

# Impact of Time Scarcity and Quantity Scarcity: The Role of Need for Uniqueness and Deal Proneness

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## Abstract

Consumer associate different meaning to product consumption (Fournier, 1991; Chandon, Wansink & Laurent, 2000) and their purchase behavior depends on perceived meaning of the products/offers. However, existing studies are limited to highlighting the impact of either time scarcity or quantity scarcity on attitude and behavior and there are very few studies on differential response to time scarcity and quantity scarcity appeals. This paper explores whether there is a differential response towards time and quantity scarcity given a level of need for uniqueness or deal proneness trait of an individual.

## Introduction

There has been a rise in various kinds of promotional offers given to the consumers since last few years. There are different ways in which these offers are given. One of the ways is restricting the opportunity of accessing products to only limited number of consumers. This appeal which is used to restrict offer to few customers or certain segment is called as scarcity appeal (Snyder, 1992). Scarcity appeal is broadly divided into two, namely, quantity scarcity and time scarcity. Quantity scarcity refers to the appeal that limits number of products to be sold. Given the very high frequency of usage of scarcity appeal, understanding how people respond to different kind of scarcity offers become important and this paper discusses consumer's reaction towards time vs quantity scarcity.

## Research Problem and Objective

Literature gives an indication that purchase intention and attitudes are higher for products with scarcity appeal than with no-scarcity appeal (Wu & Hsing, 2006; Bae & Lee, 2005; Jung & Kellaris, 2004; Brehm & Brehm, 1981; Snyder, 1992; Snyder & Fromkin, 1980). However, in spite of arguing that both time and quantity scarcity enhances consumers purchase intention and attitude (Cialdini, 1993; Snyder, 1992; Snyder & Fromkin, 1980), studies have been focused either on quantity scarcity (Wu & Hsing, 2006; Jung & Kellaris, 2004; Eisend, 2008) or on time scarcity (Brannon & Brock, 2001; Brannon & McCabe, 2001). Very few studies in literature discuss the differential impact of time and quantity scarcity (e.g. Bae & Lee, 2005). Thus literature comparing time vs. quantity scarcity is very limited. The objective of this study is twofold. One is to explore and compare how time scarcity and quantity scarcity affect

consumer's perception. Second is to explore the effect of consumer's need for uniqueness and deal proneness on consumer's response to the two types of scarcities.

## **Literature Review**

### **Definition of Scarcity**

Verhallen & Robben (1995) described four different types of scarcities. 'Unavailability' refers to something no longer available with anyone because of nature or regulation e.g. bans on a product, 'Restricted availability' refers to availability which is dependent on membership of specific group. The good is available for the member of specific group, 'Limited availability' refers to the availability because of market and non-market circumstances (Unavailability due to market circumstance happens because of limited supply in the market and unavailability due to non-market circumstances happens because of increased demand or accidental delivery issues). 'Conditional availability' refers to the availability of good only if certain conditions are fulfilled. Conditions can be in form of price to be paid, services to be rendered (Brock, 1968).

It is found that market circumstances evoke more positive response than non-market circumstances (Worchel, Lee & Adewole, 1975; Gierl & Huettl 2010). Also a marketer can control availability due to market circumstances with different promotional strategies. Therefore in this study scarcity will refer to 'unavailability due to market circumstances'. Hence scarcity is defined as - *The offering which shows limited availability of products or brands (Eisend, 2008)*.

### **Types of Scarcities**

The different ways in which scarcity has been used in marketing can be broadly divided into quantity scarcity and time scarcity (Brannon & Brock, 2001, Bae & Lee, 2005). Quantity scarcity (QS) is an approach where customer is informed that a certain product is in short supply that cannot be guaranteed to last long (Cialdini, 1993) e.g. limited edition, till the stock available etc. Time scarcity (TS) is an approach where customer is informed that some official time limit is placed on the given offer (Cialdini, 1993) e.g. last 10 days, available only for 3 days etc.

