

The process by which product availability triggers purchase

Yael Steinhart · David Mazursky ·
Michael A. Kamins

Published online: 9 February 2013
© Springer Science+Business Media New York 2013

Abstract Both product availability and lack of availability have the potential to trigger the intention to buy. The present research aims to identify the specific processes by which the latter situation of lack of availability drives purchase intention. The research demonstrates that, when lack of product availability is perceived positively, it influences purchase intentions via consumer involvement. However, when lack of product availability is perceived negatively, it influences purchase intentions via perceived feasibility, irrespective of consumer involvement. Two studies confirm the dual indirect effect of product availability on purchase intentions and its underlying processes.

Keywords Consumer involvement · Product availability · Purchase intention · Scarcity

Marketers have spent significant effort and monetary resources on keeping products continuously available on shelves (Conlon and Mortimer 2009; Stayinfront 2011) and have considered product availability as a central feature in triggering sales (Hausman and Siekpe 2009; Jamieson and Bass 1989; Lee et al. 2008; Moon, Chadee and Tikoo 2008; Park 2003). Quite simply, if the product is not available, then it cannot be sold!

Y. Steinhart (✉)

Marketing Department at the Recanati Graduate School of Business, Tel-Aviv University,
Tel-Aviv, Israel
e-mail: ysteinhart@post.tau.ac.il

D. Mazursky

Marketing at the School of Business Administration, The Hebrew University of Jerusalem,
Jerusalem, Israel
e-mail: msmazur@huji.ac.il

M. A. Kamins

Marketing at the Harriman School of Business, Stony Brook University, New York, NY, USA
e-mail: michael.kamins@stonybrook.edu

Y. Steinhart

Department of Marketing, University of Haifa, Jacobs Bldg. Mt. Carmel, Haifa 31905, Israel

On the other hand, marketers have used lack of product availability such as through strategically planned shortages designed to generate the perception of excessive demand, to incentivize the consumer's purchase before someone else does (Amaldoss and Jain 2005, 2008, 2010; Balachander and Stock 2009). This strategy considers lack of product availability to be an effective approach to enhancing the likelihood of buying, only if consumers perceive such product scarcity to reflect positively on the product (Amaldoss and Jain 2005, 2008, 2010; Balachander and Stock 2009; Fromkin et al. 1971; Lynn 1992). But what happens when product lack of availability is perceived negatively, can this also lead to enhanced purchase intention, or is the product doomed to failure?

The goal of the present research is twofold. It aims to identify the specific processes by which lack of product availability can drive consumers to buy. Accordingly, the current research provides a comprehensive and systematic framework designed to examine the relationship between lack of product availability and purchase intention. The framework focuses on the consideration of the consumer's evaluative rationale as to whether the market situation of "scarcity" is perceived as a positive or negative characteristic of the product. Such an examination is expected to shed new light on the possible strategies of enhancing or reducing product availability as a tool to trigger purchase intention. In addition, uncovering the nature of relationship between product availability and purchase intention may challenge the classic product availability manipulation, the commonly used proxy of involvement.

Involvement has been defined as the importance of the object about which the judgment is being made (Johar 1995; Zhang and Markman 2001). Under the traditional manipulation, high involvement is typically enacted by informing individuals that a given product is soon to be available in their geographic area, and alternatively, low involvement is induced by informing individuals that the product will not be available in their local area in the near future (see Liberman and Chaiken 1996; Mazursky and Ganzach 1998; Petty, Cacioppo and Schumann 1983; Sengupta and Fitzsimmons 2004; Steinhart and Mazursky 2010; Wang and Lee 2006).

Product availability has traditionally been believed to enhance involvement levels and consequently purchase intention (e.g., Goldsmith 2002; Moutinho and Bian 2011; Sawyer and Howard 1991; Shamdasani, Stanaland and Tan 2001; Zaichkowsky 1986). We question that framework and consider perceived feasibility, namely, the ease by which the product can be obtained, as an additional construct that is enacted by product availability and consequently impacts the intention to buy (Verhallen 1982; Verhallen and Robben 1994).

The joint consideration of involvement and perceived feasibility constructs generates two possible routes under which lack of product availability may determine purchase intention. We identify these routes and specify their underline processes. Specifically, we propose that lack of product availability impacts the intention to buy based on its perceived meaning and on its consequent relatedness to the ease of buying or to the value of the product itself. When it is perceived as a negative signal (see Liberman and Chaiken 1996; Mazursky and Ganzach 1998; Petty et al. 1983; Sengupta and Fitzsimmons 2004; Wang and Lee 2006), such as in the case of having a supply side shortage in commodity availability, it is expected to provide information which relates to means of buying rather than to the end-goal of buying. Therefore, under this negative perception, lack of availability is more likely to influence purchase intentions via the feasibility construct than via involvement. On the other hand, when lack of product

availability is considered as a positive cue (Balachander and Stock 2009; Amaldoss and Jain 2010; Fromkin et al. 1971; Lynn 1992; Verhallen 1982), such as in the case of a limited edition of fashion products, it is expected to reflect essential aspects of the product and therefore to influence intention to buy via involvement.

