The Effect of Scarcity Types on Consumer Preference in the High-End Sneaker Market

by

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Honors Thesis
Appalachian State University
Submitted to the Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Science in Business Administration
April, 2018

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Abstract

The high-end sneaker market consists of dedicated collectors and enthusiasts, with several unique aspects to their purchasing behavior. Collectors are known to spend exorbitant amounts of money on the secondary market for sold out sneakers, only to use the shoe for non-athletic purposes. The existence of a billion-dollar resale market is a testament to the lengths collectors are willing to go to procure a pair of shoes. As this market is relatively new, there is still little research available concerning the behavior of these consumers.

Sneakers differ in scarcity amount and type. Some sneakers are widely available. Others are demand-scarce, or hard to find due to high popularity of the product. Still others are supply-scarce, in which the brand that produces the shoe intentionally limits the amount released in order to create a desirable, exclusive product. While most collectors own sneakers of multiple different types and levels of scarcity, it is unclear whether there is a general preference towards a single type of scarcity, and how these different types of scarcity affect consumer decisions in this market.

Through an online survey administered on a dedicated sneaker discussion forum, research was conducted on the purchasing behavior and scarcity preference of consumers within this market. We find that sneaker collectors have an overwhelming preference towards supply-scarce products, with no significant difference in preferences for demand-scarce products and widely available products. This preference for limited-release products is motivated by consumers’ usage of sneakers as conspicuous consumption products, in which products are purchased to signify characteristics about the owner. Using the survey data, we also constructed a demographic of sneaker collectors, and find an overwhelming majority being males aged 18-23, and a participation rate in the resale market of approximately 50%.
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Introduction

On July 27, 2016, a pair of Nike Air Jordan IV sneakers was purchased for a sum of $18,500. The sneaker was purchased by an unknown collector from Stadium Goods, a New York shop that deals exclusively in the reselling of sneakers (Johnson, 2016). The specific pair of the Air Jordan IVs purchased bears the moniker “Undefeated,” after the sneaker and apparel store that the shoe was created in collaboration with. The sneaker now sells for a premium of 9250% over its original retail price ($200). There were only 72 pairs ever made.

The air Jordan IV “Undefeated” is an extreme example of a phenomenon that is relatively unique to the high-end sneaker market. Consumers regularly pay exorbitant amounts of money for athletic sneakers with no intention of using them for their intended purpose, e.g. actual athletic activity. Owners take meticulous care of these high-end sneakers, wearing them only for special occasions and never in poor weather. In some cases the sneakers are never worn. This practice often seems bizarre to outsiders. Consumers, usually young people, spend large sums on a functional product that they have no intention of utilizing, all the while with many cheaper alternatives available. The consumers of the high-end sneaker market are a very unique demographic, in terms of both their purchasing behavior and their motivations.

Importance of Topic

The sneaker market has ballooned into a multi-billion dollar industry in a matter of decades. Sneaker collecting is an extremely niche market, yet has considerable influence over the major sportswear companies. Nike made more money selling the Nike Tanjun than any other sneaker in 2017, even though it retails for only $65 and is one of the most widely available sneakers in the world (Powell 2018). Despite this, the company invests immeasurable resources into maintaining
the favor and loyalty of this small group of enthusiasts. These sneaker collectors are a tiny part of the company’s revenue, yet play a huge role in determining its brand equity. These sneaker collectors, or “sneakerheads,” exhibit purchasing behavior that is unlike anything seen in most industries. These consumers are purchasing products that are designed primarily for utility and functionality, yet people are willing to pay prices upwards of $10,000 for a single pair (Welty, 2017). The large variation in sneaker prices, styles, and brands leads to multiple different factors simultaneously influencing sneakerheads’ purchase decisions.

Sneaker collectors are driven by a multitude of different motivations. Some want to express style. Some want to signal their wealth. Others look to represent themselves as unique individuals. There are those that simply view sneakers as collectibles, to be put in display boxes and never worn outside the house. Regardless of their motive, these individuals turn to sneakers as a means to make statements about themselves, and as such these products take on a variety of meanings and values beyond their practical functionality.

It is not uncommon for sneaker releases to sell out extremely quickly, sometimes even in a matter of seconds. Different sneakers sell out regardless of their differing levels of availability, and oftentimes for different reasons. It is a common practice for sportswear retailers to produce a sneaker in highly limited numbers. By making a sneaker that is difficult to obtain, these brands produce an air of exclusivity around their product. This strategy has proven extremely effective, with sneakers seeming to produce lofty demand simply through the fact that few pairs exist (Economist, 2017). On the other hand, sneakers with large stock numbers will also sell out, oftentimes due to a sort of snowball effect where consumers will be influenced by the purchasing habits of those around them. Both these types of scarcity result in a sold out sneaker, but they convey vastly different impressions about the products, and by extension those who buy them.
Due to the relatively new nature of the sneaker industry, there is currently little research on the sneaker market and the purchasing habits of the consumers within it. It is not clear which type of scarcity drives consumer preferences, or even why they place such a high importance on scarce products at all. Furthermore, as sneaker collectors differ greatly in purchasing behavior from consumers in other product categories, obtaining data to compare the two would help shed light on the nature of the differences that exist.

Research Objective

Although there have been multiple studies directly comparing the effect of different scarcity types on consumer purchase behavior (Van Herpent et al. 2014, Gierl & Huettl 2009, Wu & Lee 2016), the unique nature of the high-end sneaker market and its community makes it difficult to equate with existing results. Because of this, it is necessary to conduct further research. Our objective is to answer the following questions: (1) What effect do different types of scarcity have on consumer purchase decisions in the high-end sneaker market? (2) What factors explain the variation in consumers’ responses to the different scarcity types?

Background Information

Definition of Terms

Sneakers

The term “sneakers” refers to athletic footwear, oftentimes worn for secondary purposes such as comfort or style. While sneakers were initially created with athletic functionality as the intended use, they have been co-opted by modern generations as a means to express style, conformity, and social status. Different types of sneakers are produced for athletic functionality in different sports, for casual wear, and expressly for style. An individual sneaker model will be produced in
multiple different “colorways,” or color combinations. Particularly popular colorways will sell out and be re-released every few years.

