A Study on Extended Conspicuous Consumption – Status Signaling Through Children's Clothing

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ABSTRACT

Conspicuous consumption, first defined by Veblen (1899), describes wealthy people spending excessively on goods to signal their superior social status to the public. Today, this behavior is no longer exclusive to the rich. Average people can also acquire branded products with the intention of being *perceived* as being a member of a certain class or having desirable individual qualities. Casual observation suggests that this phenomenon has also extended to children, who can often be seen using high-status branded products. One notable example is parental spending on conspicuous children's apparel. According to Belk (1988), this behavior falls into the domain of 'extended self'. We ascertained the theoretical arguments found in the literature and used secondary data on children's apparel purchases to validate the predictions implied by the signaling theory within this 'extended conspicuous consumption' context. Our main contribution is to fill the void in the literature on empirical validations of conspicuous consumption extended from parents to children. This study also offers guidance for children's consumption companies to adjust their product lines to maximize sales performance.

Key words: Extended self, Conspicuous consumption, Status consumption, Status Signaling, Keeping up with the Joneses

INTRODUCTION

The concept of 'extended self' was formally introduced by Belk (1988) who began with the following opening statements (p. 139):

We cannot hope to understand consumer behavior without first gaining some understanding of the meanings that consumers attach to possessions. A key to understanding what possessions mean is recognizing that, knowingly or unknowingly,

intentionally or unintentionally, we regard our possessions as parts of ourselves. Simply put, 'we are what we have' is the core idea behind this concept. He went on to say that the scope of 'extended self' goes beyond physical things that consumers own and use. It includes 'persons, places, and group possessions as well as such possessions as body parts and vital organs' (p.140). Despite the debate over the boundaries of extended self (Cohen 1989), the concept is extremely important for it lays the foundation for consumer behavior and connects the nature of self with personal possessions. In essence, consumers are doing more than living their lives through the products they own; they create, define and expand an 'extended self' over their lifetime by uniting the objects, people, symbols and images with their consumption and activities.

This theory lends itself to explain why people own and display conspicuous products. "Conspicuous consumption" was first coined by Veblen (1899) to describe the behavior of wealthy people who used extravagant consumption of goods as a way to signal their higher status in society. The act in itself carries specific meanings that can be seen and recognized by the public. Today, this status signaling behavior has permeated beyond the rich. As modern marketing created the concept of "brand" with carefully crafted images, lifestyles, or social characteristics advertised and linked to products, people can also acquire these products to signal their desired social identity or aspirant individual quality. However, unlike conventional conspicuous consumption which is usually equated with luxury goods, O'Cass and McEwen (2004) categorize this as "status consumption" in which the product by itself is not necessarily luxurious so long as using the product serves to be seen and recognized for the associated meanings or images.¹

The scope of 'extended self' is an evolving state as one progresses through life. Conspicuous spending with the intention to be publicly seen is also evolving, starting from products we own or services we use to people we care about, pets we own, or in today's digital world, to virtual avatars we pretend to be, or even fictional comic books characters we transform into (cosplay). All are about the excessive spending on people, entities, or imaginary selves other than ourselves. This is an intriguing consumer behavior that has yet to receive much attention academically as past conspicuous consumption studies are almost exclusively on oneself.² In particular, no one has asked whether the conventional status signaling theories for conspicuous consumption still hold true in the case of conspicuous consumption for 'extended self'. In this study, we intend to answer the question.

Since the intention of conspicuous/status consumption is to signal to others, consumption choices must be noticeable. That is, through possession of noticeable products – commonly referred as "positional goods" or "visible goods" by economists, people want to be *perceived* as being a member of a certain class or having desirable individual qualities. Ample studies from different academic disciplines have presented theories regarding the relationship between social status and consumption of conspicuous goods (Charles, Hurst, and Roussanov 2009; Dynan and Ravina 2007; Grinblatt, Keloharju, and Ikäheimo 2008; Han, Nunes, and Drèze 2010; Heffetz 2011; Kuhn, Kooreman, Soetevent, and Kapteyn 2011).

Among all conspicuous goods, cars and apparel are the top two noticeable items (Heffetz 2011), both viewed as a 'second skin' so others can see in public (Greenberg, Pyszczynski, and Solomon 1996). Indeed, it is easy to spot a 'fancy' car on the street or notice people wearing 'conspicuous' apparel at social occasions. Apparel, in particular, is an individualistic consumption but has long transformed from being a necessity to a means of communicating social identity. For consumers, wearing branded fashion not only can signify membership in a particular group but, more importantly, project a desirable social image to others (e.g., Haley-Davison leather motorcycle jacket and rugged macho man image).

Interestingly, conspicuous clothing is also seen among children today. Recent statistics show that the luxury or designer brand children's apparel market has reached \$6b globally in 2017, with an annual growth rate of 7%. This is significantly higher than the rate for adults, which is 2%.³ We are intrigued by this growing trend because, unlike their parents, children are presumably too young to concern themselves with status signaling. So, what, then, is the purpose for parents to buy so much conspicuous clothing for their children, knowing full well that they quickly outgrow their clothes?

