Just enough unless my community needs more! The necessity shopper scale and the mediating effect of connectedness on buying more

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Abstract
Purpose – Consumer choice theory (CCT) and the law of diminishing marginal utility help to explain shoppers that value less and prioritize needs. Additional units provide a marginal return on investment. Buying more does not mean equivalent gains for additional money spent. The researchers developed and validated the necessity shopper scale (NSS) to study need-focused shoppers.

Design/methodology/approach – The researchers followed standard psychometric practices to create and validate the NSS. The researchers performed item development, data collection, exploratory analysis, confirmatory factor analysis, and predictive validity analysis using survey data (N = 1,266).

Findings – Discriminant and convergent validity analyses demonstrated that the measure was distinct from existing measures. Predictive validity analysis found necessity shoppers (NS) are more likely to buy one over buy one get one half off (BOGOHO). NS were associated with a higher connection to community/group (CTCG). Higher hyperopia (i.e. disinclination to indulge) with necessity shopping beliefs heightened this CTCG. A higher CTCG was associated with a greater likelihood to select BOGOHO.

Originality/value – NS (more connected to others) buy more to share with others, while buying just enough for themselves. Social connections are long-term investments involving more people and more needs to fulfill. Brands marketed with communal values and able to enhance social connections are discussed as implications to encourage NS to buy more.

Keywords Necessity shoppers, Scale development, Validation, Prefer less, Consumerism, Path analysis

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JS: conceptualization, methodology, validation, writing-original draft, editing, added sections
ML: writing-preparation, conceptualization, visualization, writing-reviewing, added sections, editing

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1. Introduction
Researchers have studied different types of buyers: impulsive (i.e. unplanned emotionally influenced; Muruganantham and Bhakat, 2013), compulsive (i.e. repetitive response to negative events/feelings; O'Guinn and Faber, 1989; Shoham and Makovec Brenčič, 2003) and conspicuous (i.e. status/luxury; Mason, 1984; Vohra, 2016). Marketers have influenced consumers to buy more by understanding underlying motives. Despite abundant annual ad dollars promoting buying more, there are shoppers who still prefer less and prioritize needs (e.g. buying one despite alluring discounts on multiple units). Within the context of consumer choice theory (CCT), consumers make decisions based on perceived utilitarian value by comparing a product to price, prior knowledge and available information (Adamowicz and Swait, 2013; Kahneman and Thaler, 2006). At present, there lacks a validated measure to study necessity shoppers (NS). Our goal was to design and validate the necessity shopper scale (NSS) to give marketers a tool to study NS.

While lower income was associated with negative life evaluations for the lack of ability to afford needs (Diener et al., 2010), this does not identify shoppers who firmly stick to buying necessities. Many low-income consumers will partake in conspicuous shopping for high-end brands to appear better off financially with material goods (e.g. financing a new luxury car with loans) (Vohra, 2016). This is buying beyond what is necessary. What are the shared beliefs of consumers that stick to buying necessities despite advertisements to buy more? We followed psychometric statistical procedures to validate the NSS as a distinct measure to study variable relationships with this type of shopper.

Necessities are purchased by low- to high-income households (Hauck and Stanforth, 2007). Notably, there are high-income consumers who choose not to excessively spend. Despite the funds and ability to buy more, many high-income earners will strictly purchase what they need (e.g. homes with 30-year-old furniture, bare walls and half-empty closets). Spending just because they can or to fill open space does not provide meaningful utilitarian value to these individuals. This illustrates NS share a unique set of psychological beliefs that cross demographics like income brackets. This phenomenon warranted the development of the NSS so that the marketers can better serve consumers that prioritize essentials.

For higher sales potential, studying community ties can help marketers persuade NS who are likely to buy less. With modern frequent social media use, interactive marketing techniques have become a precursor to buying (Barney-McNamara et al., 2021). Bilateral communication between consumers and businesses (e.g. asking questions and requesting users to post pictures) cocreates value and fosters online communities (Wang, 2021). Bilateral online communication can reduce the need to touch a product (to sample) before buying (Lee et al., 2017). Social networking sites have become places to forge self-identity and obtain group acceptance (Dunne et al., 2010). Targeting online communities allows businesses to reach consumers more effectively in a market oversaturated with ads (e.g. sponsoring social media influencers to generate engagement from select communities) (Keller, 2009). This establishes credibility and resistance to purchasing substitutes. This fosters a community with shared values and preferences for goods. When NS buy fewer items, establishing brand loyalty to become their preferred product brand is more valuable. Investigating relationships between NS and community ties provides new opportunities for sales conversions.

2. Literature review
2.1 Consumer choice theory (CCT) and the law of diminishing marginal utility (LDMU)
CCT explains consumers attempt to rationalize their decision preferences for a combination of economic and psychological reasons (Hands, 2010). Consumers will evaluate the utility of purchases for pleasure or to avoid pain. When presented with a choice, consumers seek to resolve conflict among options based on prior experiences and knowledge to decide (Hansen,
Post-evaluations of these decisions modify consumers’ beliefs and habits over time (Bettman and Zins, 1977). CCT helps to explain irrational (i.e. emotional-based) decisions made by consumers that do not maximize economic value with a given choice (Thaler, 1980). Thaler (1980) recognized that consumers make considerations beyond just maximizing utility, such as sunk costs and self-control. Purchasing durable goods (e.g. toilet paper/paper towels) has economic and rational benefits to stockpile. This saves money by buying in bulk, will last for years and saves effort to buy later. However, it is also preferential to purchase just enough durable goods for a better future sale and not waste closet space. The latter is more present minded. Its wages prices will be the same or better in the future. It does not absorb storage costs that result in less space at home. Buying just bare necessities means more funds later in savings and remaining economically solvent. CCT allots rational and irrational considerations consumers use to inform and justify purchases.