Sneakerhead Culture

“Sneakerheads” is a self-given name for sneaker enthusiasts. Sneakerheads are individuals who partake in discussing, collecting, reselling, and wearing sneakers. With a vast majority of sneakerheads the desirability of sneakers comes not from their value as athletic goods, but from their potential as statements of fashion or style. This value can be determined by a sneaker’s level of exclusivity, amount of premium materials used, general aesthetics, and popularity among other collectors. Sneakerhead culture has steadily risen in popularity in recent years, but the community has existed since the mid-1980s, when early hits such as the Air Jordan 1, Nike Air Max 1, and Adidas Superstar garnered attention from general consumers. There is an extremely large sneaker collecting presence on the internet, with a plethora of websites that handle specific functions within the community. News organizations such as Complex, Sole Collector, and Nice Kicks provide information on upcoming releases, Sneaker subreddits and Niketalk Forums provide platforms for discussions on community and culture, and marketplaces such as Goat and Flight Club provide platforms to buy and sell shoes. There is even an unofficial sneaker stock market, Stockx, which gathers information on community purchasing habits to provide up to date after-market values for different models and colorways.
Collaboration

It is extremely common to see sneaker companies engage in collaborative releases, in which one of the company’s popular sneaker models is co-branded with a celebrity or otherwise recognizable second entity. This is a practice adopted by nearly every major sportswear retailer, and takes many different forms. There is a wide range of potential collaborative partners, from musical artists, actors, and athletes, to sneaker stores, design studios, and globally known companies such as Coca Cola. The process is distinctly different from a signature shoe line, in which a company creates a sneaker for a specific athlete and releases it under their name, such as the Air Jordan 1. While signature sneakers are tailor made with performance in mind, collaborations are meant to imbue a sneaker with the extra brand recognition that is associated with the additional partner. Collaborations can result in an entirely new sneaker being created, or simply a new colorway of an existing model. Collaborations have continued to prove successful in improving product value in the eyes of consumers, which is easy to track through a sneaker’s after-market resale price. For example, the average popular Air Jordan 1 colorway resales anywhere between $200 to $500 dollars, whereas collaborations with design studios such as Off-White and Fragment Design fetch prices anywhere from $1500 to $3000 dollars (Luber 2018).

One of the most well-known and successful sneaker collaborators is Kanye West, who has worked with well-known companies such as Nike and Adidas, and with high fashion brands such as Louis Vuitton. West’s sneakers with Nike still demand prices up to $6,500 dollars for certain colorways, and his line of sneakers with Adidas helped the company rake in $2 billion more in revenue than the previous year in 2015, and also represented 6 out of the 10 most valuable sneakers on the resale market that same year (Adams 2016).
Limited Release/ General Release

Exclusivity is a large influencer of the desirability of different sneakers, and major sportswear retailers are aware of this. Different sneakers will release at different levels of stock and geographic availability, and there are several general labels for these release methods. A general release refers to a sneaker that is available in large quantities, at most popular sportswear retailers. This is a sneaker that is usually very easy to find under any circumstance. A limited release refers to a sneaker that is produced in intentionally limited numbers, usually at a quantity much less than expected demand. These releases are usually available at a reduced amount of retailers, sometimes only at two or three worldwide. Limited releases are intended to stress the exclusivity aspect of a model, and sell out a vast majority of the time. Beyond this are extremely limited releases, which can be produced in numbers as small as 100 pairs or less, such as the Nike “Air Mag” from the Back to the Future films at 89 pairs, or the “Undefeated” Air Jordan 4 at 72 pairs. However, due to the extreme nature of these releases they are relatively useless for measuring scarcity effect.

Resale Market

A large aspect of the sneakerhead community is the resale market. Sneakers that are highly desired among the community will sell out instantaneously upon release due to demand surpassing supply. For those unable to purchase a product when it releases, the only other option is the resale market, in which sneakers are sold after release date for a large markup. This markup is directly determined by the popularity of a sneaker, with an additional emphasis being placed on sneakers with limited release numbers. Reselling is somewhat of a divisive topic
among sneakerheads. The practice allows collectors access to shoes that would otherwise be impossible to obtain, albeit at a much higher price than the sneaker originally was sold for. Reselling has proven to be a lucrative business, with the secondary market generating over $1 billion in sales in 2016 (Weinswig 2016). Due to this popularity, there is a large amount of consumers that purchase sneakers with the express intention of selling them at a large markup, sometimes even engaging in morally grey activity such as bribing store managers to purchase entire shipments or using “bots” to secure large quantities from online releases. These “resellers” flipping large numbers of shoes create a financial entry barrier for would-be sneaker collectors. The practice of reselling adds another layer onto the sneaker market for collectors, as it leads to different consumers placing different monetary values on the same sneakers based upon their personal preference and how important they perceive product scarcity to be.

Literature Review

Scarcity and the Sneaker Market

The idea behind an economic supply and demand curve is that the price of a product will self-regulate in an open market, fluctuating until it eventually reaches a point where the quantity supplied by the producer equals the quantity demanded by consumers. This is when the market is in equilibrium. Many firms in the sneaker market pursue a differentiation strategy in regards to their business level strategy, looking to make their products stand out in the eyes of consumers through unique distribution channels and constant product innovation (Warnett, 2016). This leads to the formation of monopolistic competition within the sneaker market, where the multitude of different sportswear brands produce overall similar products, but with each firm’s offering being unique in some way (Spence, 1976). As a result there is a high number of
offerings in the sneaker market, and most sneaker collectors have a strong inclination towards one brand in particular, usually because they prefer the design style of the brand or a specific technological innovation it possesses.

When creating a pricing strategy for products, companies must take into account their intended level of supply, so as to ensure that the price they charge will not jeopardize demand in any way. A product that is available in large quantities at a high price risks being undercut by competitors, and a product that is scarce but very cheap will damage a company’s profits. The amount of limited release sneakers by major sportswear companies has increased in recent years. This is driven both by the desire to charge a higher price for products, and also by an apparent consumer preference for scarce products. Notable examples include Air Jordan, which in 2015 announced its remaster initiative that would see the return of famous sneakers from Michael Jordan’s career built with premium materials (Nike 2015). These releases would carry a slightly higher price tag than previous releases due to the hike in quality, and would be more widely available in an effort to simultaneously provide more consumers with the product and reduce the rapidly expanding resale market (Welty 2017). In the two years that followed, Jordan Brand’s performance suffered. Resale prices, and subsequently the hype for upcoming releases, plummeted. Sneakers began to sit on shelves after release day, something nearly unheard of for most high-profile sneaker releases. As a result, Jordan Brand began to rapidly lose market share to competitor, Adidas, which eventually surpassed the former in 2017 (Welty 2017).

Adidas has also experienced issues balancing supply and demand, with the aftermarket price of certain pairs fluctuating to opposite extremes seemingly overnight. A large amount of the brand’s recent success is due to artist Kanye West, who was signed to Adidas in 2014. Since then, West has collaborated with the brand to produce a line of apparel and sneakers, all of which
are extremely limited and command some of the highest resale prices today. Kanye’s Yeezy line was the adrenaline shot that the company needed to kick start the hype, with Adidas’ share of the sneaker resale market jumping from 1% to 20% the year his first sneaker was released (Luber 2016). But despite huge gains in market share and brand image, Adidas could not get its quantity strategy down right. The brand made the mistake multiple times of restocking high-profile sneakers that had sold out and maintained high resale value, sometimes even with multiple re-releases within a period of months. The most extreme example is the debut colorway of the Adidas Yeezy Powerphase, which resold for up to $1,150 its release weekend, but was restocked to the point that it can now be found for as low as $125, only 5 dollars more than the sneaker’s initial release price (Dunne 2017). While this practice net the company profits in the short term, it killed the aftermarket price of dozens of sneakers, and gained Adidas’ products a reputation of having unstable value. Collectors often treat their sneakers as investments, and are less likely to pay the retail cost upfront for a sneaker when there is a chance that sneaker’s value will be cut in half or more a few months down the line. Similarly, sneakerheads that paid a high aftermarket price for a pair of Adidas sneakers, only to have the same pair available at a much lower cost later on, are significantly less likely to take the same risk in the future. In both these scenarios, Adidas’ brand image suffers due to its stock levels being higher than customers would prefer.