### **Outcomes of Scarcity**

Commodity theory in economics proposes that scarcity enhances value of anything that can be possessed, is useful to its possessor, and is transferable from one person to another (Brock, 1968). Therefore scarcity enhances value of scarce item (Fromkin, 1972; Worchel, Lee & Adewole, 1975). Because scarcity enhances value, it can lead to many other implications.

Scarcities of the products/brands lead to increased perceived value (Wu & Hsing, 2006), higher purchase intention of the products/brands (Bae & lee, 2005; Snyder, 1992), less willingness to spread word of mouth (Cheema & Kaikati, 2010). Finally scarcity also enhances final purchase behaviour of the consumers. Lynn's (1991) meta-analysis showed that the impact of scarcity messages on behaviour is robust across studies.

### **Theoretical Explanations of How Scarcity Enhances Attitude and Behaviour**

Various explanations are given to explain scarcity effect (Verhallen & Robbin, 1995)-

## **Uniqueness Theory**

According to this theory people are motivated to maintain a sense of being special as they define themselves on various important self related dimensions relative to others (Snyder, 1992).

Therefore people develop a need to be unique depending on their perceived similarity with their reference group. They like to be moderately different Snyder (1992). When they feel themselves to be too similar to reference group, they develop high need to be unique whereas when they feel themselves to be too dissimilar to reference group they develop high need to be similar to the reference group (Snyder & Fromkin, 1980; Snyder, 1992).

For being moderately different people act in different ways like possessing unique objects, use of intellectual arguments in public, showcasing that they have unique mate etc (Snyder & Fromkin, 1980). The perception of people being too similar or dissimilar from a group affects their emotions and behavior, thus attracting them towards scarce information and products thereby making scarcity appeal effective.

## **Heuristic Cue Theory**

*“Because we know that things are difficult to possess are typically better than those that are easy to possess, we can often use an item’s availability to help us quickly and correctly decide on its quality”* (Cialdini, 1993, page 244)

Cialdini (1993) claimed that people have tendency to associate things according to their availability. Specifically unavailable resources are assumed to be better in quality than available ones. Therefore just the information of scarcity makes people perceive that the scarce product is better than non-scarce one (Verhallen & Robbins, 1995). However, heuristic cue claim of scarcity appeal has also been contested (Brannon and Brock, 2001)

## **Psychological Reactance Theory**

The theory as explained by Brehm (1966) explains human response to diminishing personal control. It says that when opportunities become less available, one loses freedom. Since people tend to value freedom, the loss of freedom creates a desire to preserve that established freedom. Increasing scarcity interferes with prior access to some items and thus creates a hurdle for the freedom of accessing the item; people will react against the interference by wanting and trying to possess the item more than before (Cialdini, 1993). Thus scarcity of products/services develop desire to possess them more than under circumstances of non-scarcity because of the perceived loss of freedom.

## **Studies on scarcity appeal**

As discussed above, apart from scarcity of an object perceived similarity of oneself with others also impacts perceived value of the object (Fromkin, 1970). Explicit use of different variables to explain impact of scarcity on consumers’ value perception and purchase intention from marketer’s perspective has been developed lately (Jung & Kellaris, 2004; Bae & lee, 2005; Eisend, 2008). It includes role of involvement with the product and product knowledge (Brannon & Brock, 2001; Bae & Lee, 2005), perceived quality, symbolic benefits, perceived monetary sacrifice and perceived value (Wu & Hsing, 2006), third person effectiveness (Eisend, 2008), assumed expensiveness (Lynn, 1989; Cialdini, 1993 ), deal evaluation or perceived high value of deal (Inman, Peter & Raghubir, 1997).

Scarcity appeal enhances attitude and behaviour, but the effect depends on certain conditions. These conditions include perception of right to deserve the message/product (Worchel, 1992), attractiveness of the products (Verhallen, 1982) and the source of scarcity e.g. accidental delivery vs. planned delivery (Verhallen, 1982) and scarcity due to limited supply vs. excess demand (Herpen et al, 2007).