Within the context of CCT, utility is the value consumers perceive of a product compared to price, available information and prior knowledge (Adamowicz and Swait, 2013; Kahneman and Thaler, 2006). Marginal utility is the relative increase in value perceived with a purchase or additional unit of the product (Alvino et al., 2018; Vickrey, 1945). Diminishing marginal utility is the decrease in added satisfaction after the consumption or purchase of additional units (e.g. purchasing a second car reduces the utility of the first car because of annual costs) (Castro and Araujo, 2019; Lavoie, 1994). The law of diminishing marginal utility (LDMU) can be depicted by a curve where initial units are associated with higher satisfaction, followed by smaller increases (or decline) after a certain point (e.g. satisfying first cheeseburger bite followed by less satisfying bites) (Li and Hsee, 2021). Consumer evaluation of attributes is subjective and uses reference points (e.g. higher value placed on $150 sunglasses versus a $5 pair) (Meyer and Johnson, 1995). Marginal utility is circumstantial to historical, social and cultural influences (Zafirovski, 2001). Promotional deals influence perceived value (e.g. coupons/multiunit discounts) (Lichtenstein et al., 1990). Promotions encourage consumers to spend more by discounting the per-unit price for multiple units. We assert shoppers focused on more immediate needs can resist such promotions because of perceived diminishing marginal utility (e.g. buying excessive laundry detergent will occupy limited space). By using a generic dichotomous option [i.e. buy one versus buy one get one half off (BOGOHO)] as an outcome variable, we can evaluate consumer preference for just enough versus economic maximization. For many common goods (e.g. ice cream, notebooks and toothpaste), purchasing a second unit half off is economically more beneficial given that consumers will eventually use the product. However, there are NS who exhibit self-control despite alluring promotional deals that other consumers typically cannot resist (Mela et al., 1998). Satisfaction from multiple units is not obtained by NS compared to other consumers.

Validation of the necessity shopper scale

Annual U.S. Federal Reserve research found 32 per cent of American participants would need to sell something, borrow money or not be able to cover an unexpected $400 expense (The Federal Reserve Board of Governors in Washington DC, 2022). This indicated many US citizens did not have sufficient savings to cover next month’s rent in 2021. This lack of finances suggests consumers have a bare-needs shopping mindset to remain economically solvent. With less cash available, consumers shift to a scarcity mindset that narrowly focuses on immediate needs (Shah et al., 2012). Such consumers cannot afford to buy more and must prioritize necessities. There are consumers primarily focused on the next meal or common goods (e.g. dish soap/toothpaste) recently depleted. They will buy it again when they need it. Therefore, we defined NS as individuals who prefer less and prioritize their needs. Development of the NSS provides marketers with a tool to enumerate this segment of the population.
2.2 Necessity shoppers (NS) and preference for less

A review of global data on income with well-being found standard of living and ownership of conveniences to be strong mediators of life evaluations (Diener et al., 2010). Basic needs unmet negatively associated with negative life evaluations. Not everyone can afford or intently desire goods beyond their basic needs. Luxury purchases (e.g. hand tailored regalia for an exclusive gala) can jeopardize paying next month’s rent and security needs. Material goods can produce feelings of happiness when owners perceive themselves better off than others through subjective comparison (Veenhoven, 1991). Gratifying needs are not always comparative to others, but rather a fulfillment of basic needs to satisfy one’s current state. The pursuit of goods beyond basic needs can require more effort, money and time with diminishing gains (e.g. wearing trending apparel to exclusive events for compliments) (Manolis and Roberts, 2012). Stratification of economic systems has created an echelon of premium goods to tap into human desire to own rare treasures. However, many recognize opulence is unattainable based on their income and will likely produce negligible value for their overall well-being. Thus, creating a scale to identify NS choosing to prioritize needs warranted design.

A minimalistic lifestyle (i.e. preference for simplicity) is different from necessity shopping and focusing on buying present needs. Prior research has studied minimalism (e.g. aesthetic simplicity) (Wilson and Bellezza, 2022), sustainable minimalistic lifestyles (e.g. owning possessions for as long as possible) (Kang et al., 2021) and voluntary simplistic lifestyles (e.g. biking to work) (Cowles and Crosby, 1986). Minimalism is considered voluntary simplicity (Hook et al., 2023). A minimalistic lifestyle values the benefits of fewer obligations cluttered by material objects (Pangarkar et al., 2021). Minimalists choose to avoid overconsumption and practice conscious consumption (e.g. choosing products manufactured with a smaller environmental footprint) (Oliveira de Mendonca et al., 2021). Minimalist décor may be simple white walls and foldaway furniture. Less functions as aesthetic appeal. While choosing to live a simplistic lifestyle has personal and environmental benefits, there are consumers driven by finances to buy just enough. Minimalism is more of a lifestyle choice as opposed to a consumer choice to buy based on economics to survive. We identify and distinguish NS from minimalistic lifestyles.

Similar to conspicuous shoppers who intentionally purchase luxury goods for a purpose, we believe NS are intentional in their needs-based purchases. With less research specifically on needs-based purchases, we reviewed research that studied making lists prior to grocery shopping. Grocery stores are also places where necessary goods, like food for sustenance, are sold. Grocery shoppers with a list significantly purchased less than those without (Thomas and Garland, 1993). Shoppers without a list purchased more promotional grocery store deals than those with a list (Thomas and Garland, 1996). Qualitative interviews revealed shopping lists helped to control spending and ensure required/necessary purchases (Thomas and Garland, 2004). Women (71 per cent) and men (59 per cent) of their 262 completed interviews used shopping lists. Participants rated unplanned shopping list items more likely impulsive/emotional purchases than forgotten necessity items (Massara et al., 2014).

Common necessary goods (e.g. toiletries, produce and household supplies) can be found at grocery stores. Grocery shoppers exhibit price sensitivity (Fox et al., 2004). Many shoppers favor grocery stores offering promotional savings over those that do not (Smith and Sinha, 2000). It has become commonplace for shoppers to expect savings on multiple units because existing businesses have drawn customers to stores with promotional discounts. Singles (both males and females) had spent less money on groceries annually than couples (Tariq et al., 2016). Consideration for fewer people amounts to spending less on average. Corollary, consideration for more people and needs means spending more. Couples annually spent on average approximately 138.46 per cent ($4,680 to $3,380) more than male
singles and 139.87 per cent ($4,680 to $3,346) more than female singles for groceries. There is an approximate savings of about 61 per cent for couples (not a doubling of the money spent). These researchers also found couples spent more on promotions compared to singles. This indicates couples share resources and utilize more promotions to cut costs. This approximate savings as a percentage is why we used the dichotomous buy one versus BOGOHO selection as the less versus more dependent variable for predictive validity analysis. Single shoppers typically do not buy two regular-priced units during a routine visit (e.g. two bottles of shampoo or two heads of lettuce). Promotions encourage shoppers to buy more despite their current needs.