The cases of Jordan Brand and Adidas shed light on an interesting dynamic between supply and demand. In this scenario it seems that consumers are instead specifically looking for products in which there are limited supplies. That is, the demand for the product is in part a function of the supply. For a sneaker to become popular without selling out is almost unheard of at this point, as a model that is still available at retail will have no presence in the resale market, and by extension no after market value in the eyes of collectors. When everyone who wanted a
sneaker is able to purchase it, suddenly no one wants it anymore. There are several economic
theories that could shed light on this consumer behavior. Michael Lynn offers an explanation in
an article for the Journal of Economic Psychology. In this paper, Lynn explores the impact of
unavailability on consumer preference and purports a theory in which scarcity of a product leads
a consumer to assume exclusivity, which in turn leads to desirability (Lynn 1989).

Types of Scarcity

There are multiple different factors that can result in a product being available in a limited
supply. A shortage can be the product either of intentional efforts by companies, or by
circumstances outside the control of manufacturers. In terms of outside factors that cause
scarcity, a product can be scarce due to it requiring components that are rare or expensive, due to
an issue arising in the supply chain, or due to changing circumstances among a manufacturer’s
supplier channel. Alternatively, a product can be scarce due to a manufacturer intentionally
limiting the amount produced or due to high customer demand resulting in a product selling out.
These last two sources of scarcity are seen the most often in the sneaker market, and are referred
to as limited supply and high demand (Gierl & Huettl, 2009).

A product with limited supply is one that is intentionally produced in quantities that do
not meet consumer demand. The idea behind limited supply is not to sell as many of an item as
possible, but rather to instill a sense of “exclusivity” in the product. This practice has been
implemented successfully in several different instances and with a wide range of products, from
new game consoles and rare automobiles to high fashion footwear such as Prada (Stock &
Balachander, 2005). In terms of sneakers, the degree to which a product is limited varies greatly.
Oftentimes intentional scarcity will create “hype”, or an increased desirability of a product even when a large fraction of consumers are unable to purchase the product (Stock & Balachander, 2005). The perceived value behind “hype” is that even though some willing consumers are unable to purchase the limited edition at the retail price, the exclusive sneaker that they want will promote a favorable image of the brand. This in turn motivates consumers to purchase the company’s more widely available models as an alternative to the limited sneaker. In anticipation of this, companies will introduce new sneaker models in extremely limited quantities, and then flood the market with more widely available colorways and cheaper alternatives a few months down the line, as shown by Adidas’ release schedule for the NMD sneaker in 2016 (Luber 2016). Through this model the original limited edition sneakers retain their aftermarket value and by extension their popularity, and consumers unable to purchase these exclusive releases are provided with similar alternatives. When used correctly, this strategy allows a company to maintain hype for their brand through upcoming limited releases while still maintaining high levels of sales through cheaper, widely available alternatives.

With high demand scarcity, the emphasis is not on supply levels but rather customer demand. A high demand product is one that, regardless of stock level, has sold out or nearly sold out as a result of popularity among consumers (Gierl & Huettl 2009). The reasons behind a product having high demand can vary. Products can be popular due to an economic or quality advantage over competitors, or because they offer some unique feature. In the sneaker market, high demand is often the result of a sneaker featuring a new technology that provides some advantage in comfort, durability, or performance. However, there are instances in which a sneaker became high demand scarce due to other factors, such as the triple white Adidas Ultra Boost which sold out after influencer Kanye West was spotted wearing them for a performance
(Luber 2016). This instance accentuates the important role status plays in creating high demand scarcity in the sneaker market. The sneaker was widely available, yet not desired until it became connected to a well-known artist, meaning that this affiliation alone was enough to justify a purchase for a large number of consumers. The triple white Ultra Boost would now associate the wearer with Kanye West, even if just through imitation. This association highlights the importance of both tribal marketing (Cova 2002) and conspicuous consumption (Gierl & Huettl 2009, Bagwell & Bernheim 1996) to sneaker popularity.

**Conspicuous Consumption**

Conspicuous consumption plays a large part in the high-end sneaker market. The term refers to the practice of purchasing goods that are meant to convey a certain impression about the owner. Conspicuous consumption goods are often status symbols, and can be used to signal a variety of different characteristics. Consumers may seek out products that are associated with a certain group to demonstrate conformity, or products that are unusual to demonstrate uniqueness (Gierl & Huettl 2009). Products with a high value can also be used to demonstrate a higher social status, or a sense of wealth. Conspicuous consumption products can include items such as sports team paraphernalia or heavily branded items for demonstrating conformity, brand new and innovative technological devices for demonstrating uniqueness, and luxury goods such as high-end watches, automobiles, and clothing for demonstrating social status. A unique aspect of conspicuous consumption is that often a product’s suitability for conspicuous consumption is determined by factors other than its quality or features. While these aspects are still important, often factors such as scarcity, popularity, or uniqueness will be more likely to trigger a purchase decision when a consumer is considering options for conspicuous consumption (Wu & Lee, 2016).
Branding plays a large role in conspicuous consumption. When a product is attached to a strong brand name, its effectiveness as a social indicator is increased. A brand will have certain connotations or values attached to its name, and by extension any of its products. Therefore, brands can function as status symbols and wearing a branded product is an easy way for consumers to signify the same characteristics about themselves (O’Cass & Frost, 2002). This in part explains the popularity of branding-heavy products in the fashion industry, as brand choice becomes a medium through which consumers can express their identity (Schwarzenberger & Hyde, 2013).

Another important characteristic of products meant for any form of conspicuous consumption is scarcity. In reference to commodity theory, Brock stated that “any commodity will be valued to the extent that it is unavailable” (Gierl & Huettl 2009, Brock 1968). In relation to conspicuous consumption, this means that a product which is available universally has no value for conspicuous consumption, as there is no way to differentiate an owner from the average consumer. For example, a good that is universally available has no conspicuous consumption value to a consumer attempting to express uniqueness, as there are no restrictions to stop other people from also purchasing that good. However, a good that is scarce due to high demand would also hold no conspicuous consumption value, as this would testify to its popularity and widespread nature (Lynn & Harris 1997). This shows that not only does scarcity affect product suitability for conspicuous consumption, but different types of scarcity affect product suitability in different ways and to different extents.

Research on scarcity and Consumer Preferences

While not much research has been conducted on the high-end sneaker market, there has been considerable research concerning scarcity. This research covers scarcity effects on desirability
and consumer decisions in several different scenarios, and takes into account the effect of different types of scarcity.