## **Research Questions**

As discussed in previous section, literature gives an indication that scarcity appeal, both quantity and time, enhances consumer's value perception and purchase intention. However most of the studies are focused either on quantity scarcity or on time scarcity. Very few studies have explored the impact of time and quantity scarcity together (Cialdini, 1993; Inman, Peter & Ragubir, 1997; Bae & Lee, 2005). Therefore, an understanding of whether the impact of quantity scarcity on consumers could be different than time scarcity for the same brand and product is limited. With this regard it is important to understand that the sources of time scarcity and quantity scarcity are different. Quantity scarcity is the scarcity because of limited availability of product (Eisend, 2008) but time scarcity is the scarcity because of limited offer (e.g. 40 percent discount for three days only) given within a time limit. Important factor in quantity scarcity is how much others in the reference group have bought the product. However, in time scarcity important factor is to act within time for the given offer. Therefore the way quantity scarcity and time scarcity is processed by consumers may be different.

Q1 Do time scarcity and quantity scarcity differentially impact consumers' attitude and behavior?

As argued in Uniqueness theory that scarcity will be valued more by those who have developed high need for uniqueness, but it is not clear whether individuals with high need for uniqueness will be attracted to both time scarcity and quantity scarcity or to one of them. Therefore -

Q2. How does individuals' need for uniqueness impact the relationship of time and quantity scarcity with consumer's attitude and behaviour?

Deal proneness also explains consumers' response to different promotions (Lichtenstein, Netemeyer, & Burton, 1990; Lichtenstein, Netemeyer, & Burton, 1995). A deal prone consumer is found to purchase products on deals more than a non deal prone one. Therefore individual's deal proneness is also expected to impact response towards time and quantity scarcities.

Q3. How does individuals' deal proneness impact the relationship of time and quantity scarcity with consumer's attitude and behavior?

## **Conceptual Framework**

### **Definitions**

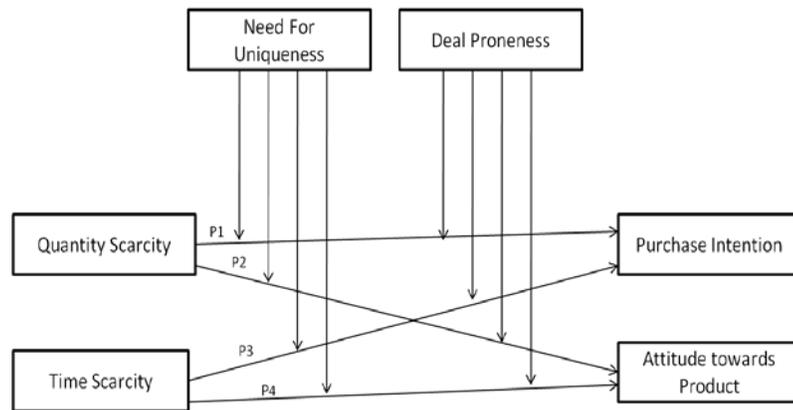
(a)- Quantity Scarcity (QS) – An approach where customer is informed that product is in short supply that won't last long (Cialdini, 1993), (b)- Time Scarcity (TS) – An approach where the

customer is informed that offering is available for a specified time (Cialdini, 1993), (c)- Attitude towards product- is defined as a pre- disposition to respond in a favorable or unfavorable manner to a particular product during a particular exposure occasion (Hoolbrook & Hirschman, 1982; Mckenzie, Lutz & Belch, 1986). It is an overall affect. (e)- Purchase intention- is defined as the willingness of an individual to buy the given product.

**The Framework**

Purchase intention and attitude towards product is considered as dependant variables. Need for uniqueness and deal proneness are considered to moderate the impact of scarcity appeal on consumers’ purchase intention and attitude towards product. Figure below explains the conceptual framework for the study. How deal proneness and need for uniqueness are expected to moderate this relationship is discussed in next chapters.

Impact of quantity scarcity on attitude towards product and purchase intention is shown in the figure below with path P1 and P2 respectively. Similarly, impact of time scarcity on attitude towards product and purchase intention is shown with the path P3 and P4 respectively. As the objective of this study is to compare the impact of time scarcity vs. quantity scarcity, the hypothesis will be compared for the paths P1 vs. P3 and P2 vs. P4. Need for Uniqueness and deal Proneness will be considered as moderating variables for these paths.