Shoppers visiting a store for promotions will also purchase regular-priced items (Mulhern and Padgett, 1995). Consumers visiting a store for promotions and those without these intentions did not significantly differ in the amount of money spent. Modeling research of rational shoppers illustrated that as price increases, they will purchase less and make more frequent trips to anticipate potential price variations (e.g. drop in regular price) (Ho et al., 1998). This is buying present needs and believing future cost will be the same or less. Researchers found most consumers plan to purchase goods at regular price (60.2 per cent of 2,172 shoppers), while 13.7 per cent planned to purchase goods only on sale, and 12.6 per cent planned to purchase goods both on sale/regular-priced (Kelly et al., 2000). When given a generic selection to buy more with a promotional offer, we expect consumers to apply their normal tendencies to a given option because they have purchased goods both at regular price and on sale.

The LDMU explains value decreases with each additional unit (Castro and Araujo, 2019; Li and Hsee, 2021). Promotional deals reduce perceived loss pain from higher costs (Mulhern and Padgett, 1995; Smith and Sinha, 2000). This generates perceived per unit value buying more (e.g. second cereal box at half price stored and eaten later). However, how do NS resist such deals, unlike average consumers? We contend NS believe units have diminishing marginal utility despite enticing promotions. For example, one hamburger is good enough for now, and a box of cereal can be purchased later for about the same price when desired. They are more likely to value current needs as opposed to the cost-saving transactional value of buying multiple discounted units.

We expect NS will choose less to obtain more satisfaction for one unit compared to the diminishing returns of multiple units. For predictive validity analysis, we modeled the NSS on relevant variables. Figure 1 depicts the hypothesized model of relationships. Promotions encourage shoppers to shop more on the days they are offered (Namin and Dehdashti, 2019). Consumers will evaluate their current needs against a promotional offer. We anticipate participants to follow their tendencies and personal criteria when presented with the option

![Figure 1](image-url). Hypothesized model of effects on buy one versus buy one get one half off

Notes: The outcome variable (BOGOHO) was a dichotomous selection between 0 = buy one and 1 = buy one get one half off
to buy one or BOGOHO. When presented with an option to purchase less, we hypothesized NS will select the less option even though savings for multiple units would save shoppers more long-term.

H1. NS will more likely select buy one versus BOGOHO.

2.3 Necessity shoppers (NS) and connection to community/group (CTCG)
With less research available on needs-based consumerism and its fulfillment of social needs, we draw from materialism literature. Contrary to needs-based purchases, materialism is described as owning more possessions in the pursuit of happiness and perceived success (Richins, 2004). Materialists tend to purchase for themselves and are less likely to share possessions with others (even close friends/family) (Richins and Dawson, 1992). Individuals low on materialism ranked warm relationships (64.7 per cent) as one of their top four most important goals more frequently compared to those high on materialism (45.1 per cent). Certain consumers will prioritize relationships over material goods. Less studied is empirical path analysis of consumers low on materialism with social connectedness. We draw on this research to study NS and the mediating effects of CTCG.

Social connections are a basic human need that can generate happiness and well-being (Diener et al., 1999). By contrast, possessions can create a short-term sense of fulfillment because after a certain point when needs are met the enjoyment and satisfaction from goods has diminishing returns (e.g. a closet full of designer wear but no people/events to generate meaningful experiences) (Kesebir and Diener, 2008). It is like owning a wedding dress or suit without a wedding to attend. By filling space with objects, it can feel like someone has a fuller and more meaningful life (e.g. a garage full of forgotten belongings), but it is human connections that fulfill social needs. Studies of the relationship between happiness and income have shown a positive relationship, but after a certain point, happiness only gradually increases with level of income (Diener, 1984). Factors such as time, cognitive resources and ability to remember may limit the benefits money can buy. Social capital (from strong family, religious, neighborhood and community ties) relates to higher subjective well-being and physical health compared to material affluence (Helliwell and Putnam, 2004).

NS stand in contrast to materialism (i.e. central pursuit and effort to obtain material goods). Because of the lack of NS literature, understanding materialism helps to explain the satisfaction of needs through objects versus building interpersonal relationships. Materialism related to lower self-reported overall life satisfaction (e.g. family life, work and standard of living) (Ryan and Dziurawiec, 2001). Research found higher materialism related to lower quality interpersonal connections (Dittmar et al., 2014; Kasser, 2016). This is explained by underlying insecurities and contingent self-esteem (based on possessions and money) (Kasser and Kasser, 2001). Their research explains those with strong materialistic values have difficulty satisfying social connection needs because they deny or ignore these desires as important. Possessions are used as a compensatory strategy to satisfy some of these social needs (e.g. hours individually playing video gaming or watching television). Materialistic individuals place more emphasis toward the ownership of possessions than developing robust interpersonal relationships (Chaplin and John, 2010). Meanwhile, Kasser (2016) found participants low on materialism to demonstrate a greater ability to overcome fears from interpersonal conflicts and seek to improve existing relationships. Interpersonal relationships have greater value compared to possessing goods to satisfy someone’s well-being. Individuals low on materialism have similar characteristics to NS who prefer fewer possessions. We believe NS place more emphasis on interpersonal relationships and thereby have a greater CTCG.
**H2.** CTCG will mediate the relationship between NS and selecting buy one versus BOGOHO. NS will associate with a higher CTCG.

Inward lifestyles (compared to accumulating possessions) tend to invest in “personal growth, family, community, spirituality, and communion with nature” (Kasser, 2009, p. 178). The lack of effort and money spent on material goods provides opportunities to grow interpersonal relationships to derive value (Richins and Dawson, 1992). Relationships with people are investments that have longer-term benefits compared to material goods (e.g. hiking buddies traveling the world generate a lifetime of memories). Commonalities and shared experiences help form close relationships. Close relationships have a cognitive interdependence (i.e. individuals have a shared view of themselves with others) (Agnew et al., 1998). This cognitive interdependence is a collective sense of self. Committed relationships have a common agenda and shared identity (Stanley and Markman, 1992). Close relationships have monetary investments, often sharing possessions. Close ties become considerations for buyers. We posit NS more socially connected will opt to buy more to share.