Research carried out by Gierl and Huettl compared the effect that different types of scarcity had on product suitability for conspicuous consumption. The two types of scarcity compared were high demand and low supply, as outlined by multiple other papers (Van Herpen et al. 2014, Wu & Lee 2016). Gierl & Huettl utilized a survey which compared the two types of scarcity in two different scenarios: one in which products are being chosen for conspicuous consumption, and one in which products are being chosen for other uses. The research found that different types of scarcity were preferred depending on the intended use. Respondents favored low supply for conspicuous consumption goods, as this led to goods being more unique and therefore more useful to differentiate their owners. On the other hand, respondents favored scarcity due to high demand for goods purchased for uses other than conspicuous consumption, as popularity is usually a signifier of high product quality.

Wu and Lee conducted similar research concerning different types of scarcity. Their research, conducted using an online survey, compared the different forms of scarcity when consumers were buying products for themselves versus buying for others, and took into account the extra variable of high vs low price. Results showed that consumers were more likely to favor products with low supply scarcity for themselves, and high demand scarcity for others. In both cases price had a negligible effect on consumer preference. The motivations given for the scarcity preferences were very similar in nature to those recorded by Gierl & Huettl, with low supply being favored for its uniqueness and high demand being favored for its perceived quality (Gierl & Huettl 2009).
Van Herpen, Pieters, and Zeelenberg also compared these two types of scarcity in their research. This was done through a thought experiment that prompted respondents to make a choice between three options of wine, with the background behind each choice being explained beforehand. One option was scarce due to high demand, one to low supply, and one was widely available. Respondents were informed that they were selecting the wine for a dinner with a friend who is visiting. The most popular option among respondents was the demand-scarce at 42%, with the control coming in second at 32% and the supply scarce in third at 25% (Van Herpen et al. 2014). The experiment was repeated with respondents this time being informed that the friend was visiting from out of town, which meant the evening was special and a unique wine should be selected. This experiment resulted in a much higher percentage choosing the supply-scarce product. Despite this, the demand-scarce product remained the most popular choice, with supply-scarce being a close second and the control a distant third. The results of this research mirror that conducted by Wu and Lee, where consumers favored demand-scarce products when purchasing them for friends (Wu & Lee 2016).

There are several common takeaways from these different studies. All three identified high demand and low supply as the two main types of scarcity that consumers will encounter. It was shown that consumers infer items that are scarce due to high demand as being of high quality. It was also shown that consumers tend to prefer these demand scarce items when purchasing products for a friend, meaning that they place quality of a product over exclusivity when purchasing for others. Finally, it is shown that consumers prefer supply scarce products for conspicuous consumption, as a product has its characteristics and image benefits for its owner accentuated by rarity.
In relation to the sneaker market, the concepts of types of scarcity and conspicuous consumption are interconnected. As high end sneakers are undeniably a conspicuous consumption good, it makes sense that consumers would prefer supply scarce products in order to have the maximum effectiveness in indicating whatever trait the product is associated with. However, sneaker collectors also place a large emphasis on the quality of their products regardless of scarcity, as shown through the overwhelming popularity and staying power of comfort-focused sneakers and technology, such as Adidas Boost (Woolf 2018). The interaction of these two scarcity types and the seeming equal consumer affinity for both leads to unpredictable behavior within the sneaker collecting community, which necessitates further research to fully understand.

Methodology

Participants

The participants in this research were members of the “sneaker” and “streetwear” dedicated communities on Reddit. Reddit is a social media platform focused around content aggregation and link sharing. The site’s user base has steadily grown since its creation with 6% of adults online reporting that they are active on the platform (Smith & Duggan 2013). Reddit is increasingly popular among young males age 18-29, which is coincidentally within the principal demographic for the high-end sneaker market (McCracken et al., 2016). Within Reddit there are dedicated communities called “subreddits” which individuals can subscribe to in order to receive updates as new content is posted. These subreddits are focused around specific topics, ranging from broad to extremely specific. Content within the subreddits is created, shared, and curated by the members of these communities through a content submission and voting system. As such,
subreddits provide complete and diverse portrayals of the groups they represent, encompassing the different opinions, niches and subgroups within the given communities.

Due to the survey containing specific terminology and concepts concerning scarcity and the sneaker market, it was necessary to locate a sample population that possessed some background knowledge on both of these topics. Conducting research on general consumers would mean running the risk of encountering respondents that have no understanding of these concepts, which could result in the survey being filled out incorrectly and the results of the experiment being jeopardized. In order to ensure accurate results, it was imperative to find a platform through which sneaker collectors, or at minimum individuals active in fashion communities that feature limited products, could be contacted. Two subreddits, /r/sneakers and /r/streetwear, fit this requirement appropriately. /r/sneakers is focused primarily on the discussion of high-end sneakers from major sportswear retailers, whereas /r/streetwear is focused around the general culture of streetwear, or a fashion style that “combines elements of countercultures around the world with modern street style” (from /r/streetwear’s website). While sneakers are an important part of streetwear, the community also encompasses other high-fashion clothing items that are often expensive and almost always limited to some extent.

In both communities, the link to the survey was posted alongside a short description of the participants that consented to take the survey were first presented with several demographic questions and some skip-logic questions that were meant to ensure respondents had some knowledge of the concepts being studied and fit the target sample population.
Background

Of the previously mentioned research conducted on scarcity, the experiment created by Van Herpen, Pieters, and Zeelenberg seems particularly applicable to the sneaker market. In their experiment consumers were presented with a choice between 3 wine selections, one limited due to low supply, one limited due to high demand, and one not limited at all. As detailed previously, subjects were asked to choose which of the three they would be most likely to purchase, along with their opinions of the three selections. Respondents were randomly separated into two groups, one being the control that was choosing between the wine options for a common event, while the other group had a goal of selecting a unique wine for a rare event.

For the control, the option that was limited due to high demand was identified as the most desirable, due to consumers interpreting popularity as a sign of quality. Furthermore, after the high-demand option the control was the second most popular, with the low-demand option coming third. When respondents were given additional information in order to add a uniqueness condition, the supply-scarce option was much more popular, yet still remained second behind the demand-scarce wine. The uniqueness goal had no significant effect on preference towards the demand-scarce and control product.

This study is particularly relevant in its methodology and results. The structuring of the situation in the thought experiment provided to respondents, the inclusion of the two types of scarcity and the non-scarce control, and the background context behind each option that assigns certain values and characteristics to them, all come together to create a situation very similar in nature to that which exists in the high end sneaker market. The product options that sneakerheads are presented with vary based on multiple different factors, including level of scarcity, type of
scarcity, context behind a certain product, fashion trends, and personal preference. Consumers are often faced with a choice between options much like that which was presented in Van Herpen et al.’s experiment, and just like their experiment the options vary based on scarcity level and type.

