made for a more standardized definition of the term sustainability in the fashion industry. In addition, a more standardized definition of sustainability can serve to educate customers, and customers who better understand sustainable fashion and sustainable fibres may be less likely to perceive them as unattractive and/or unstylish.

The same can be said with respect to a more standardized definition of luxury in the fashion industry. That is, a more common definition (or set of definitions) for luxury in the fashion industry may not only reward members who are offering legitimate luxury goods, but may also act to expose those who are offering counterfeit goods [21]. A set of common definitions can be as broad and encompassing as is desirable by industry members.

In the future, surveys to address the questions proposed in this study should be administered to larger samples and to more diverse samples. For example, both focussed samples of luxury buyers and focussed samples of sustainable buyers should be surveyed, as well as broader, more general samples of fashion buyers. Since the sample surveyed for this exploratory study was young (17- to 23-year-olds), future samples should include older buyers, and/or a more general cross-section of buyers across all age groups. Since the sample surveyed for this exploratory study was relatively small, future studies should survey larger groups of buyers.

Appendix: Proposed Definitional Mapping of Rusinko and Faust's Luxury Scale (Adapted from Kapferer) onto a Hybrid Luxury Scale (DeBarnier et al.) Based on the Three Most Quoted Luxury Lcales

"Across the top" should not appear in print–it is directing the editor/typesetter about where "Six Luxury Variables Used by Rusinko and Faust (adapted from Kpaferer)" should be placed.

"Down the side" should not appear in print–it is directing the editor/typesetter about where "Eight Luxury Varialbles by DeBarnier et al." should be placed.

Luxury variable	Costly	Rare/Unique	Good feel	Status symbol	Beautiful	Always in style
Elitism	×	×				
Distinction and status	×			×		×
Rarity		×				
Reputation				×		
Creativity		×				
Power of the brand				×		×
Hedonism			×			
Refinement					×	×

Note Mapping is proposed to illustrate that the luxury scale variables used by Rusinko and Faust are grounded in existing theory and existing luxury scales

Down the side: Eight luxury variables by DeBarnier et al.

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