Whether online or in-person, connection to others is a basic human need. Online community research has empirically studied the benefits and outcomes of strong community ties. In the digital era, social networking sites have become a source of connection to others or extend in-person ties (e.g. source of next group event information) (Burke and Kraut, 2014; Donath and Boyd, 2004). Offline activities typically support bonds to an online community (Sessions, 2010). Enhancing ties and improving engagement among individual participants increases connection to the overall community and increases bonding social capital. Psychological attachment to online communities related to higher commitment (Park and Cho, 2012). This commitment related to higher engagement and awareness of information shared by the community. Online communities influence the buyer behavior process (e.g. need recognition, information search and pre/post purchase evaluations) (De Valck et al., 2009). Well-connected members are cognizant of community needs. Contributing to satisfy others’ needs can generate social capital. We believe, NS will buy more when they are well connected and consider their community.

Similarities and receptivity in branded communities related to higher community engagement (Kwon and Ha, 2023). Even inactive online Facebook page members demonstrated identification with a brand community (Dessart and Veloutsou, 2021). Congruence with a community (i.e. self-image, value and brand-image congruence) was associated with community identification and consumer citizenship behaviors (Deng et al., 2023). Community-oriented consumption is a connection between shopping with and for others to feel a part of a group (e.g. brands appealing to pro-conservation communities with environmental sustainability marketing) (Máté, 2013). Among older adults, shopping behaviors are associated with greater social integration (Toepoel, 2013). Shopping was associated with greater satisfaction with social contacts. Shopping with others was associated with shopping for longer and purchasing more goods (Kahn and Mcalister, 1997). More time was spent in-stores contemplating when shopping with others (Inman et al., 2009). A study among older women (55 years and older) found social shopping related to higher social connectedness and self-esteem (Kang and Ahn, 2014). This research indicates that shopping with and for others helps satisfy social needs. When someone is well connected to their community, consideration for others’ needs increases (e.g. multiunit packs for tailgating/picnic gatherings). More shared goods help satiate a group’s physiological needs. This contributes to a more satisfying event and the ability to bond as a group. Exchanging goods builds kindship and helps to sustain community ties (Lewis, 2018).

**H3.** Higher CTCG will associate higher to selecting BOGOHO versus buy one.
2.4 Hyperopia and necessity shopping

Hyperopia is farsightedness that inhibits someone from indulging in the present (Kivetz and Keinan, 2006; Kivetz and Simonson, 2002). Hyperopia is the reluctance for individuals to consume goods for current pleasure because of a focus on future consequences (e.g., denying oneself dessert to avoid extra gym time to burn the calories). Hyperopic thoughts influence the decision-making process to purchase goods. Hyperopic consumers less likely purchase luxury goods and more likely to save for the future (Pan et al., 2019). Necessity shopping is related to hyperopia because it shares a mindset of selecting just enough presently as opposed to seeing a purchase independent of future consequences.

Prior research studied hyperopia with luxury goods, and we extend these findings to social relationships that have longer-term value. Researchers influenced hyperopic consumers by promoting long-term value of luxury products (Haws and Poynor, 2008). Perceived long-term value appeals to hyperopic consumers. Unlike most low involvement product purchases, building social relationships takes time and effort. Hyperopia aligns with having the foresight to invest in community because ideally it will produce future payoffs. Social connections have group insurances (e.g. sharing resources, gains and losses that individually pose greater risks) (Dutta et al., 2005). We hypothesize those more hyperopic, value relationships with this long-term perspective in mind.

\[ H4. \] Hyperopia will moderate the relationship between NS on CTCG. In conditions where NS have high hyperopia, there will be a heightened CTCG.

We expect high hyperopia will increase the likelihood of selecting BOGOHO through the mediator (CTCG). Within the context of the LDMU, NS will choose BOGOHO over one because the perceived communal value for multiple individuals justifies purchasing more.

Both quality and quantity of social relationships can relate to better long-term mental and physical health (Umberson and Karas Montez, 2010). Committed relationships require consistent attitudinal effort and inputs proportional to the extent of the long-term commitment (Gundlach et al., 1995). Investments in communal connections are long-term commitments with potential long-term benefits. For NS, the long-term benefits of communal connections to satisfy needs are worth the investments. With a closer CTCG, the needs of others factor into someone’s decision-making process. It is like a parent caring for their household; with more household members, there are more needs to satisfy. NS will likely understand and share similar needs of their community. To support their community, NS will be willing to purchase more to share.

3. Method

3.1 Overview of studies

The researchers followed psychometric theory and practices to construct the NSS (Gibbons et al., 1985; Raykov and Marcoulides, 2011, p. 9). Using four studies, the researchers constructed and collected date (study 1), performed exploratory factor analysis (study 2), conduct confirmatory analysis (study 3) and assessed predictive validity (study 4) (Carpenter, 2018; Hinkin, 2005; Worthington and Whittaker, 2006). The creation of the NSS provides a unique scale to identify individuals with the tendency to fulfill basic needs with restraint to buy in excess. The NSS provides marketers with a method to influence need-based shoppers who are more reluctant to buy beyond their current means.

3.2 Study 1: Item development and data collection

3.2.1 Initial item generation. The researchers reviewed academic articles and online forums (e.g. Reddit and Twitter) for statements regarding shopping for primary needs and avoiding
buying wants. The terms searched included needs-based shopping, necessity shopping, buying just enough, frugal consumers, conscientious consumers and grocery shopping lists. The researchers performed a wide search to identify needs-based shopping while examining tangentially related topics for a comprehensive review. Many topics fell outside the scope of this topic, such as sustainable goods and low-income social services. Focus was placed on buying necessary goods and just enough to fulfill needs. For example, some shoppers evaluate a criteria checklist before purchasing what they need. Others associate unwanted goods with clutter. A common term was sticking to bare necessities when shopping. Individuals recognized more items meant a subtraction of space. Individuals expressed buying more goods did not mean buying more happiness. The researchers succinctly created the initial NSS items reflecting these beliefs (one idea per statement) (Hinkin, 1995) (see Appendix). The researchers meticulously examined each item for relevance and inclusion (Clark and Watson, 1995).