With an experiment that was remarkably relevant to the sneaker community and similar to those performed by other researchers, the results of Van Herpen et al.’s research were somewhat surprising. The study used undergraduate university students of legal drinking age. As there were no other distinguishing factors, and as price was not included as a factor within the experiment, the sample population can be reasoned to represent the average consumer with no predisposition towards any type of scarcity. The preference towards a demand-scarce product made sense based on the previously identified consumer inference that demand-scarce products were popular and therefore of high quality (Gierl & Huettl 2009), and the fact that the product was being purchased to be shared with another individual (Wu & Lee 2016). However, the favoring of the non-scarce option over the supply-scarce was surprising, especially considering other research found supply-scarce to be the most favorable option (Gierl & Huettl 2009, Wu & Lee 2016). When a uniqueness goal was added, the preference towards the supply-scarce option increased while preference towards the other two remained similar. This result is in line with the popularity of supply-scarce products among sneakerheads, given the use of sneakers as conspicuous consumption products meant to make their user stand out in some way.

Based upon previous knowledge of consumer preferences and behavior within the community, it seemed unlikely that the results of Van Herpen et al.’s research would hold true if sneaker collectors were used as the sample population. The sneaker market is a niche community focused around a product for which exclusivity is a large influencer. Because consumers in these
communities are used to exclusivity and many seem to embrace it, it is likely that the preference of consumers in these niche communities may differ from that of the general consumer. While wine is sometimes used for conspicuous consumption, high-end sneakers are purchased almost exclusively for this purpose, and scarcity has a greater effect on consumer perception of goods in the sneaker market. This is reflected somewhat in Van Herpen et al.’s second trial of the survey, in which the uniqueness condition caused the number of respondents who selected the supply-scarce condition to rise. However, the persistent preference of respondents in Van Herpen et al.’s experiment towards demand-scarce products seems in stark contrast with the preferences of consumers in the sneaker market, where supply-scarce products routinely command the most attention and highest resale prices (Luber 2016).

The ease with which Van Herpen et al.’s experiment can be applied to the sneaker community means it is an excellent instrument through which the two can be compared with minimal risk of differences in methodology affecting the results. Using the basis of this research to create the experiment means the results of the new survey can be measured directly against the existing ones, which will enable comparisons to be drawn between the two sample populations.

Design

The research was conducted via an online survey. After consenting to the research participants were presented with a scenario in which they had a choice between three similar sneakers. The circumstances concerning each sneaker are explained to subjects at the beginning of each trial. Participants were asked to choose which sneaker they would be most likely to purchase, and had the option to give a reason behind their choice. The first option is a sneaker that is widely available. This option would represent a control for the experiment. The description for this
option is as follows: “This sneaker has been in production for multiple years and is well known among the sneaker community. There are frequent restocks of the shoe, along with releases of new colorways every year. In addition, the sneaker is sold at every major sports and footwear retailer. As a result, the sneaker is easily available for purchase. There is a full size run available of this model in store, with multiple pairs available in your size.”

The second option was a recent release from a major sportswear company with their newest technology. The sneaker was produced in large numbers but had a limited amount of stock remaining. This is explained as being due to high popularity of the sneaker. The text for this option is as follows: “This sneaker was produced as a general release but quickly gained popularity among consumers. As a result, demand has been high and it is now difficult to find a pair. The store no longer has a full size run, with limited pairs remaining in only some sizes. However, there is a pair left in your size.”

The third option was a sneaker produced through a collaboration between a sportswear company and a major musical artist. This sneaker would be produced as a limited release, with much smaller stock numbers and a shorter list of retailers stocking it. Therefore, it has the same amount of pairs available as the popular release, but for a different reason. The text for the third option is as follows: “This sneaker is co-branded by a celebrity and the sportswear company that produced the shoe. The sneaker carries a logo to differentiate it from the general release version, but is otherwise equivalent. The sneaker was marketed as being an exclusive release and was produced in very limited quantities and only sold at a short list of retailers. Due to supply being very low it is now difficult to find a pair. The store does not have a full size run, with limited pairs remaining in only some sizes. However, there is a pair left in your size.”
Responses were gathered over a period of one week. Links to the survey were posted simultaneously on the /r/sneakers and /r/streetwear subreddits, with both communities being given the same prompt. Early in the survey consumers were presented with several questions intended to verify that the respondent displayed the consumer purchasing behavior typical of sneakerheads, such as “Have you ever purchased a sneaker for a purpose other than athletic functionality? (e.g. for style or aesthetics, to wear casually).”

Demographics

Of the 191 respondents, 155 were aged 18-23, 20 were aged 24-29, 10 were aged 30-35, 4 were aged 36-40, and 2 were aged above 40. Furthermore, 182 respondents were male, while 9 were female. The sample was overwhelmingly young males, which is consistent with descriptions of the target demographic for most sportswear companies (Wilson & Sparks, 1996) and the typical sneakerhead (McCracken et al., 2016). While sneaker culture has been around for 3 decades at this point, the community has not aged at all demographically.

Respondents were asked how many sneakers they had in their collection, and additionally how much of their collection consisted of general release sneakers versus limited release sneakers. The compiled data produced a mean collection size of 14.34 sneakers. On average, sneakerheads’ collections were comprised of 60.56% general release sneakers that were not limited in any way, and 37.99% limited sneakers that had some form of scarcity associated with them. These responses show that while scarce sneakers are often what garners the most attention from sneakerheads and have the highest values as conspicuous consumption products (Gierl & Huettl 2009), they do not make up a majority of most of their collections. This could be due
either to the fact that limited sneakers are much harder to obtain, or that they are usually accompanied by higher retail prices that discourage some collectors.

Respondents were also asked if they had ever paid above retail price for a sneaker. In this context, retail price is the price that a brand charges for a product when it is initially sold, as opposed to resale price, which is set by individuals who are selling shoes at a markup. 52% of respondents indicated that they had paid above retail price for a sneaker at least once. As reselling is a somewhat divisive topic among sneakerheads, the community is often split down the middle in terms of opinion on the practice and willingness to pay resale prices (Welty, 2017). In addition, respondents reported the highest price they had ever paid for a single sneaker. The prices that companies set for their sneakers vary widely based on quality, exclusivity and popularity. However, it is relatively uncommon for retail prices to exceed 200 to 250 dollars, and it is likely that any consumer who spent more than this amount on a sneaker was purchasing the pair on the resale market. The variation in brands’ retail pricing was matched by the range of responses received for this question. While some respondents had never paid more than 60 to 70 dollars for a shoe, the average highest price paid for a single sneaker was $352.58, with several responses ranging well into the thousands including as high as $2,500. 45% of responses were greater than or equal to $250, Most of which can be assumed to be respondents participating in the resale market. However, this is not a wholly reliable measure as there are periodically both sneakers that retail for prices higher than $250, and sneakers that resell for lower prices.
Table 1: Descriptive statistics for the sample of respondents (n = 191)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male = 95.29%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female = 4.71%</td>
</tr>
<tr>
<td>Age</td>
<td>18 – 23 = 81.15%</td>
</tr>
<tr>
<td></td>
<td>24 – 29 = 10.47%</td>
</tr>
<tr>
<td></td>
<td>30 – 35 = 5.24%</td>
</tr>
<tr>
<td></td>
<td>35 – 40 = 2.09%</td>
</tr>
<tr>
<td></td>
<td>Above 40 = 1.05%</td>
</tr>
<tr>
<td>Participation in resale market</td>
<td>Yes = 52%</td>
</tr>
<tr>
<td></td>
<td>No = 48%</td>
</tr>
<tr>
<td>Average of highest price paid for single pair</td>
<td>$353</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation = $364.35</td>
</tr>
<tr>
<td>Average collection size</td>
<td>14.34 pairs</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation = 13.06 pairs</td>
</tr>
<tr>
<td>Percentage of collection considered scarce</td>
<td>37.99%</td>
</tr>
<tr>
<td>Percentage of collection considered widely available</td>
<td>60.56%</td>
</tr>
</tbody>
</table>