We now turn to discuss in detail the proposed effects of the product availability manipulation on consumer's involvement, perceived feasibility, and the intention to purchase the product.

1 Theoretical background

Two streams of research that examine the effect of product availability on purchase intention from different perspectives posit independent routes of influence. In this research, we focus on the influence of lack of product availability on purchase intention via (a) consumer involvement or via (b) perceived feasibility. The former is proposed to elevate the involvement toward the product, thus making the consumer focus on the perceived importance of the product in terms of its benefits. The latter is proposed to impact the ease of obtaining the product, which may not be related to the product's essence but rather to useful aspects surrounding its' purchase. These routes have significantly different implications in terms of human behavior. Specifically, we propose that the type of route taken is determined by the consumer's perceived meaning of lack of product availability (positive or negative).

1.1 When lack of product availability is perceived negatively

In general, it is common to consider product availability as a positive signal about the product. That is, when the product is available to purchase, the consumer typically finds it as a good thing (in most cases, this is the default state), and when it not available, there are potentially negative consequences. This perception is in line with the traditional way of inducing involvement levels via product availability (e.g., Apsler and Sears 1968). However, reservations concerning the appropriateness of the product availability manipulation as the driver of involvement have been echoed in subsequent research. The core principle behind the product availability manipulation is that it activates product relevance. Mittal (1995) and Poiesz and de Bont (1995) argue that relevance differs from involvement. According to Mittal (1995), relevance simply means that something serves a function, but it does not indicate the importance of the function it serves. For example, cotton swabs may be very relevant to a consumer, as may be diamonds, but these two products are poles apart in importance or involvement.

We further contend that, when product availability is perceived positively and lack of product availability is perceived negatively, it represents a practical product feature which is more related to the ease of attaining the product than to its core benefits. Therefore, product availability is proposed to be strongly related to subordinate features of the product.

More precisely, this research does not underestimate the importance of positive product availability, especially in markets where products are perishable, seasonal, or have storage costs. Nevertheless, it proposes that the mere presence of the product on

shelves may not always elevate involvement and purchase intentions. On the contrary, in some cases, it is expected to be perceived as a given and not even influence one's involvement toward the product. Moreover, if product availability influences the intention to buy, its impact relies on practical reasons, rather than on involvement. For example, Verhallen (1982) indicates that, when product availability is perceived positively and lack of product availability is perceived negatively, such as when no reason is provided for a stock-out of products, then a lack of product availability is expected to affect purchase intention via useful aspects, such as feasibility considerations. In sum, we hypothesize:

H1: When lack of product availability is perceived negatively, this will impact feasibility more strongly than involvement and, subsequently, the intention to purchase the product.

1.2 When lack of product availability is perceived positively

In this research, we contend that, in some cases, lack of availability triggers involvement in a stronger manner than it triggers perceived feasibility in determining the intention to buy the product. In these cases, lack of availability constitutes an essential cue about product quality and benefits.

Prior research has suggested that, when the causes for lack of product availability are clearly stated, as well as associated to extensive demand (Verhallen 1982) or product scarcity (Amaldoss and Jain 2005, 2008; Fromkin et al. 1971; Lynn 1992; Verhallen 1982), then lack of product availability constitutes an essential cue about product benefits. Amaldoss and Jain (2005), for example, indicate that the strategy of limiting production quantity, restricting product availability by using exclusive distribution channels, or via legal action, increase the perceived value of products even for items such as cookies. Verhallen (1982) specifically examines the effect of degree of availability (low to high) and cause of unavailability (unexplained lack of availability, unavailability due to popularity, unavailability due to limited supply, and unavailability due to both limited supply and popularity) on the consumers' preferences. The results suggest that unavailability enhanced the intention to buy only in the case where lack of availability was a result of high popularity or limited supply. The current research extends this reasoning and further examines the settings where lack of product availability impacts purchase intention via involvement, or via perceived feasibility. We formally, hypothesize:

H2: When lack of product availability is perceived positively, this will impact involvement more strongly than feasibility and, subsequently, the intention to buy the product.