3.2.2 Survey participation. The large sample represented the diverse US population and geographical regions adequate for academic research (see Table I) (Coppock and McClellan, 2019; Levay et al., 2016). The initial Amazon Mechanical Turk (MTurk) convenience sample (1,309 participants) was assessed for incomplete surveys (12 participants) and incorrect answers to attention checks (31 participants) (Buhrmester et al., 2016). Analysis was conducted on the remaining participants (N = 1,266). For psychometric studies, approximately 385 or more participants will generate a 95 per cent confidence level with a real value of ±5 per cent (to the general population) (Worthington and Whittaker, 2006). The participants completed consent, demographic questions, all 19 initial NSS items and then individual differences (anxiousness, industriousness, extraversion, etc.) survey questions. There was random presentation within each section for NSS items and individual difference measures. We collected individual differences measures to perform discriminant and

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Notes: The average age was approximately 40 years. The median household size was three individuals and median household income was between $50,000 and $59,999
Source: Authors' own work

Table I. Demographic characteristics of participants
convergent validity analysis. The researchers required MTurk approval ratings over 97 per cent (recommended ≥95 per cent) for participation which was associated with better data quality (Keith et al., 2017). MTurk studies with data quality procedures (e.g. attention checks) have produced adequate results to infer human behavior (Buhrmester et al., 2016).

3.3 Study 2: Exploratory analysis
3.3.1 Method. To assess the item composition and uniqueness of the NSS measure, we performed a series of exploratory analyses. We assessed inter-item correlations, factor loadings, reliability, convergent and discriminant validity.

3.3.2 Results.
3.3.2.1 Inter-item correlations and reduction. The inter-item correlations of the 19 initial items demonstrated acceptable results for 15 items (|r| ≤ 0.30) (Tabachnick et al., 2007). The researchers removed four items below this level by using objective statistical standards, despite preconceived notions of relevance (e.g. “I have a specific place at home for the products I buy”) (Dimitrov, 2014; Kyriazos and Stalikas, 2018). Kaiser–Meyer–Olkin’s measure of sampling adequacy (0.923) and Bartlett’s test of sphericity \[\chi^2(105) = 6,011.027, p < 0.001\] showed factor analysis was appropriate for the items (Cerny and Kaiser, 1977; Kaiser, 1981).

3.3.2.2 Factor loadings, convergent validity and discriminant validity. Evaluation of the scree plot and parallel analysis of items evinced the presence of two factors (Watkins, 2018). The first item explained 36.69 per cent and the second item 11.42 per cent of the common variance. Table II illustrates the items retained for further analysis.

Table III illustrates the seven-item NSS correlations with a variety of variables to assess for convergent validity and discriminant validity. The tabled results indicated NSS relatedness to existing measures while differentiating.

<table>
<thead>
<tr>
<th>Factor loadings</th>
<th>M (SD)</th>
<th>Component 1</th>
<th>Component 2</th>
<th>AVE</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference for less</td>
<td>0.72 0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Quality product over quantity</td>
<td>5.59 (1.28)</td>
<td>0.656</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Buying too many things is clutter</td>
<td>5.41 (1.36)</td>
<td>0.753</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. You cannot always buy everything you want</td>
<td>5.64 (1.36)</td>
<td>0.744</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritizing needs</td>
<td>0.73 0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have a long criteria list before I purchase a product</td>
<td>4.73 (1.48)</td>
<td>0.694</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I will buy only the bare necessities</td>
<td>4.55 (1.56)</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I like to go shopping to see all the things I am happy without</td>
<td>4.06 (1.86)</td>
<td>0.705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. When I purchase something new, I move something old out</td>
<td>4.53 (1.61)</td>
<td>0.723</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: AVE = average variance extracted, α = Cronbach alpha. Analysis of two principal component factor loadings (direct oblimin rotated) produced scores adequate for two factors (Dunn et al., 1994; Gibbons et al., 1985). Factor loadings between 0.40 and 0.70 are acceptable with higher scores preferable (Hair, 1995; Peterson, 2000). Higher factor loadings indicate an item explains more variance of the construct (Chyung et al., 2017; Lin, 2012). On two components (1 – preference for less and 2 – prioritizing needs), seven items topped 0.64 scores. The seven-item NSS demonstrated good internal consistency (α = 0.71) (satisfactory ≥ 0.60) (Taber, 2018)

Source: Authors’ own work
3.4 Study 3: Confirmatory analysis

3.4.1 Method. To assess whether the NSS suited one component or two components, we performed confirmatory factor analysis (CFA) using SPSS AMOS V25. We compared a one-component NSS measure to an uncorrelated two-component measure, and to a correlated two-component measure. A sample of independent raters assessed the face validity of the items within each component by categorizing the items as (1) prefer less, (2) prioritize needs or (3) neither. This followed guidelines for psychometric development to use knowledgeable independent raters to assess scale items (Kyriazos and Stalikas, 2018; Sterner et al., 2020).

3.4.2 Confirmatory factor analysis. We conducted CFA to assess the discriminant validity of the two-component structure of the scale compared to a one-component scale. We assessed fit using SPSS AMOS V25 with maximum likelihood estimations to allow estimation of all factor loadings. The two-component NSS demonstrated acceptable model fit ($\chi^2$/df = 11.407, $p < 0.0001$, root mean square error of approximation [RMSEA] = 0.078, comparative fit index [CFI] = 0.713 and Tucker–Lewis index = 0.570). The two-component NSS model fit the data significantly better than a two-component solution that did not allow covariances among the latent factors ($\chi^2$/df = 14.960, $p < 0.0001$) and a single-component NSS ($\chi^2$/df = 40.261, $p < 0.0001$). Average variance extracted (AVE) for the two components (component 1 AVE = 0.72, component 2 AVE = 0.73) was greater than the shared variance between factors (i.e. squared pairwise correlations between factors) (Fornell and Larcker, 1981). This evinced discriminant validity for a two-component measure.

3.4.3 Face validity analysis. Just to assess face validity, a sample of independent raters evaluated the refined list of seven NNS items. The purpose was to have raters with a proficient understanding of necessity shopping evaluate the items on two components. We first identified participants with a tendency to choose a need over a want. Participants initially wrote a product they considered a (1) bare necessity and (2) want/desire. After completing a distraction task (i.e. demographic questions), participants selected between their two products (i.e. “Imagine shopping and having to select between the following two products, which would you choose?”). Of the 20 initial participants, 17 selected they would