Fashion experts suggested that for status-conscious parents, a child is just an extension of themselves.⁴ This view is echoed by the CEO of Fendi, Pietro Beccari, who said that "The Fendi Kids collection includes elegant garments designed for children imagined as mini-me women's and men's looks, proposing the exact ready-to-wear looks with the same texture and workmanship, but in smaller sizes."⁵ What this is alluding to is that the conspicuous clothing purchased for children falls into the domain of parents' 'extended self' mentioned earlier. In fact, more than a century ago, Veblen (1899) already noted that wives and children play a decorative and expressive role for the nouveau riche. Adorning one's wife and child is another form of

advertisement for a man's status. Families are less male-dominated today than those of Veblen's day but, evidently, to excessively consume through family members who are a part of extended self maybe has not changed.

Researchers in many fields have been extensively studying the behavior of owning conspicuous products (Bagwell and Bernheim 1996; Berger and Ward 2010; Holt 1995; Hopkins and Kornienko 2004; Ireland 1994). When it comes to conspicuous consumption, the standard assumption is that consumers care about society's beliefs regarding their wealth or abilities. That is, doing well is not good enough; individuals also want others to know that they are doing well. Veblen (1899) called this "invidious comparison" referring to situations where a member of a higher class consumes conspicuously to distinguish himself from members of a lower class. Taking this view, buying conspicuous clothing for one's children is possibly just another form of parents' status signaling act.

An alternative view on conspicuous consumption is commonly referred to as the "keeping up with the Joneses" syndrome. Veblen (1899) called this type of conspicuous consumption "pecuniary emulation". The motivation refers to the attempt by members of a lower class to engage in upward social comparisons with their aspirational social group. Children can be stimulating, fun, and a source of happiness for parents while, on the other hand, children can often turn into another form of social comparison or even competition (Hoffman and Hoffman 1973). Hence, it is conceivable that parents buy conspicuous clothing for their children because they do not want their children to feel "left out" especially when their playmates or friends are from affluent families. This behavior can have detrimental financial consequences. Morgen and Christen (2003), for example, showed that rising income inequality

within a community induces poor households to increase conspicuous consumption by raising personal debt to maintain social position.

On a completely different angle, Frank (1985) argued that human preferences are shaped by the forces of natural selection. His view is that an overriding importance in human nature is seeing one's children launched in life as successfully as possible. Furthermore, the success of individuals and their children depends largely on their relative standing in a society. But, since relevant attributes such as ability are difficult to observe, people resolve to engage in a signaling contest (through the consumption of "positional goods") to attain a high relative position and increase the chance of succeeding. Following this argument, dressing children up with conspicuous clothing is just a way to gain social advantage.

In a similar vein, Moav and Neeman (2012) proposed a model where individuals' preferences are defined by their consumption, investment in their offspring's human capital and status. The implication is that if an individual's level of human capital provides a signal about the individual's income then it is plausible that more educated individuals will spend relatively less on conspicuous consumption. In contrast, individuals with low levels of human capital spend a relatively larger fraction of their income on conspicuous consumption. Obviously, investment in the health and education of one's children may serve as a signal about wealth. Therefore, it is puzzling why some poor parents allocate a significant fraction of income to conspicuous consumption while neglecting to invest in their children's education. The authors suggested that, unlike conspicuous consumption, the fruits of human capital investment are only observable in the long run whereas conspicuous consumption impresses others instantly. The unfortunate consequence is that the poor may be stuck in a poverty trap.

Other than the economic theory approach, Cross (2002) argued that parents have the silent desire ("wondrous innocence") of seeing their child's look of delight when receiving gifts from them. One subtle goal is to "recapture a feeling long lost in the consumer's encounter with goods but reflected in the child's response of pure delight". In other words, dressing up children with conspicuous clothes can simply be an act of indulgent parenting showing affection toward children or wishing children to have a better materialistic childhood than their own in the past. Another possible motive for parents is to boost children's self-esteem as some researchers found that possession of conspicuous goods can make owners feel superior and have a positive self-evaluation and self-esteem about themselves (Collins 1996; Drèze and Nunes 2009).

To ascertain the face validity of these different motives, we conducted a field survey in 2018 during a convention held for children's product distributors in China. We asked the participants the following question: "To the best of your knowledge about your customers, what are the motives for parents to buy conspicuous or expensive clothing for their children?" We found: signaling higher social status (14%), conforming to peers (18%), enjoying better materialistic childhood (38%), boosting child's self-esteem (14%), and others (16%). The survey results appear to support the likely motives mentioned above.

In short, though parents dressing children in conspicuous clothing is becoming a prevalent phenomenon, this behavior of 'extended self' overlapping with 'conspicuous consumption' has yet to be thoroughly studied. Our research intends to look deeper into this adult-child interplay. The primary goal is to investigate whether the implications extracted from signaling theories related to conspicuous consumption for 'self' can be validated in the case of conspicuous consumption for 'extended self', albeit conspicuous children's clothing. Secondly, though there are ample theoretical models explaining why people spend on conspicuous products,

collaborating evidence is all from indirect inferences based on household expenditure diaries or surveys. Our study is the first to examine conspicuous consumption using actual transaction data. Lastly, we intend to shed light on the potential social and marketing implications and how these findings may lead to opportunities for better managerial initiatives.