Results

Overall, respondents favored the supply-scarce option (e.g., limited release) by a large margin. Of the 207 responses, approximately 60% of respondents, or 122 people, chose the supply-scarce option, with 22% choosing the demand-scarce and 18% choosing the control. We first tested whether there were significant differences in the proportion of respondents that chose each of the three sneaker types. A chi-square test of goodness of fit, yields a test statistic of 5.74 with a p-value of less than 0.01, and so we reject the null hypothesis of equal pick rates between the three sneakers. Pairwise tests shed further light on the relative popularity of the sneakers (p1 vs p2, p <0.01; p1 vs p3, p = 0.865; p2 vs p3, p <0.01). These results indicate a significant difference between the limited-release sneakers and each of the other options, with no significant difference in the response rate between the widely available and demand-scarce sneakers.
The popularity of the limited-release option makes sense given the conspicuous consumption nature of sneakers, however the overwhelming inclination of respondents towards this option over demand-scarce is in stark contrast with the results of Van Herpen et al. In their study, demand-scarce was the second highest option by a tight margin when respondents chose a wine selection with no uniqueness goal, and the most popular option when the uniqueness goal was present.

Figure 1: Percentage choosing to purchase each sneaker type

![Consumer Scarcity Type Preference](image)

Table 2: Purchase decisions depending on scarcity type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>18.85</td>
<td>60.21</td>
<td>20.42</td>
</tr>
<tr>
<td>2nd</td>
<td>58.92</td>
<td>33.33</td>
<td>20.83</td>
</tr>
<tr>
<td>3rd</td>
<td>20.83</td>
<td>22.62</td>
<td>56.55</td>
</tr>
</tbody>
</table>
Finally, respondents were asked to rank six factors in order of their impact on sneaker purchasing behavior. The six factors given were comfort, price, aesthetics, exclusivity, popularity, and functionality. Aesthetics was overwhelmingly selected as being the most important, with 74.7% of respondents placing it as their first choice. Comfort and price also scored relatively high on the scale. On the other end, popularity and functionality were identified as being of very low significance to consumers. Exclusivity was most commonly ranked 4th to 5th on the scale. This is particularly interesting, as based off of the high level of respondents that selected the supply-scarce option one would assume that exclusivity is one of the more important factors to sneakerheads. It is possible that exclusivity is a factor that highly influences the choices of consumers in this market without them even realizing it.

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>11.05%</td>
<td>37.89%</td>
<td>30.53%</td>
<td>13.68%</td>
<td>2.11%</td>
<td>2.11%</td>
</tr>
<tr>
<td>Price</td>
<td>8.95%</td>
<td>24.21%</td>
<td>23.68%</td>
<td>19.47%</td>
<td>8.95%</td>
<td>8.95%</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>74.74%</td>
<td>13.16%</td>
<td>6.84%</td>
<td>4.74%</td>
<td>0.53%</td>
<td>0.53%</td>
</tr>
<tr>
<td>Exclusivity</td>
<td>2.11%</td>
<td>15.79%</td>
<td>13.16%</td>
<td>23.16%</td>
<td>16.32%</td>
<td>16.32%</td>
</tr>
<tr>
<td>Popularity</td>
<td>1.58%</td>
<td>1.05%</td>
<td>14.21%</td>
<td>13.16%</td>
<td>38.42%</td>
<td>38.42%</td>
</tr>
<tr>
<td>Functionality</td>
<td>1.58%</td>
<td>7.89%</td>
<td>11.58%</td>
<td>25.79%</td>
<td>33.68%</td>
<td>33.68%</td>
</tr>
</tbody>
</table>

Regression results

In this section we explore what factors help explain consumers’ sneaker choice. To help answer this we estimate a multinomial probit regression. The dependent variable is the particular sneaker
choice (one of three categories) and the regression results illustrate what factors influence the probability of choosing one type of sneaker over the other. The results are contained in Table 4. The base category is the scare sneaker driven by high popularity (demand induced). Therefore, the coefficient estimates tell us the influence each factor has on choosing one type of sneaker over the high demand sneaker. As independent variables, we include number of pairs, number of limited release, a binary variable whether they’ve interacted on a secondary market, most they have every paid for a pair of sneaker and all the variables soliciting ranks.

A number of variables significantly explain consumers’ choice. As a respondent’s ranking of comfort increases, the respondent is less likely to choose the limited release sneaker over the high demand sneaker (p = 0.023, coefficient = -0.0457). This is supported by the findings of Gierl & Huettl, who proposed that consumers will perceive high demand products as being of high quality due to their popularity. It then follows that a consumer who places a high level of importance on quality aspects such as comfort would favor a high demand product. Inversely, as a respondent’s ranking of exclusivity increases, the respondent is significantly more likely to choose the limited release sneaker over the high demand sneaker (p = 0.00, coefficient = 0.696). That is, the more weight consumers place on exclusivity the more likely they will choose to purchase the limited-release sneaker over the limited-availability sneaker triggered by high demand.
Table 4: Multinomial Probit Regression Results

<table>
<thead>
<tr>
<th></th>
<th>General vs. High Demand</th>
<th>Limited Release vs. High Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Number general</td>
<td>0.252</td>
<td>0.117</td>
</tr>
<tr>
<td>Number pairs</td>
<td>-0.228</td>
<td>0.146</td>
</tr>
<tr>
<td>Number limited</td>
<td>-0.018</td>
<td>0.901</td>
</tr>
<tr>
<td>Secondary Market</td>
<td>0.019</td>
<td>0.965</td>
</tr>
<tr>
<td>Most paid</td>
<td>0.001</td>
<td>0.501</td>
</tr>
<tr>
<td>Rank comfort</td>
<td>0.506*</td>
<td>0.070</td>
</tr>
<tr>
<td>Rank price</td>
<td>0.360*</td>
<td>0.061</td>
</tr>
<tr>
<td>Rank aesthetics</td>
<td>0.417</td>
<td>0.129</td>
</tr>
<tr>
<td>Rank exclusivity</td>
<td>0.038</td>
<td>0.858</td>
</tr>
<tr>
<td>Rank popularity</td>
<td>-0.297</td>
<td>0.155</td>
</tr>
<tr>
<td>Constant</td>
<td>2.003</td>
<td>0.466</td>
</tr>
</tbody>
</table>