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>(SD)</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiousness</td>
<td>4.23</td>
<td>(1.67)</td>
<td>0.333</td>
</tr>
<tr>
<td>Industriousness</td>
<td>5.03</td>
<td>(0.81)</td>
<td>0.271</td>
</tr>
<tr>
<td>Extraversion</td>
<td>3.73</td>
<td>(1.34)</td>
<td>0.061</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>4.76</td>
<td>(1.14)</td>
<td>−0.111</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.91</td>
<td>(1.24)</td>
<td>−0.039</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>4.52</td>
<td>(1.31)</td>
<td>0.007</td>
</tr>
<tr>
<td>Openness</td>
<td>4.68</td>
<td>(1.16)</td>
<td>−0.122</td>
</tr>
<tr>
<td>Ability to handle stress</td>
<td>4.14</td>
<td>(1.74)</td>
<td>0.158</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>4.66</td>
<td>(1.67)</td>
<td>0.245</td>
</tr>
<tr>
<td>Quality of life</td>
<td>3.66</td>
<td>(0.81)</td>
<td>0.240</td>
</tr>
<tr>
<td>Burnout</td>
<td>2.78</td>
<td>(1.25)</td>
<td>0.106</td>
</tr>
</tbody>
</table>

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$. $r = $ bivariate correlation values. The NSS positively correlated with anxiousness (i.e. nervousness) ($\alpha = 0.83$) (Simms et al., 2011), industriousness (i.e. hard-working) ($\alpha = 0.78$) (Cloninger et al., 1994), extraversion (i.e. outgoingness) ($\alpha = 0.79$) (Rammstedt and John, 2007), ability to handle stress (i.e. coping skill) ($\alpha = 0.77$) (Littman et al., 2006), self-esteem (i.e. self-confidence) ($\alpha = 0.64$) (Robins et al., 2001), quality of life (i.e. standard of happiness within last week) ($\alpha = 0.87$) (Zimmerman et al., 2006). The NSS negatively correlated with Rammstedt and John’s (2007) big five personality traits: agreeableness (i.e. trust/morality) ($\alpha = 0.69$) and openness (i.e. intellect/imagination) ($\alpha = 0.65$). Meanwhile, conscientiousness (i.e. self-discipline) ($\alpha = 0.70$) and neuroticism (i.e. emotional stability) ($\alpha = 0.76$) did not significantly correlate.

Source: Authors’ own work

Table III. Seven-item necessity shopper scale (NSS) correlations with variables

Validation of the necessity shopper scale

purchase their bare necessity item (e.g. food, water, soap, electricity) versus their want/desire (e.g. cake, motorcycle, virtual reality game, fried chicken). These 17 participants self-rated themselves as a proficient or expert NS when given the definition (scale points: 1 = novice, 2 = advanced beginner, 3 = competent, 4 = proficient, 5 = expert). The median household income was between $50,000 and $59,999. Nine of the 17 participants identified as female. Based on two-way mixed-effects modeling for consistency, interrater reliability across the 17 independent raters for the average of the seven items was high (intraclass correlation coefficient = 0.965, 95 per cent confidence interval = 0.910–0.993) (Koo and Li, 2016). The participants categorized the seven items into one of the three options: (1) prefer less, (2) prioritize needs or (3) neither. Item one (15/17), two (16/17) and three (14/17) were categorized in prefer less. Item four (15/17), five (17/17), six (14/17) and seven (15/17) were categorized in prioritize needs. Results demonstrated appropriate face validity with 82.35–100 per cent categorization of the items with their respective component.

3.4.4 Discussion. CFA demonstrated that the NSS on two components (preference for less and prioritizing needs) was satisfactory. Face validity analysis with independent raters supported these results. The researchers proceeded to predictive validity analysis which investigated the utility of the measure.

3.5 Study 4: Predictive validity analysis
3.5.1 Method. We tested the hypotheses presented in the literature review using pathway analysis to assess the NSS with relevant variables. SPSS PROCESS V3.5 (Model 7) and the 10,000 bootstrapped sampling procedure were utilized for moderated mediation analysis (Hayes, 2012, 2017; Preacher et al., 2007).

3.5.2 Results.
3.5.2.1 Path analysis results. Table IV illustrates descriptive statistics and cross-level correlations. SPSS PROCESS modeled the hypothesized path relationships on the dichotomous dependent variable by performing logistic regression analysis (Abu-Bader and Jones, 2021; Hayes, 2012).

Table V and Figure 2 illustrate moderated mediation results. The moderated mediation omnibus test of NSS and hyperopia demonstrated a significant indirect effect with CTCG to BOGOHO \[ b = 0.014, SE = 0.006 \] (lower limit confidence interval [LLCI] = 0.0033, upper limit confidence interval [ULCI] = 0.0283) (Hayes, 2015, 2018). Higher NSS scores were associated with a lower likelihood to BOGOHO (i.e. select buy one) \[ b = -0.299, t = -3.430, SE = 0.067, p < 0.001 (LLCI = -0.3597, ULCI = -0.0981) \] (H1 supported).

Higher NSS scores were associated with greater CTCG \[ b = 0.439, t(1,258) = 8.598, SE = 0.051, p < 0.0001 (LLCI = 3.8132 ULCI = 4.7940) \] (H2 supported). Greater CTCG was associated with a higher likelihood to BOGOHO \[ b = 0.104, t = 2.720, SE = 0.038, p < 0.01 (LLCI = 0.0291 ULCI = 0.1793) \] (H3 supported).

3.5.2.2 Moderated mediation results. We tested hyperopia as a moderator in the indirect path between NS with CTCG on BOGOHO (see Table VI and Figure 3). There was no direct significant relationship between hyperopia and CTCG \[ b = 0.008 t(1,258) = .216, SE = 0.036, p = 0.829 \]. As predicted, moderated mediation analysis with high hyperopia and high NSS was associated with a greater CTCG \[ b = 0.626, LLCI = 0.4963 to ULCI = 0.7548 \] (H4 supported). This indirect pathway relationship through CTCG was associated with a higher likelihood to BOGOHO \[ b = 0.065, LLCI = 0.0185 ULCI = 0.1189 \]. In other words, NS with high hyperopia was associated with higher CTCG and therefore higher likelihood to select BOGOHO.
Table IV. Descriptive statistics and cross-level correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>(SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. NSS</td>
<td>4.93</td>
<td>(0.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CTCG</td>
<td>4.34</td>
<td>(1.61)</td>
<td></td>
<td>0.296**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hyperopia</td>
<td>4.59</td>
<td>(1.33)</td>
<td>0.425**</td>
<td>0.168**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. BOGOHO</td>
<td>1.47</td>
<td>(0.50)</td>
<td>−0.072*</td>
<td>0.056*</td>
<td>0.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gender (female)</td>
<td>1.57</td>
<td>(1.26)</td>
<td>−0.079**</td>
<td>−0.180**</td>
<td>−0.121**</td>
<td>0.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>40.18</td>
<td>(0.50)</td>
<td></td>
<td>−0.027</td>
<td>−0.019</td>
<td>−0.006</td>
<td>0.051</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Household size</td>
<td>3.36</td>
<td>(1.41)</td>
<td>0.171**</td>
<td>0.228**</td>
<td>0.234**</td>
<td>0.048</td>
<td>−0.147**</td>
<td>−0.092</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Household income</td>
<td>6.07</td>
<td>(2.70)</td>
<td>−0.038</td>
<td>0.032</td>
<td>−0.152**</td>
<td>0.009</td>
<td>−0.047</td>
<td>−0.003</td>
<td>0.111**</td>
<td></td>
</tr>
</tbody>
</table>