To begin, we obtained data from a Chinese online children's apparel company. The children's apparel industry in China has been growing rapidly. It reached \$21 billion in 2015 with about 25% CAGR annually as many international fashion brands have steadily opened stores in major Chinese cities dedicated to their children's clothing lines. Rapid growth of this industry (and many others) is mainly attributed to households' increased purchasing power as well as the fast penetration of e-commerce and improved logistic and transportation infrastructures.

However, not all regions in China are equal economically or culturally. For instance, the average annual income of an urban household is about three times that of the average rural household.⁶ Regional idiosyncrasies in culture, ethnicity, dialect, and lifestyle also vary widely from North to South and East to West. These differences are ideal for our study because we seek to validate that conspicuous consumption behavior, no matter where one lives or what ethnic background one comes from, is driven by one's economic and social conditions and not by personal taste or preference. In this regard, our findings and implications are universal because the same motives prevail across all human cultures and societies.

The rest of this paper is organized as follows. First, a brief review of theories on conspicuous consumption. We then propose a set of testable implications followed by a section on data and operationalization of dependent and controlled variables. Next, we document and discuss the results of our analyses and related robustness checks. Lastly, we present our conclusions and implications, address limitations, and finally suggest future research directions.

RESEARCH BACKGROUND AND THEORY IMPLICATIONS

First, we describe a standard status signaling model to illustrate the role of "conspicuous goods" in one's utility function (see, for example, Charles, Hurst and Roussanov 2009).⁷ Individuals obtain utility from three components: non-conspicuous goods, conspicuous goods, and income status. The key features of the model, which makes it different from a conventional utility maximization problem are: 1) income status also brings utility to the consumer in addition to both conspicuous and non-conspicuous goods and 2) income cannot be observed but can be inferred via consumption of conspicuous goods.

At the equilibrium, the theory yields two main implications: 1) if the average peer group income falls, then conspicuous spending rises at every level of income; 2) as income *dispersion* of the peer group increases (that is, income in the community becomes heterogeneous), people would increase conspicuous spending.⁸ The intuition of the former is that as the average income of the community decreases, persons of every level of income must now spend more to signal to distinguish themselves from those immediately poorer. As to the latter implication, the intuition is that wider income dispersion (while mean-preserving) implies more poor and rich people join the community. If the utility from the conspicuous goods is concave, i.e., diminishing return, the average people would then spend more on conspicuous goods to signal their status.

Charles, Hurst and Roussanov (2009) validated these predictions based on the Consumer Expenditure Survey (CEX, 1996-2002) obtained from different racial groups in the US. They concluded that conspicuous consumption differences across race can be explained rationally by "signaling" motivation. In fact, *within* the same minority subsamples, they replicated the same behavior patterns. So, following this logic, the level of conspicuous consumption on children's apparel should tie with the relative family income position within the peer group as suggested by the theory. Hence, given our context, we postulate that

- *Implication 1*: As average income increases (decreases) in parents' community, conspicuous spending on children's clothing would decrease (increase).
- Implication 2: As income dispersion increases (decreases) in parents' community, spending on conspicuous children's clothing would increase (decrease).

Frank (1985) adopted a similar modeling approach but asserted that income and ability are correlated. He argued that "when an individual's ability level cannot be observed directly, such observable components of his consumption bundle (conspicuous goods) constitute a signal to others about his total income level, and on average, therefore, about his level of ability." For example, anecdotally, good lawyers generally earn a lot of money in the US, and generally drive expensive cars. Thus, any potential client is likely to assume that a lawyer driving an old rusty car is not getting much business.

Based on this theory, the ability-signaling rationale suggests that consumption of conspicuous goods will be inversely related to the reliability of information concerning individual abilities. Hence, other things being equal, a few testable implications follow: 1) living in a community where long-standing social networks exist, one's spending on conspicuous goods should diminish; 2) people who move frequently (thus, hard to know by others) should spend more on conspicuous goods than those who stay put; and 3) generally speaking, as independent measures of an individual's ability accumulate as one grows older, his spending on conspicuous goods would decline. Putting all these together, we postulate that as people reach a stable stage

in life with a well-established social network, the need for ability-signaling diminishes and, as such, conspicuous spending diminishes accordingly. Thus,

• *Implication 3*: As parents reach a stable stage in life, spending on conspicuous children's clothing would decrease.

Moav and Neeman (2012) proposed an overlapping generation model where resources can be invested in human capital or spent on status goods, both tied to the signaling of income. At the equilibrium, they deduced that higher educated individuals will spend relatively less on conspicuous goods whereas those who are less educated spend more on conspicuous consumption. Thus,

• *Implication 4*: Parents with higher education would spend less on conspicuous children's clothing.

Furthermore, they inferred that during festivals, the display of expensive clothing and jewelry is more conspicuous than other types of consumption, and hence may provide an effective signal for income or wealth. Sociology has a different way to examine festivals. The social and cultural meanings of festivals are naturally rooted in the locale since they can strengthen the natural bond between people and their communities (Lau and Li 2015). Some argued that people in the communities communicate and compare with each other (Festinger 1954; House 1980). Since people indeed care about other people's evaluations concerning them (Hopkins and Kornienko 2004; Mas and Moretti 2009), festivals are great occasions for them to compare with others. Thus, we postulate the following:

Implication 5: During festivals, parents would spend more on conspicuous children's clothing.