**Base Hypotheses**

As argued, time scarcity as well as quantity scarcity enhances consumer’s value perception and intention more than non-scarcity situation (Cialdini, 1993; Jung & Kellaris, 2004; Bae & Lee, 2005 Cialdini, 2009). Before comparing impact of time scarcity with quantity scarcity, two base hypotheses comparing impact of time scarcity as compared to non-scarcity situation and impact of quantity scarcity as compared to non-scarcity situations are made here.

**Base hypotheses**

***B1: Purchase intention will be higher for time scarcity as well as quantity scarcity as compared to non-scarcity situation***

***B2: Attitude towards product will be more positive for time scarcity as well as quantity scarcity as compared to non-scarcity situation***

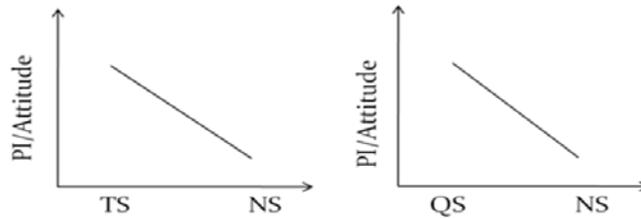


Figure 3.1 – Base Hypotheses

## Need for Uniqueness

Need for uniqueness (NFU) is described as people's desire to be different as a result of their perception of similarity with others (Snyder, 1992). Snyder (1992) argued that individual who finds her to be too similar to others develop a high need for uniqueness whereas the individual who finds her to be too dissimilar develop low need for uniqueness.

### Behavioral Outcome of Need for Uniqueness

The behavior elicited because of perceived high need for uniqueness is the trial of assimilation with the reference group and the behaviour elicited because of perceived low need for uniqueness is the trial of differentiation with the reference group (Snyder 1992; Ruvio, 2008). To differentiate themselves people seek symbols and anchors which are different from their reference group but acceptable to the reference group. To assimilate themselves people seek symbols and anchors used by its reference group (Snyder, 1992; Lynn & Harris, 1997).

### Types of Need for Uniqueness

From counterconformity perspective, need for uniqueness of has been divided into three types on the basis of behaviour manifested (Tian, Bearden & Hunter, 2001; Tian & Mckinzie, 2001) namely creative choice counterconformity, Unpopular Choice Counterconformity and Avoidance of Similarity. In creative choice counterconformity consumer seek social differentness from most others but that this consumer makes selections that are likely to be considered good choices by these others. Unpopular choice counterconformity refers to the selection or use of products and brands that deviate from group norms and thus risk social approval that consumers withstand in order to establish their differentness from others. Avoidance of similarity refers to the loss of interest, discontinuing use or discontinuing the possession of goods which has become common in the consumer's reference group.

As argued, people show themselves unique but within the acceptable range of their group (Snyder & Formkin, 1980; Snyder, 1992; Ruvio, 2008), this study takes creative choice counterconformity as the indicator of need for uniqueness. Therefore need for uniqueness is defined here as- *A trait of seeking social differentness from most others but making selections that are likely to be considered good choices by these others* (Tian, Bearden & Hunter, 2001)

### Relationship between Quantity Scarcity, Time Scarcity and Need for Uniqueness

From a psychological perspective, scarcity implies that only a few people will have access to an object. As explained by uniqueness theory those individuals who have high need for

uniqueness try to demonstrate themselves different than others. One of the ways to differentiate themselves is possession of those products which provide unique identity (Belk, 1988; Snyder & Fromkin, 1980) which makes possessor moderately different from the society (Snyder, 1992) but still acceptable.

As explained in ‘Research Question’ section that quantity scarcity depends on how much others have bought. Time Scarcity posits no limit on the number of quantity sold but creates urgency of purchasing product during a particular time. So, unlike quantity scarcity, in time scarcity consumer is assured that the product can be possessed if bought in the given time limit. Therefore the role of significant others in the group becomes more important in case of quantity scarcity as compared to time scarcity.