Notes: N = 184, Wald chi-square = 51.03***

Discussion

The results of this experiment reveal both differences and similarities between the preferences of the “sneakerhead” community and the sample population of general consumers from Van Herpen et al.’s experiment. Following the results of their experiment, Van Herpen et al. recommended that suppliers only attempt to use scarcity signals when marketing conspicuous consumption goods. As sneakers are a conspicuous consumption good it follows that scarcity signals would perform particularly well for sneakerheads as opposed to other consumer groups. This is supported by the results of both experiments. In Van Herpen et al.’s research, a uniqueness goal led to nearly 30% more respondents choosing the supply-scarce option than without a uniqueness goal. However, even with this goal, the demand-scarce option remained the most popular, if only by a small margin. This is in stark contrast with the results of the sneaker trial, in which 3 times as many respondents chose the supply-scarce over the demand-scarce option, which was only 3% more popular than the control.
Differences in Results

There are several possible reasons for these differences in results. These stem from differences in both the product, and the sample community. Both wine and sneakers are non-durable products that may or may not be considered conspicuous consumption goods based on the scenario. Both have cheaper options that are more popular among average consumers with no interest beyond the basic functionality of the product. Similarly, both also have higher end options that are used to signify different characteristics about their owner. Higher end wines can be used to convey a sense of wealth, social standing, or high level of knowledge about wines. Similarly, higher end sneakers can be used to convey wealth, personal style, or high level of knowledge concerning fashion. As found in Gierl and Huettl’s research, supply scarce products are favored for conspicuous consumption goods because scarcity accentuates whatever characteristic the good is being used to signify, while demand scarce is favored for other product uses. This is shown in
the results of Van Herpen et al.’s experiment in which the uniqueness goal, which leads to the product now being perceived as a conspicuous consumption good, led to a higher selection rate of the supply-scarce option. It also is shown in the results of the sneaker trial, in which the supply-scarce was by far the most popular. However, the results of the two experiments still do not line up perfectly. Even with a uniqueness goal, respondents in Van Herpen et al.’s experiment still chose the demand-scarce product at a higher rate than the supply-scarce.

Furthermore, respondents in the sneaker trial chose the demand-scarce option at around the same rate as the control, showing that this type of scarcity had little to no effect on sneakerheads. This is further supported by the results of the purchase factor ranking question, in which popularity and functionality ranked the lowest in terms of importance.

This is somewhat unique in terms of general consumer behavior. While scarcity is arguably one of the more important factors when determining the desirability of conspicuous consumption goods, that does not mean that customers disregard other factors such as functionality or quality. Oftentimes luxury brands are known primarily not for their limitedness, but for the quality of their products. This appears in multiple product categories, with notable examples including Porsche, Louis Vuitton, and Rolex. Attention to quality is present in the high-end sneaker market, as the factor ranking showed that consumers do value comfort. However most sneakers are built around functionality, with years of research and development behind the technology, design, and materials in a shoe. But as sneakerheads are arguably purchasing sneakers for reasons other than their intended use, it seems that functionality is of little to no importance.

As outlined in Wu and Lee’s research, consumers are more likely to select a demand-scarce product when purchasing it for someone else, as it is perceived as being of high quality. Inversely, consumers preferred a supply-scarce product when purchasing for themselves. It
follows then that consumers purchasing sneakers for themselves would favor the limited option, while consumers purchasing wine to share with a friend would want a product that is supposedly of high quality. This is further supported by the lower ranking of functionality by sneakerheads in relation to other purchase factors.

**Demographic Differences**

Van Herpen et al.’s experiment used a sample population of undergraduate students at a Dutch university. The sample population was about 25% male and 75% female, and the average age was 22 years (Van Herpen et al., 2014). In comparison, the sample population for the sneaker trial was 95% male with 82% being aged 18 to 23. While the average age of the separate populations are very similar, the high percentage of males in the sneaker trial may have an influence on consumer behavior. It is also worth noting that there are cultural differences between the Netherlands and the United States, where a majority of /r/sneakers users reside. However, it is by far the most likely that the difference between the two populations’ preferences comes from the pre-established concepts and preferences towards scarcity that exist in the sneaker market. Unlike the respondents in Van Herpen et al.’s experiment, sneakerheads are intimately familiar with scarcity, all the different forms it takes, and the effect it has on products and those who consume them. The continued success of the resale market shows that consumers are willing to pay a hefty premium to have scarcity attached to their products (Luber 2016), and the direct correlation between aftermarket price and scarcity means that the effect of this limitedness is particularly potent, as in the case of extreme price fluctuation for the Adidas Yeezy Powerphase (Dunne 2017). It has become such a large part of the high end sneaker market that consumers may not even realize the extent to which it influences their decisions. Based off of the overwhelming preference for supply-scarce sneaker, especially in comparison to the
demand-scarce option, it seems scarcity may be the most influential factor for consumers in the high-end sneaker market.

**Conclusion**

**Limitations**

Due to the sneaker market being a relatively newer industry, there is less existing research on this topic compared to other consumer groups. While scholarly articles concerning the sneaker market do exist, they are few in number and descriptive in nature, focused on the origins and motivations of sneakerheads as opposed to their purchasing decisions. There was, however, an abundance of non-academic content concerning the sneaker market originating from the vast number of news outlets, selling platforms, and discussion forums dedicated exclusively to this industry. While these sources do not necessarily carry the same amount of weight, they still provided valuable information concerning industry performance, specific examples, and consumer perspectives. Despite the relative lack of scholarly sources concerning the sneaker market, numerous articles on scarcity, conspicuous consumption, and consumer behavior allowed for a strong foundation of research to be built.

In terms of the survey transcript, it seems that the prompt concerning the limited release sneaker was interpreted by respondents as being more specific than originally intended. When constructing the prompts for the main decision, the supply-scarce option was described as a sneaker that was a co-branded collaboration with a celebrity. There are multiple types of supply-scarce sneakers, ranging from collaborations with celebrities, designers, boutique stores, and unassociated brands, to sneakers that have no third party connection and are simply produced in a limited supply. The supply-scarce option was presented specifically as a celebrity collaboration to give respondents a frame of reference with existing supply-scarce sneaker options, in the hope
of maximizing respondent understanding of the scarcity concepts. This is especially effective considering that celebrity collaborations are some of the most popular scarce sneakers in the industry currently (Adams 2016). However, a number of respondents seemed to have had their choice influenced heavily by the fact that the supply scarce option was a celebrity collaboration. Multiple respondents indicated that while they do like supply-scarce sneakers, they in particular do not care for celebrity collaborations, preferring the other types of limited supply shoes. When constructing the survey prompts, this level of specificity for consumer preference beyond the broader scarcity categories was not anticipated. However the amount of respondents who indicated this preference were insignificant in the larger sample population.