Morgan and Christen (2002), by adding consumption of "the others" (that is, other people in the community) element into the utility function, argued that a "relatively" poor person in a community would borrow money (through financing or credit card debt) or sacrifice the consumption of non-conspicuous goods to main his social status when he cannot keep up with the income increase of "the others" in the community. They framed this as "keeping up with the Jones" syndrome. They deduced that the rising personal debt phenomenon is tied to 'income inequality' in the society as people borrowed money and spent on conspicuous goods. Note, however, they do not have the data to directly link income inequality and sales of conspicuous goods. Odabayeva and Chandon (2011) also concurred that bottom-tier consumers (as in the classroom experiments) would reduce conspicuous consumption when income inequality eased in the peer group. Following these studies, the implication is that:

• *Implication 6*: As income inequality increases in parent's community, they would spend more on conspicuous children's clothing.

All status-signaling theories justify conspicuous consumption as a "rational" consumer choice. As conspicuous consumption shifts from 'oneself' (parents) to 'extended self' (children), based on the 'extended self' theory, we expect that status signaling motive still applies here and the implications described above remain unscratched. Thus far, however, no direct validations of these status signaling theories in this 'extended conspicuous consumption' context.

In what follows, we describe our data, approach, and validation results of these theoretical implications.

DATA, VARIABLES, AND ESTIMATION

Data

The data we used is an SKU-level sales dataset from August 2011 to October 2014 obtained from a children's clothing company that sells their products purely online in China. This online sales company is a very typical children's apparel seller, with annual sales of RMB 250 million (near USD 35 million) in 2014, covering almost all geographic markets in China.

This company is one of many sellers in a very low-concentrated children's apparel market where Balabala is the number one children's apparel brand in China but has only a 3.1% market share, compared to the 12% market share of Carters in the US. Additionally, this online company does not have any offline outlets (i.e., branded stores, department stores, or discount stores) or offline advertising channels. It does not differentiate its product assortment, price, or promotion strategies. This "no differentiation" marketing strategy eliminates the potential regional or store-specific confounding factors commonly seen in offline sales settings.

Data contained information such as item price, discount, SKU, category, and shipping addresses. Shipping address is essential because we matched that with district-level statistics obtained from the National Statistics Bureau. The latter includes socioeconomic information for every administrative district in China. The data structure is elaborated as follows.

First, aberrational, international, and institutional buying (e.g., school) records were removed. After data cleaning, the final dataset contained 2,611,265 transactions from 1,540,473 orders purchased by 1,057,487 customers. Based on the purchase information, we computed and created a series of variables for each customer such as average price paid per order, average quantity per order, average discount percentage per order, number of orders, and average clothing size purchased. Table 1 contains the summary statistics of the purchase data.

We also obtained 2010 Chinese census data from the National Bureau of Statistics which covers all 3,640 counties and districts in the entire country. Based on the address, our sales data matched 2,831 counties and districts, roughly 78% of the country. Census data includes information such as average education level (years), size of the county/district, rural, smaller city, or big metropolitan city, percentage of homeowners, birth rate, and male-female ratio, etc. Table 2 contains the summary statistics used in this study.

Note that children's clothing can also be purchased from offline retail outlets. Though there are no priori reasons to speculate that conspicuous children's clothing purchases would be different when parents shop online versus offline, the concern about the potential effect of shopping formats should be addressed. Unfortunately, we do not have information about the distribution of children's apparel stores across the country. To attenuate this concern, we used the information of physical store locations obtained from Balabala, the number one children's fashion brand with over 4,000 stores nationwide, to form the proxy as a control variable.

Another issue is the prevalence of e-commerce and competition across different regions. That is, shoppers may be more receptive to e-commerce in some regions than others. To account for this potentially compounding factor, we included the *e-commerce development index* created by Alibaba, the number one online selling platform in China, in which they have gathered both online-shopping and online-retailing information to define the level of e-commerce development for each district in China. Lastly, since clothing purchase is also dependent on local climate and temperature, we collected data on the yearly average temperature of each county. In summary, control variables are sorted into two categories: customer order-related variables (shown in Table 1) and socio-economic factors (shown in Table 2). The former is to capture the idiosyncrasies of customer buying patterns whereas the latter is to reflect community characteristics and socio-economic conditions.

Variables of Interest

Dependent Variable: Our challenge is to define conspicuous or status children's clothing. Based on Veblen's definition (1899), two conspicuous characteristics are: visibility and expensiveness. Hence, our approach was first to identify whether the purchased item is inherently visible and then secondly if it was more expensive than the average price within its category. We assigned a visibility score (1 being not conspicuous at all, and 5 being extremely conspicuous) to each category of children's clothing. To validate our coding, we asked 11 undergraduate students to assign a visibility score based on each purchase item description following Heffetz (2011).⁹ The reliability of these 11 raters is statistically acceptable (Cronback's Alpha = .76). The Pearson correlation between our coding and average rater coding is 0.53 (p-value < .01). Therefore, the visibility coding was applied across all purchase data. Regarding the second criterion, expensiveness, we found that prices of boy's clothing and girl's clothing are systematically different even within the same category. Hence, we tabulated the average price for the boy's and girl's clothing categories. Then, if the purchase price is above the average price in the category, it is coded 1 as expensive.¹⁰

To be quantified as a conspicuous purchase in this study, an item must be expensive and have a 5 in visibility score. We identified, among all transactions, roughly 22.5% of the purchases as being conspicuous buys. Given that the unit of analysis is household or customer, we then computed and created the following dependent variable:

• CC Index: the percentage of spending on conspicuous items out of the total spending on children's clothing.