Because individuals with high need for uniqueness value scarce products (Snyder & Fromkin, 1980), they will be more concerned about the possessions of relevant others. Quantity scarcity being related to the relevant others (Uniqueness theory), it is expected that individuals with high need for uniqueness will respond more favourably to quantity scarcity as compared to time scarcity. It is also expected that for low need for uniqueness consumers, as they are not interested in the possession of relevant others, there will not be much difference in purchase intention and attitude towards products between quantity scarcity and time scarcity. Therefore,

***H1:***

- (a) For HNFU, purchase intention will be higher in case of quantity scarcity than time scarcity***
- (b) For HNFU, attitude towards product will be more positive in case of quantity scarcity than time scarcity***
- (c) For LNFU, there will be no difference in purchase intention and attitude towards products in case of quantity scarcity than time scarcity***

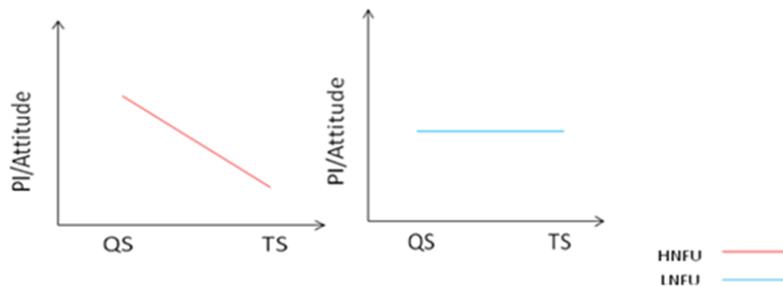


Figure 3.2 – Hypotheses 1(a) to 1(c)

**Deal Proneness**

Deal proneness (DP) has been defined as an increased propensity to respond to a purchase offer because the purchase offer is in deal form and it positively affects purchase evaluations (Lichtenstein, Netemeyer, & Burton, 1990).

Deal proneness literature has been focused on identifying the demographic and psychographic characteristic of deal prone customers so that they can be easily segmented for offering the deal of their type (Webster, Jr., 1965; Montgomery, 1971; Blattberg, Buesing,

Peacock & Sen, 1978). These characteristic include home ownership & mobile ownership (Blattberg, Buesing, Peacock & Sen, 1978; Martinez & Montaner, 2006), age of housewives, number of brand purchased, brand loyalty and total number of units purchased (Webster, Jr., 1965) etc.

Deal proneness can be considered in three ways (Lichtenstein, Netemeyer, & Burton, 1995). First is the general deal proneness that is defined as general proneness to respond to promotions (Lichtenstein, Netemeyer, & Burton, 1997). Second deal proneness is considered as domain specific construct like coupon proneness, rebate proneness, sale proneness (Lichtenstein et. al, 1990; Lichtenstein et.al, 1995; Lichtenstein et. al, 1997). Third deal proneness is a construct which includes only certain types of deals (Lichtenstein, Netemeyer, & Burton, 1995) e.g. active and passive deal proneness (Schneider & Currim, 1991) or price deal proneness (discounts, rebates, coupons) and non-price deal proneness (sweepstakes, free-gifts).

Generalized deal proneness is well established and supported (Lichtenstein et. al, 1995; Lichtenstein et.al 1997; Bawa & Shoemaker, 1987). Therefore, following Lichtenstein, Netemeyer, & Burton (1990) and taking general form of deal proneness, deal proneness is defined here as ‘*The increased propensity to respond to offer because of offer being in deal form*’

**Relationship between Quantity Scarcity, Time Scarcity and Deal Proneness**

A deal prone consumer always looks for the deals and finds more satisfaction in buying products on deal. Time limit is always associated with some kind of offer (like 30% off for 3 days only). But quantity limit can be a standalone offer in itself (like limited edition), although quantity limit can also be associated with some offer (like 30% off on first 20 units). Because time scarcity is always associated with some kind of offers or deals and quantity scarcity can be non-deal and exclusive, it is expected that an encounter with time scarcity will lead to association of time scarcity with more number of deals as compared to associations of quantity scarcity with deals. Therefore for consumers with high deal proneness (See figure below)–