Summary of Findings

The research revealed a clear preference within the sneakerhead community towards supply-scarce products. Furthermore, there was no significant difference in consumer preference between demand-scarce products and products with no form of scarcity whatsoever. With a pick rate of 60% for supply-scarce compared to 22% for the demand-scarce option, it would seem that sneakerheads rank exclusivity above any other factor when purchasing products. The preference towards supply-scarcity was not necessarily surprising, but the extent to which this preference reached was. Sneakers are first and foremost a functional product, and as demand-scarcity is usually interpreted as a sign of quality. In other industries, consumers with extensive knowledge of a product will first and foremost value quality, as is the high-end markets for watches and cars. It would then follow that collectors with extensive knowledge concerning sneakers would similarly value products with high quality signals.
The weight placed on exclusivity explains this lopsided preference, as a supply-scarce sneaker will have fewer pairs out in the world, whereas a demand-scarce sneaker ostensibly has been purchased by a high number of consumers, and therefore will be seen much more commonly. Consumer desire for scarcity stems from the use of high-end sneakers as conspicuous consumption goods, in which scarcity amplifies the capability of a product to signify some characteristic for its owner. This is further supported by the multinomial probit which identified customer ranking of exclusivity as being closely tied to preference between the two scarcity types.

**Recommendation for Further Research**

There is still plenty of room for further research concerning scarcity and consumer behavior within this specific market. The research conducted within this thesis was successful in creating a general demographic profile of sneakerheads and their purchasing behaviors, along with gathering a data set that could be used in direct comparison with similar research by Van Herpen et al. to highlight the differences between the two sample populations of consumers. While this serves as a good basis for documenting and understanding the behavior of consumers within this market, additional research would add further detail to this profile and allow researchers both scholarly and within the industry to better understand the causes behind these preferences.

As mentioned earlier, sneaker collectors seem to divide scarcity types beyond the general supply-scarce vs demand-scarce categories. Further research is required to fully understand how these preferences differ depending on type of supply-scarcity. Similarly, further research comparable to that conducted by Van Herpen et al. could be carried out in order to measure the effect that level of involvement has on consumer preference, as outlined in their paper.
Acknowledgements

Thanks to Dr. Jeffrey Foreman for his comments and suggestions, and to Dr. Dave McEvoy for his comments and assistance in creating the survey. The question design and results were partially based upon previous research conducted by Van Herpen, Pieters, and Zeelenberg.
Appendices


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Smith, Aaron; Duggan, Maeve (2013). “6% of Online Adults are Reddit Users”, Pew Research Center, *WWW ‘14 Companion* pp. 517-522
McCracken, Arienne; Dong, Huanjiao; Murphy, Catherine; Hoyt, Mason; and Niehm, Linda (2016), "The Stories that Come With the Shoe: A Qualitative Study of Male Sneaker Collector Motivations, Experiences, and Identities" International Textile and Apparel Association (ITAA) Annual Conference Proceedings.

STUDY ON CONSUMER DECISION MAKING

Thank you for participating in this short survey.

The study is designed to get a better understanding of how consumers make decisions in a retail environment.

Completing this survey is voluntary. Even if you decide to participate now, you may change your mind and stop at any time.

Responses are anonymous, meaning no personal data or identifying information will be collected. The survey will be administered using HTTPS encryption. There are no known financial, emotional, or social risks associated with participating in this research.

This research will not result in any direct benefits for participants, but will increase the general knowledge concerning the relationship between product scarcity and consumer preference, especially in the high-end sneaker market.

If you have questions about this research study, you may contact:
Nick Cassidy at: cassidyng@appstate.edu
or
Dave McEvoy at: mcevoydm@appstate.edu

The Appalachian State University Institutional Review Board (IRB) has determined that this study is exempt from IRB oversight.

By continuing to the research procedures, I acknowledge that I am at least 18 years old, have read the above information, and agree to participate.
This section contains demographic questions that will be used to construct a profile of survey respondents.

Q1. How old are you?

☐ 18-23
☐ 24-29
☐ 30-35
☐ 36-40
☐ Above 40

Q2. What is your gender?

☐ Male
☐ Female
☐ Other

Q3. Have you ever purchased sneakers for a purpose other than athletic functionality? (e.g., for style, to wear casually)

☐ Yes
☐ No
In the next section we ask you to make choices in a hypothetical retail situation involving sneakers.

Imagine that you are shopping for sneakers at a local sneaker store. On the shelf are three sneakers, all produced by a major sportswear company and all similar in price. All three are made of the same materials, using the same technology. Also, imagine that you like the look and feel of the sneakers and would gladly wear each of them.

Below is a description of each sneaker concerning its release quantity, characteristics and availability.

Read the following descriptions of each pair, and choose which one you would be most likely to purchase.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The sneaker has been in production for multiple years and is well known among the sneaker community. There are frequent restocks of the shoe, along with releases of new colorways every year. In addition, the sneaker is sold at every major sports and footwear retailer. As a result, the sneaker is easily available for purchase. There is a full size run available of this model in store, with multiple pairs available in your size.</td>
<td>The sneaker is co-branded by a celebrity and the sportswear company that produced the shoe. The sneaker carries a logo to differentiate it from the general release version, but is otherwise equivalent. The sneaker was marketed as being an exclusive release and was produced in very limited quantities and only sold at a short list of retailers. Due to supply being very low it is now difficult to find a pair. The store does not have a full size run, with limited pairs remaining in only some sizes. However, there is a pair left in your size.</td>
<td>The sneaker was produced as a general release but quickly gained popularity among consumers. As a result, demand has been high and it is now difficult to find a pair. The store no longer has a full size run, with limited pairs remaining in only some sizes. However, there is a pair left in your size.</td>
</tr>
</tbody>
</table>

Q4. Of the three options, which would you be most likely to purchase?

- [ ] General Release Sneaker (not scarce)
- [ ] Limited Release Sneaker (scarce because of small production)
- [ ] General Release Sneaker (scarce because of high demand)
Q5. Why would you be most likely to purchase this option?

Q6. Rank the three options in order of preference, with 1 being most likely to purchase and 3 being least likely.

___: Option 1 (widely available)
___: Option 2 (scarcity, low supply)
___: Option 3 (scarcity, high demand)

This section contains questions concerning your sneaker purchasing habits.

Q7. How many pairs of sneakers do you currently own? (Please enter an exact number)

Q8. Of the sneakers you own, how many are general release? (not limited in any way)

Q9. Of the sneakers you own, how many are a limited release?

Q10. Have you ever paid above retail price for a sneaker? (for example, in a secondary market like Ebay)

   O Yes

   O No

Q11. What is the most (in US Dollars) that you have paid for a sneaker?
Q12. Please rank the following factors in terms of their importance when shopping for sneakers, with 1 being most important and 6 being least important.

___: Comfort
___: Price
___: Aesthetics
___: Exclusivity
___: Popularity
___: Functionality

End of Survey

Thank you for taking part in this survey.
If you have any questions concerning the survey or its results, please contact:
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