As shown in Table 3. The average spending on conspicuous clothing over total spending is 30.64% across all households.

Variables of Predictions: Next, we defined a set of variables associated with the theoretical implications.

• Average income: Census data does not contain income at the district level. Fortunately, there are records on 19 industries such as finance, information, hotel, and agriculture in each district. We inferred average income using the number of employees in industry and the average salary of the corresponding industry. Hence,

Average income_{*i*} =

 $\sum_{i=1}^{19}$ (the number of employees of industry_{ij} *

the average salary of industry $_{ij}$ / total population size_{*i*}

- Income dispersion: Based on the average salary of each industry, we then classified each industry into one of the following five categories: high income, high-medium income, medium income, and low income. We computed the standard deviation based on the number of employees of each category as the operationalization of income dispersion.
- Stable community: Census data does not have any direct measures to match the notion of "stable environments with long-standing social networks" or "people who are frequent movers", both mentioned as possible predictors (Frank 1985, p185). The closest proxy is the percentage of homeownership since homeownership conceptually fits well with both

descriptions and is highly correlated with another descriptor, "older and married". Hence, the percentage of homeownership is used as a proxy for the degree of stable community.

- Education: Average years of education is obtained from the district data.
- Festival purchase: Since each purchase record is time-stamped, we computed percentage of purchase orders made prior to festivals.¹¹
- Income inequality: Gini coefficients are not available at the district level. So, the operationalization of this variable is as follows: Given the number of employees of an industry and the average salary of the corresponding industry, we are able to construct the income earned by the top 10% of households in district *i*, as well as the income earned by the bottom 10% of households in district i. Specifically, 10% households of District i =10% * 50,000 (total working employees of District i). We find the industry that offers the highest average salary (IT industry) and if the number of employees in the information industry is equal to or greater than 10% of households, then the income earned by the top 10% of households = 10% * 50,000 * average salary of information industry. If the number of employees in the information industry is smaller than the 10% of households. we find the industry that offers the second highest salary (in this case, finance industry). Then, the income earned by the top 10% of households = the number of employees in the information industry * average salary of the information industry + (10% * 50.000- the number of employees in the information industry) * average salary of finance industry. With that, income inequality *i* is computed as the ratio of income earned by the top 10% of households to income earned by the bottom 10% of households in District i.

Table 3 contains the summary statistics of the dependent variable and all variables of interest related to our predications above. The correlation matrix of all variables contained in the analysis is shown in Table 4.

Estimation and Results

Estimations were carried out with various functional forms. Through standard checks on model residuals, we applied generalized least squares (GLS) regressions in this study. The main results are shown in Table 5.

Based on the model estimates, we found all predictors are statistically significant. Specifically, we found as average income level increases, the conspicuous children's clothing consumption falls (B = -.062, p < .05) as implied in Charles, Hurst and Roussanov (2009). Note that though the direction of "income dispersion" is theoretically ambiguous, the estimate suggests that the utility from conspicuous clothing is concave (B = .008; p < .05) which is also consistent with Glazer and Konrad (1996). Thus, the higher the income dispersion the more would be spent on conspicuous children's clothing consumption which supports the intuition – as income dispersion in the reference group gets wider, the need for status/conspicuous goods increases.

A stable community means the social network is relatively more mature and people know each other well. Hence, the need for conspicuous goods diminishes. This implication is also supported (B = -.085, p < .05). Higher education level also reduces the demand for conspicuous children's clothing (B = -.013, p < .05) while during festivals, families would buy more conspicuous children's clothing (B = .172, p < .05). Both are consistent with the predictions of signaling theories. Lastly, income inequality (B = .019, p < .05) is also consistent with the prediction of Morgan and Christen (2002). Higher income inequality would lead to higher demand for conspicuous/status clothing. The syndrome of "keeping up with the Joneses" is supported here.

As to other control variables, we found the estimate of size is statistically significant (B = .029, p < .05). Since the products in our data are for children ranging from ages 0 to12, the estimate means parents would buy more conspicuous clothing for older children. This makes intuitive sense since as children grow older, they are more engaged in group activities and social occasions (i.e. private parties and school events), so the opportunities for conspicuous display increases. Anecdotally, older children are also more susceptible to peer pressure and appearance comparison. Note also, the results indicate that customers in small cities/rural areas are spending more on conspicuous children's clothing compared to the customers in bigger cities (B = .019, p < .05). One plausible explanation is that city folks have more options to signal their status through children (for example, private K-12 schools, private lessons, and summer camps).

In summary, based on our main estimation results, we validated the implications or predictions gleaned from various status-signaling theories as applied to the case of 'extended conspicuous consumption' here. Both Veblen effects of "invidious comparison" (showing-off) and "pecuniary emulation" (keeping up with the Joneses), are well supported in this study.