**H2:**

- (a) *For HDP, purchase intention will be higher in case of time scarcity than quantity scarcity*
- (b) *For HDP, attitude towards product will be more positive in case of time scarcity than quantity scarcity*
- (c) *For LDP, there will be no difference in purchase intention and attitude towards products in case of quantity scarcity than time scarcity*

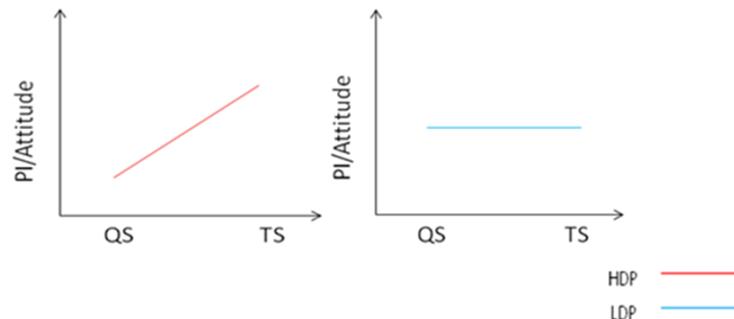


Figure 3.5– Hypothesis 4(a) to 4(c)

## References

- Bae, Yunkyung, & Lee, Sukekyu (2005). The effect of scarcity message on consumer's purchase intention in the internet shopping mall. *Asia Pacific Advances in Consumer Research*, 6, 252-258.
- Blattberg, Robert; Buesing, Thomas; Peacock, Peter & Sen, Subrata (1978). Identifying the deal prone segment. *Journal of marketing Research*, 15 (3), 369-377.
- Brehm, J. W. (1966). *A theory of psychological reaction*. New York: Academic Press.
- Brehm, Sharon S., & Brehm, Jack W. (1981). *Psychological reactance: A theory of freedom and control*. New York: Academic Press.
- Brannon, Laura A. & Brock, Timothy C. (2001). Limiting time for responding enhances behavior corresponding to the merits of compliance appeals: Refutations of heuristic-cue theory in service and consumer settings. *Journal of Consumer Psychology*, 10(3), 135-146.
- Brannon, Laura A. & McCabe, Amy E. (2001). Time-restricted sales appeals: The importance of offering real value. *Cornell Hotel and Restaurant Administration Quarterly*, 42 (August), 47-52.
- Brock, Timothy C. (1968). Implications of commodity theory for value change. In A. G. Greenwald, T. C. Brock & T. M. Ostrom (Eds.), *Psychological foundations of attitudes* (pp. 243-275). New York: Academic.
- Brock, Timothy C. & Brannon, Laura A. (1992). Liberalization of commodity theory. *Basic and Applied Social Psychology*. 13 (1), 135-144.
- Cialdini, Robert B. (1993). *Influence: The psychology of persuasion*. New York: Quill William Morrow.
- Cialdini, Robert B. (2009). *Influence: Science and practice*, USA: Pearson Education, Inc.
- Chandon, Pierre; Wansink, Brian & Laurent, Gill (2000). A benefit congruency framework of sales promotion effectiveness. *The Journal of Marketing*, 64 (4), 65-81
- Cheema, Amar & Kaikati, Andrew M. (2010). The effect of need for uniqueness on word of mouth, *Journal of Marketing Research*, 47, 553-563.
- Darke, Peter R. & Chung, Cindy M.Y. (2005) Effects of pricing and promotion on consumer perceptions: It depends on how you frame it. *Journal of Retailing*, 81 (1), 35-47.
- DelVechhio, Devon (2005). Deal-prone consumers' response to promotion: The effects of relative and absolute promotion value. *Psychology & Marketing*, 22 (5), 373-391.
- Eisend, Martin (2008). Explaining the impact of scarcity appeals in advertising: The mediating role of perceptions of susceptibility. *Journal of Advertising*, 37(3), 33-40.
- Fromkin, Howard L. (1970). Effects of experimentally aroused feelings of undistinctiveness upon valuation of scarce and novel experiences. *Journal of Personality and Social Psychology*, 16 (3), 521-529.
- Fromkin, H. L. (1972). Feelings of interpersonal undistinctiveness: An unpleasant affective state. *Journal of Experimental Research in Personality*, 6, 178-185.
- Herpen, Erica Van, Pieters, Rik, & Zeelenberg, Marcel (2009). When demand accelerates demand: Trailing the bandwagon. *Journal of Consumer Psychology*, 19, 302-312.
- Inman, Jeffrey J., Peter, Anil C., & Raghurir, Priya (1997). Framing the deal: The role of restrictions in accentuating deal value. *Journal of Consumer Research*. 24(June), 68-79.