Notes: NSS = necessity shopper scale, CTCG = connection to community/group, BOGOHO = buy one get one half off. \( N = 1,266 \), \( *p < 0.05 \), \( **p < 0.01 \) level (two-tailed). Hyperopia measured an individual’s excessive farsightedness and inhibition to seize the present using six items. For example, one item from the scale stated, “I often fail to enjoy attractive opportunities” (\( \alpha = 0.85 \)) (Haws and Poynor, 2008). Hyperopia is someone’s resistance to indulge in the present. CTCG was measured using seven images, illustrating circles from 1 = fully disconnected to 7 = fully connected (Shamir and Kark, 2004). Participants selected one image to respond to the prompt, “Please select the image that represents how connected you identify with your community/group” (\( \alpha = 0.80 \)). This general organizational identification single-item graphic scale gave the diverse sampled population the flexibility to respond accordingly to their social networks. Buy one versus BOGOHO was a binomial selection between the two options. This measured participants’ likelihood to purchase generically one or more than one at a discount. One-item measures have captured and studied constructs such as self-esteem (Robins et al., 2001) and overall job satisfaction (Dolbier et al., 2005; Oshagbemi, 1999). Dichotomous one-item dependent variables have been used to study hedonic (e.g. $50 dinner certificate) versus utilitarian (e.g. $50 grocery certificate) selection (Okada, 2005). The generic selection without context was used to lessen the influence of salience (e.g. current weather and preference for a convertible car) (Bordalo et al., 2020) and contextual influences (e.g. brands and product categories) (Handel and Schwartzstein, 2018)

Source: Authors’ own work

Table V. Validation of the necessity shopper scale

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Coeff.</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>Coeff.</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSS</td>
<td>0.439</td>
<td>0.051</td>
<td>8.598</td>
<td>&lt;0.0001</td>
<td>−0.229</td>
<td>0.067</td>
<td>−3.303</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>CTCG</td>
<td>−0.001</td>
<td>0.004</td>
<td>−0.329</td>
<td>0.742</td>
<td>0.001</td>
<td>0.005</td>
<td>0.002</td>
<td>0.999</td>
</tr>
<tr>
<td>Hyperopia</td>
<td>0.008</td>
<td>0.036</td>
<td>0.216</td>
<td>0.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSS × hyperopia</td>
<td>0.132</td>
<td>0.032</td>
<td>4.202</td>
<td>&lt;0.0001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (female)</td>
<td>−0.419</td>
<td>0.086</td>
<td>−4.880</td>
<td>&lt;0.0001</td>
<td>0.177</td>
<td>0.118</td>
<td>1.501</td>
<td>0.133</td>
</tr>
<tr>
<td>Age</td>
<td>−0.001</td>
<td>0.004</td>
<td>−0.329</td>
<td>0.742</td>
<td>0.001</td>
<td>0.005</td>
<td>0.002</td>
<td>0.999</td>
</tr>
<tr>
<td>Household size</td>
<td>0.182</td>
<td>0.031</td>
<td>5.813</td>
<td>&lt;0.0001</td>
<td>0.077</td>
<td>0.042</td>
<td>1.821</td>
<td>0.069</td>
</tr>
<tr>
<td>Household income</td>
<td>0.010</td>
<td>0.016</td>
<td>0.655</td>
<td>0.512</td>
<td>−0.001</td>
<td>0.021</td>
<td>−0.038</td>
<td>0.969</td>
</tr>
<tr>
<td>Model Summary</td>
<td>( R^2 = 0.150 )</td>
<td>( F(7,1258) = 31.733, p &lt; 0.0001 )</td>
<td>( \chi^2 (df = 6) = 20.122, p &lt; 0.01 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Analysis utilized variables mean centered. Statistical significance was when zero was not between the 95 per cent upper and lower bound confidence intervals. The model included gender, age, household size and household income as control variables. Gender was dummy coded with males as 1 and females as 2. BOGOHO was a dichotomous variable with buy one as 1 and BOGOHO as 2. The results on BOGOHO are expressed in a log-odds metric. Covariates, household size \( [b = 0.077, t(1,258) = 1.821, SE = 0.042, p = 0.069] \) and household income \( [b = −0.001, t(1,258) = −0.038, SE = 0.021, p = 0.969] \) did not significantly influence NS and their likelihood to buy one or BOGOHO. The model analyzed in SPSS AMOS V25 showed satisfactory fit indices \( \chi^2 / df = 8.790, p < 0.0001, RMSEA = 0.078, SRMR = 0.066, CFI = 0.840 \) (Hu and Bentler, 1999; Kline, 2015)

Source: Authors’ own work
4. Overall discussion

4.1 General discussion

The seven-item NSS demonstrated satisfactory validity and reliability. Discriminant and convergent validity analysis demonstrated the measure to be unique from the studied individual differences (e.g. conscientiousness, neuroticism, etc.). CFA showed appropriate discriminant validity for the NSS to be on two components: (1) preference for less and (2) prioritizing needs. This psychometric tool gives marketers a way to identify and study ways to influence NS.

Within the context of CCT, NS rationalize purchasing less through the lens of diminishing marginal utility, even though purchasing more at half off is economically beneficial. Path analysis results showed NS more likely selected buy one versus BOGOHO (i.e. the economically maximizing choice). NS recognize more is not equivalent in value to a single unit of a generic product, despite half-off the price. This demonstrated a unique quality of NS to purchase less despite choosing the suboptimal economic option. This selection for less demonstrated an irrational economic decision yet a justifiable preference based on current circumstances and a bet on future costs to remain the same or better (Helsen and Schmittlein, 1992). Enough is enough without the need to stockpile more because of promotions. It is important for marketers to effectively build brand relationships to become the single most needed item purchased. Researchers found companies that effectively foster user-generated social media communication on Facebook increased perceived brand quality and loyalty (Schivinski and Dabrowski, 2015). Interactive marketing can influence consumers to develop a relationship with brands to become their selection.