ROBUSTNESS CHECKS

Though the estimated results support the status signaling theories proposed in the literature, we conducted a series of robustness checks to further solidify the notion that conspicuous consumption behavior is driven by the economic or social conditions rather than by intrinsic preference differences.

We divided the data into two halves, respectively, in the following ways: 1) by GDP - top 25% vs bottom 25% districts; 2) by city vs. rural; and 3) by North vs. South. We re-estimated the model, respectively, and contrasted the results. As shown in Table 6 and 7, *within* each subsegment, though the magnitudes of the coefficients are different and some effects fade away, the directional patterns are still consistently aligned with the results of the pooled data shown earlier. This is a strong vindication that the behavior of status-signaling via consuming positional goods is universal.

Robustness Check (RC) 1-5

Our study anchored on the 'extended self' concept. Then, we need to show that conspicuous children's clothing is indeed purchased for parents' status signaling purpose. To do so, we further constructed a variable for conspicuous children's clothing purchased prior to Fall School Opening day (on Sept 1 in China). School Opening day is a big event for children whereas major festivals such as Moon festival and Chinese New Year are important for parents since during those festivals it is a tradition for the family to visit other families, see people, and move about in public. Thus, we expect that conspicuous children's clothing purchases, in contrast, are far less before School Opening day. Indeed, as seen in RC1, we not only replicated the results of our main analyses but also found that for School Opening day, parents purchased significantly less conspicuous children's clothing (B = -.126, p < .05) while for traditional Chinese festivals, the effect (B = .170, p < .05) is positive and significant.

To further strengthen the results, we also repeated the analysis with alternative operationalization of the dependent variable, different model specifications, and functional forms. RC2: we converted conspicuous purchase into a binary variable, assigning 1 to customers who ever bought a conspicuous clothing, 0 otherwise. We then employed a logit model. RC3: we utilized Poisson regression where the total number of conspicuous products purchased is a dependent variable. RC4: instead of using the customer-level data, we created an order-level data and a binary variable, assigning 1 to orders containing conspicuous products, and 0 otherwise. Again, a logit regression is performed. Overall, the results are largely consistent with the original GLS model as shown in Table 8 and 9.

Furthermore, though we included a pair of proxies, offline store locations and ecommerce development index to control for physical store distribution and pervasiveness of online channels, the results may be skewed by the missing offline purchases that are not observable to us. To alleviate this concern, we conducted RC5 and selected a subsample data to include 61,659 customers who live in small and remote counties in West China (the most undeveloped region in the country) where retailing settings remain very primitive. As shown in Table 9, the pattern remains quite consistent with our main findings. Hence, per our judgment, the potential skewedness from missing offline purchases is a concern but not serious enough to unravel the main findings.

CONCLUSION AND DISCUSSION

In conclusion, the main contribution of this study is twofold. First, though the link between conspicuous or status consumption and exhibitionistic motivation has long been noticed and examined, as far as we know, there are no empirical studies directly linking the theories to actual conspicuous purchases in the previous studies. Moreover, as conspicuous consumption has progressively expanded from 'self' to 'extended self', research on this 'extended conspicuous consumption' phenomenon is completely void. Our findings suggest that the conventional status signaling motives still hold true in the context of conspicuous spending shifted from oneself to one's children. Second, this study supports the argument that using conspicuous products is to signal social status and the propensity to allocate more (or less) budget to conspicuous goods is driven by socio-economic conditions, and not because people put different weights (i.e., strong or weak preferences) on the conspicuous goods. Thus, we view our contribution in the tradition of scientific approach, according to which, theories explaining economic behavior should rely on measurable variables rather than on ad hoc assumptions concerning tastes. In this regard, our findings are generalizable, albeit using children's clothing purchase data obtained in China.

Above and beyond the contribution to the academic literature, this research provides managers with some insights on why particular cross-sections of customers are more interested in purchasing expensive children's clothing than others. Our results can potentially offer managers useful and actionable suggestions on their distribution, pricing, and product strategies (e.g., Tereyağoğlu and Veeraraghavan 2012, Amaldoss and Jain 2005).

There are a few caveats to address. Conspicuous consumption behavior extended to the domain of extended self is new. Discretionary parental actions on behalf of their children are likely motivated by both status-signaling and parental affection as suggested by our field survey. However, as we discovered in the conspicuous children's clothing category supports the status signaling motive, we are silent on validating the motives of parental love or altruism. A central

assumption in these signaling theories is that while actions (spending on conspicuous goods) are observable, the information they are based on is not or not credibly inferred. Although the purchase data we examined is at the unit of household, we do not have other household-specific information. Thus, statistically, we cannot validate other motives despite the likelihood is high.

As pointed out by Moav and Neeman (2012), poorer people may end up allocating too much of their resources on conspicuous consumption (for example, lavish wedding ceremonies in poor rural India as documented by Bloch, Rao and Desai (2004)) instead of investing in human capital accumulation. Consequently, they are stuck in the so-called "poverty trap". In our study, we do not have data on spending on other goods to check whether spending on conspicuous children's clothing, as evident in our study, reduces spending on other goods within the household. At the district level, we do not have any aggregate measures to serve as surrogates of possible tradeoffs.