- Jung, Jae Min & Kellaris, James J. (2004). Cross-national differences in proneness to scarcity effects: The moderating roles of familiarity, uncertainty avoidance, and need for cognitive closure. *Psychology & Marketing*, 21(September), 739-753.
- Lichtenstein, Donald R., Netemeyer, Richard G. & Burton, Scot (1990). Distinguishing coupon proneness from value consciousness: An acquisition-transaction utility theory perspective. *Journal of Marketing*, 54, 54-67.
- Lichtenstein, Donald R., Netemeyer, Richard G. & Burton, Scot (1995). Assessing the domain specificity of deal proneness: A field study. *The Journal of Consumer Research*, 22 (3), 314-326.
- Lichtenstein, Donald R., Burton, Scot & Netemeyer, Richard G. (1997). An examination of deal proneness across sales promotion types: A consumer segmentation perspective. *Journal of Retailing*, 73 (2), 283-297. .
- Lynn, Michael (1989). Scarcity effects on desirability: Mediated by assumed expensiveness. *Journal of Economic Psychology*, 10, 257-274.
- Lynn, Michael (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57.
- Lynn, Michael & Harris, Judy (1997). The desire for unique consumer products. *Psychology and Marketing*, 14 (6), 601-616.
- Ruvio, Ayalla (2008). Unique like everybody else? The dual role of consumers' need for uniqueness. *Psychology and Marketing*, 25 (5), 444-464.
- Schindler, R.M., (1989). The excitement of getting a bargain: some hypothesis concerning the origins and effects of smart-shopper feelings. *Advances in Consumer Research* 16, 447-453.
- Schneider, Linda G. & Currim, Imran S. (1991). Consumer purchase behaviors associated with active and passive deal-proneness. *International Journal of Research in Marketing*, 8, 205-222.
- Sirgy, J. (1993). Review of "The Psychology of Unavailability: Explaining Scarcity and Cost Effects on Value." *Journal of Marketing Research*, 30, 395-398.
- Snyder, C. R., & Fromkin, H. L. (1980). *Uniqueness: The human pursuit of difference*. New York: Plenum.
- Snyder, C. R. (1992). Product scarcity by need for uniqueness interaction: A consumer catch-22 carousel? *Basic and Applied Social Psychology*, 13(1), 9-24.
- Tian, Kelly Tepper; Bearden, William O. & Hunter, Gary L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28 (1), 50-66.
- Tian, Kelly Tepper & Mckenzie, Karyn (2001). The long term predictive validity of the consumers' need for uniqueness scale. *Journal of Consumer Psychology*, 10 (3), 171-193.
- Verhallen, Theo M. M. & Robben, Henry S.J. (1995). Unavailability and evaluation of goods, *Kyklos*, 48 (3), 369-387.
- Webster, Jr., Frederick E. (1965). The "Deal-Prone" consumer. *Journal of Marketing Research*, 2 (2), 186-189.
- Worchel, Stephen (1992). Beyond a commodity theory analysis of censorship: When abundance and personalism enhance scarcity effects. *Basic and Applied Social Psychology*, 13 (1), 79-92

Worchel, Stephen; Lee, Jerry & Akanbi, Adewole (1975). Effects of supply and demands on rating of object value. *Journal of Personality and Social Psychology*, 32 (5), 906-914

Wu, Couchen & Hsing, San-San (2006). Less is More: How Scarcity Influences Consumers ' Value Perceptions and Purchase Intents through Mediating Variables. *The Journal of American Academy of Business*, 9, 125-133.