Notes: Covariates included gender, age, household size and household income. A significant direct relationship between NSS and BOGOHO and indirect path results exhibited partial moderated mediation through CTCG (Hayes, 2018). **p < 0.01, ***p < 0.001, ****p < 0.0001

Source: Authors’ own work

<table>
<thead>
<tr>
<th></th>
<th>Left-leaning Low (–1 SD)</th>
<th>Average Mean</th>
<th>Right-leaning High (+1 SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSS → CTCG</td>
<td>0.251 (LLCI = 0.1142)</td>
<td>0.471 (LLCI = 0.3708)</td>
<td>0.626 (LLCI = 0.4963)</td>
</tr>
<tr>
<td></td>
<td>0.3874</td>
<td>0.5717</td>
<td>0.7548</td>
</tr>
<tr>
<td>NSS → CTCG → buy one</td>
<td>0.026 (LLCI = 0.0057)</td>
<td>0.049 (LLCI = 0.0138)</td>
<td>0.065 (LLCI = 0.0185)</td>
</tr>
<tr>
<td>versus BOGOHO</td>
<td>0.0527</td>
<td>0.0882</td>
<td>0.1189</td>
</tr>
</tbody>
</table>

Source: Authors’ own work

Figure 2.
Effects on buy one versus buy one get one half off

Table VI.
Conditional direct and indirect effects with moderator hyperopia

JRIM
4.2 Implications
Prior research found tie-strength and social identity influenced social media brand engagement (Chahal and Rani, 2017). Effective brand management of online sentiment can nurture brand loyalty and tribalism that promotes resistance to substitutes (Pathak and Pathak-Shelat, 2017). Brands that foster supportive environments (informationally/emotionally) related to greater community identification and commitment (Liao et al., 2023). This is related to greater helping behaviors. For NS, one helping behavior is buying more products to share with their community. Fostering communities using interactive marketing techniques are particularly beneficial, given NS will buy just what is needed. Findings from our study indicated NS value social connections. The stronger the CTCG the more likely NS will BOGOHO. This implies NS will buy more the more people to satisfy (e.g. family gathering with more mouths to feed). Interactive branding campaigns touting communal values can appeal to NS (e.g. Coca-Cola “Share a Coke” campaign) (Tien et al., 2019). This expands understanding of CCT and consumer behavior. Furthermore, ideally hyperopia would associate with buying less to have more later. However, hyperopia moderated the mediated effect by heightening CTCG. NS believe in the long-term benefits of investing in community. Interactive marketing strategies can appeal to NS by emphasizing communal values.

4.3 Limitations and future research
There are a host of different marketing promotions (e.g. free sample, etc.). Studying a wide variety of potential promotions goes beyond the scope of the project, which focused on designing and validating the NSS. We focused on a generic BOGOHO discount to study NS’
preference for less. Marginal utility and context are interrelated because perceived utility is subjective and often in contrast to similar options (e.g. family versus party pack) (Meyer and Johnson, 1995). The researchers chose a generic dependent variable to capture a fundamental less versus more outcome minus context. Future research can study NS and different marketing promotions.

A want today can become a need tomorrow. While we used a large sample and designed each scale item to allow for generic interpretation of needs, different populations and times can change perceived bare essentials (e.g. Internet/smartphones in the digital era). Technology, arguably, has become a necessity. Our sample included a diverse adult population (i.e. ranging from 18 to 78 years old). Future research can study the NSS with different samples for validation and replicability (Darley, 2000). This can corroborate empirical findings, verify validity and confirm reliability (Babin et al., 2021). It can contextualize perceived needs by different age-groups.

Moderated mediation analysis controlled for household size and household income, with neither significantly influencing the modeled variables on BOGOHO. However, various external social influences could influence different situations. For example, researchers studied normative impulsive buying scenarios (e.g. buying discounted gifts on credit card debt) (Rook and Fisher, 1995). Despite a lack of available funds, modern society has accepted buying goods beyond current finances. This is not living to fulfill just bare necessities. Consumers will justify purchases for external factors like appearance at a party or a time sensitive discount (e.g. bowtie/handkerchief for a wedding). The creation of the NSS provides opportunities to study a myriad of scenarios consumers justify purchases as needs because of cultural factors.

The generic selection of BOGOHO overlooks the influence of salience and different contexts (e.g. attending movie theaters during the COVID-19 pandemic) (Bordalo et al., 2013; Koszegi and Szeidl, 2013). Different contexts (e.g. low/high involvement purchases, in-person/online shopping, etc.) could obfuscate need-based purchases (Bordalo et al., 2012, 2022). The simple dichotomous selection was considered a key relevant outcome variable with NS. Future research can study the different types and quantity of goods/services NS will purchase (e.g. common goods: milk/eggs versus luxury goods: purses/watches). NS will likely prefer utilitarian over hedonic goods/services.

Marginal utility can be modeled as a function or graphed with numbers (Alvino et al., 2018; Rabin, 1997). This was beyond our scope. This project concentrated on the development and validation of the NSS. It is possible future research can gather data on additional units (e.g. 1–12 units) to graph with perceived satisfaction. It can also integrate discounts with each additional unit to counteract feelings of loss income associated with spending more and perceived diminishing returns. It is possible to graphically contrast high and low NS to evaluate differences. The NSS allots multiple avenues for future research.

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References


Appendix  List of Initial Necessity Shopper Scale Items

(1) Buying less is more
(2) Buying just enough is enough
(3) I make a list prior to shopping and stick to it
(4) Quality product over quantity
(5) I prefer simple products rather than complex
(6) One product is plenty
(7) Life is finite, choose purchases wisely
(8) Buying too many things is clutter
(9) You cannot always buy everything you want
(10) Buying too much of a good thing is bad
(11) I have a long criteria list before I purchase a product
(12) When shopping, I will browse and most of the time not buy anything
(13) Buying as little as possible for what I need is a win
(14) I will buy only the bare necessities
(15) I have a specific place at home for the products I buy
(16) Simple product designs are elegant
(17) I like to go shopping to see all the things I am happy without
(18) I will purchase just what I need
(19) When I purchase something new, I move something old out

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