As mentioned in the Introduction, the scope of 'extended self' includes other close relatives or friends, pets, avatars (Belk 2013), or even cosplay characters. In the future, the list may include AI-enabled human-like robots at home. Conspicuous consumption extending to these domains is an interesting consumer behavior and, in our view, should be studied further. As the data and information is becoming available or can be properly inferred in the future, these theoretical predictions hopefully can be validated more comprehensively.

REFERENCES

- Amaldoss, W and S. Jain (2005), "Pricing of conspicuous goods: A competitive analysis of social effects," *Journal of Marketing Research* 42(1), 30 – 42.
- Bagwell, Laurie S. and B. Douglas Bernheim (1996), "Veblen Effects in a Theory of Conspicuous Consumption," *The American Economic Review*, 86 (3), 349.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 12 (September), 139-67.
- Belk, Russell W. (2013), "Extended Self in a Digital World," Journal of Consumer Research, 40 (October), 477-500.
- Berger, Jonah and Morgan Ward (2010), "Subtle Signals of Inconspicuous Consumption," Journal of Consumer Research, 37 (4), 555-569.
- Bloch, Francis, Vijayendra Rao, and Sonalde Desai (2004), "Wedding Celebrations as Conspicuous Consumption Signaling Social Status in Rural India," Journal of Human Resources, 39(3), 675-695.
- Charles, Kerwin K., Erik Hurst, and Nikolai Roussanov (2009), "Conspicuous Consumption and Race," The Quarterly Journal of Economics, 124(2): 425-467.
- Cohen, Joel. B. (1989), "An Over-extended Self?," *Journal of Consumer Research*, 16(1), 125-128.
- Collins, Rebecca L. (1996), "For Better or Worse: The Impact of Upward Social Comparison on Self-Evaluations," *Psychological Bulletin*, 119 (1), 51-69.
- Cross, Gary (2002), "Valves of Desire: A Historian's Perspective on Parents, Children, and Marketing," *Journal of Consumer Research*, 29(3), 441-447.

- Drèze, Xavier and Joseph C. Nunes (2009), "Feeling Superior: The Impact of Loyalty Program Structure on Consumers' Perceptions of Status," *Journal of Consumer Research*, 35(6), 890-905.
- Dynan, Karen E., and Enrichetta Ravina (2007), "Increasing Income Inequality, External Habits, and Self-reported Happiness," *American Economic Review*, 97(2), 226-231.
- Festinger, Leon (1954), "A Theory of Social Comparison Processes," *Human Relations*, 7(2), 117-140.
- Frank, Robert H. (1985), Choosing the Right Pond: Human Behavior and the Quest for Status, Oxford University Press.
- Glazer, Amihai and Kai A. Konrad (1996), "A Signaling Explanation for Charity," The *American Economic Review*, 86(4), 1019-1028.
- Greenberg, Jeff, Tom Pyszczynski, and Sheldon Solomon (1996) "The Causes and Consequences of a Need for Self-esteem: A Terror Management Theory," In *Public Self* and Private Self, pp. 189-212., New York, Springer.
- Grinblatt, Mark, Matti Keloharju, and Seppo Ikäheimo (2008), "Social Influence and Consumption: Evidence from the Automobile Purchases of Neighbors," *The Review of Economics and Statistics*, 90(4), 735-753.
- Han, Young Jee, Joseph C. Nunes, and Xavier Drèze (2010), "Signaling Status with Luxury Goods: The Role of Brand Prominence," *Journal of Marketing*, 74(4), 15-30.
- Heffetz, Ori (2011), "A Test of Conspicuous Consumption: Visibility and Income Elasticities," *Review of Economics and Statistics*, 93(4), 1101-1117.

- Hoffman, Lois W. and Martin L. Hoffman (1973), "The Value of Children to Parents," in
 Psychological Perspective on Population Fawcett, J.T., ed. New York, Basic Books, 19-76
- Holt, Douglas B. (1995), "How Consumers Consume: A Typology of Consumption Practices," Journal of Consumer Research, 22 (1), 1-16.
- Hopkins, Ed and Tatiana Kornienko (2004), "Running to Keep in the Same Place: Consumer Choice as a Game of Status," *The American Economic Review*, 94 (4), 1085-107.
- House, William C. (1980), "Effects of Knowledge that Attributions Will Be Observed by Others," *Journal of Research in Personality*, 14(4), 528-545.
- Ireland, Norman J (1994), "On Limiting the Market for Status Signals," *Journal of Public Economics*, 53(1), 91-110.
- Kuhn, Peter, Peter Kooreman, Adriaan Soetevent, and Arie Kapteyn (2011), "The Effects of Lottery Prizes on Winners and Their Neighbors: Evidence from the Dutch Postcode Lottery," *American Economic Review*, 101(5), 2226-47.
- Lau, Chammy Y. L. and Yiping Li (2015), "Producing a Sense of Meaningful Place: Evidence from a Cultural Festival in Hong Kong," *Journal of Tourism and Cultural Change*, 13 (1), 56-77.
- Mailath, George. J. (1987), "Incentive Compatibility in Signaling Games with a Continuum of Types," *Econometrica: Journal of the Econometric Society*, 1349-1365.
- Mas, Alexandre and Enrico Moretti (2009), "Peers at Work," *The American Economic Review*, 99 (1), 112-45.

- Moav and, Omer and Zvika Neeman (2012), "Saving Rates and Poverty: The Role of Conspicuous Consumption and Human Capital," The Economic Journal, 122(563), 933-956.
- Morgan, Ruskin and Markus Christen (2002), "Keeping Up with the Joneses: Conspicuous Consumption, Income Inequality and Americans' Addition to Debt," INSEAD.
- O'cass, Aron, and Hmily McEwen (2004), "Exploring Consumer Status and Conspicuous Consumption," *Journal of Consumer Behaviour*, 4(1), 25-39.
- Ordabayeva, Nailya and Pierre Chandon (2011), "Getting ahead of the Joneses: When Equality Increases Conspicuous Consumption among Bottom-Tier Consumers," Journal of Consumer Research, 38 (1), 27-41.
- Ridgway, Nancy M, Monika Kukar-Kinney, Kent B. Monroe, Emily Chamberlin (2008), "Does excessive buying for self relate to spending on pets?" *Journal of Business Research* (61), 392–396.
- Tereyağoğlu, Necati nd Senthil Veeraraghavan(2012), "Selling to Conspicuous: Pricing, Production, and Sourcing Decisions" *Management Science* 58(12), 2168-2189.

Veblen, Thorstein (1899), The Theory of the Leisure Class, New York: Penguin.

Vigneron, Franck, and Lester W. Johnson (1999), "A Review and A Conceptual Framework of Prestige-seeking Consumer Behavior," *Academy of Marketing Science Review*, 1(1), 1-15.

FOOTNOTES

¹ Vigneron and Johnson (1999) sorted the motivations for prestige-seeking behavior into five different categories – Velbenian, Snob, Bandwagon, Hedonist, and Perfectionist. Han, Nunes, and Dreze (2010) classified people into four categories depending on their wealth and need for status.

² Ridgway, Kukar-Kinney, Monroe and Chamberlin (2007) using lab experiments to examine the tendency of excessive buying behavior extended from self to pets.

³ This is partially thanks to many fashion name brands that have been extending their adult lines to the children's segment. https://www.statista.com/statistics/874374/childrenswear-and-designer-kidswear-market-sizes-worldwide/

⁴ https://www.scmp.com/magazines/style/fashion-beauty/article/2125186/why-chinese-parents-invest-luxury-childrens-wear

⁵ https://www.scmp.com/magazines/style/fashion-beauty/article/2008410/secret-success-fendiceo-pietro-beccari-motivates-his

⁶ http://data.stats.gov.cn/easyquery.htm?cn=C01&zb=A0A01&sj=2017

⁷ See Mailath (1987), Ireland (1994), and especially Glazer and Konrad (1996) for formal treatments of models of this form.

⁸ A necessary condition is that consumers are less "risk averse" for spending on non-conspicuous goods than that on conspicuous goods (see Glazer and Konrad1996).

⁹ In his study, Heffetz (2011) uses a 5-point interval scale of noticeability (by other people) survey results to create a "visibility index".

¹⁰ As an alternative operationalization, we used top 25% to form an "expensiveness" indicator. The result was not significantly different.

¹¹ For Chinese New Year, all logistic companies shut down their operations a week to 10 days prior to the new year. As such, people would buy their products early accordingly. Hence, we counted all purchases in a 3-week window before the Chinese New Year as festival purchases.

TABLE 1

Variable	Mean	Std. Deviation	Minimum	Maximum
Average clothing size	5.36	1.70	1.00	8.00
Promotion intensity	53.55%	30.31%	0.00%	100.00%
Order price	144.80	108.27	0.00	3980.00
Product quantity per order	1.65	1.11	1.00	10.00
Number of orders	1.46	1.67	1.00	608.00

Descriptive Statistics for Part One Data

N=1,057,487.

TABLE 2

Descriptive Statistics for Part Two Data

	Std.				
Variables	Mean	Deviation	Minimum	Maximum	
Average education (Years)	8.75	1.41	2.42	13.11	
Percentage of homeowners	90.47%	10.20%	16.01%	100.00%	
Birth rate	10.69%	3.79%	1.70%	27.62%	
Male female ratio	1.05	0.06	0.73	1.60	
Average temperature	14.57	4.88	4.30	24.30	
City levels	Frequency				
Non-rural/small cities	43.3	81%			
Small cities (rural)	56.69%				
Offline store distribution					
With Balabala store	32.85%				
Without Balabala store	67.15%				
E-commerce development					
Developed counties	27.48%				
Undeveloped counties	72.52%				
N=2,831					

Variable	Mean	Std. Deviation	Minimum	Maximum
Dependent Variable				
CC Index	30.64%	41.88%	0.00%	100.00%
Variables of Predictions				
Average income	8.18	0.21	7.18	8.68
Income dispersion	3.18	2.56	0.03	11.68
Stable community				
(Percentage of	0.79	0.17	0.15	1.00
homeowners)				
Education	9.88	1.43	2.42	13.14
Festival ratio	17.55%	36.14%	0.00%	100.00%
Income inequality	3.23	0.37	1.74	3.65

TABLE 3

Descriptive Statistics for Dependent Variable and Variables of Predictions

N=1,057,487.