We conducted two studies to examine the two routes by which a lack of product availability influences purchase intention (Study 1) and to shed more light on the considerations (such as the essence of the product or practical aspects related to purchasing it) that consumers take into account under each route of influence (Study 2).

2 Study 1

In the first study, we concentrate on the indirect effects of lack of availability on the intention to buy, when lack of availability is either perceived as a positive or negative

state. We examine two possible states of lack of product availability: (a) not available currently but available in the future without any explanation for the unavailability and (b) limited edition which leads to highly constrained availability and high demand. The former condition is based on the classic manipulation of product availability under the involvement stream of research (e.g., Apsler and Sears 1968), under which the available condition is expected to be perceived positively and the unexplained unavailability condition negatively (Verhallen 1982). We therefore expected that the former condition, where lack of availability is perceived negatively, will influence purchase via feasibility rather than involvement (H1). In contrast, the latter condition is based on the scarcity perception which refers to lack of product availability in a positive manner where demand exceeds supply (Amaldoss and Jain 2005, 2008; Fromkin et al. 1971). In this case, we expected lack of availability to influence purchase intention via involvement rather than feasibility considerations (H2).

2.1 Method

Participants Sixty participants took part in an online survey in exchange for approximately US\$3 ($M_{\text{age}}=32$, 48 % women). They were randomly assigned to each of the two conditions: (a) available in the future versus (b) limited availability due to a limited edition.

Product description The product of interest was a T-shirt that changes color according to the ambient temperature. The product presentation included a photo and a brief description of its features. All participants were told that the T-shirt was a great success in the US, and then one half were told that it would be launched in their country in a year from now, and the other half were told that T-shirt is currently available in their own country but in limited edition and only in selected stores. A pre-test among 33 participants ($M_{\text{age}}=31$, 27 % women) showed that the available in the future condition, without explanation about the causes for lack of availability was perceived as a negative state ($M=3.45$) compared with the mid-scale ($M=4$, $t_{(32)}=2.55$, $p<.05$). An additional pre-test among 20 participants ($M_{\text{age}}=33$, 50 % women) revealed that the limited edition condition was perceived as a positive state ($M=4.95$) compared with the mid-scale ($M=4$, $t_{(19)}=2.37$, $p<.05$).

Procedure The study was based on an online questionnaire. Participants were introduced to the new product concept and then were asked to answer a short set of questions: (a) purchase intention: two items were used for this purpose (“I am interested in purchasing the T-shirt”, “It is likely that I will purchase the T-shirt”); (b) Involvement: participants were asked to respond to items based on the shortened version of Zaichkowsky’s PII scale (1985). Accordingly, participants were asked to rate their perception on five facets of involvement with the target product (important versus unimportant, of concern to me versus of no concern, means a lot to me versus means nothing to me, matters to me versus does not matter to me, and significant versus insignificant) on a bipolar semantic-differential scale ; (c) Perceived feasibility: two items were used to evaluate this construct (“In case I would like to purchase the T-shirt, it will be easy to attain it”, “If I would like to purchase the T-shirt, it will

be simple and convenient to buy it”); (d) Perceived availability: participants were also asked to rate the product perceived availability: “The T-shirt is available to purchase.”

The purchase intention, feasibility, and availability measures were taken on a seven-point scale, from 1 (very low) to 7 (very high).

2.2 Results

Involvement A confirmatory factor analysis on the shortened PII scale ($\alpha=0.90$) revealed a single factor. Accordingly, all five measures were used as indicators for the latent factor of involvement.

Paths of influencing intention Structural equation modeling methodology was applied to test the effects of the product availability manipulation on purchase intention. The measurement model explored the relationships between one exogenous variable (i.e., product availability), two mediating endogenous variables (i.e., involvement and perceived feasibility), and a dependent endogenous variable (i.e., purchase intention). The model considers the effects of lack of product availability on purchase intention via the feasibility construct and via the involvement variable, using multi-group analysis. Specifically, in this sample, the relationships between the variables within each of the subgroups of the total sample were based on the unavailability conditions ($\chi_{(64)}^2=88.49$, $p<0.02$; $NFI=0.94$, $CFI=0.93$, $RMSE=0.08$, $AIC=220.85$). The model is presented in Fig. 1.

The pattern of results indicated that within the subgroup where lack of availability is perceived negatively, the effect of product availability on perceived feasibility was marginally significant ($b=0.37$, $p<0.07$), whereas the effect of product availability on involvement was not significant ($b=-0.18$, $p>0.10$). Moreover, the effect of involvement on purchase intention was found to be significant ($b=0.64$, $p<0.05$), compared with the non-significant effect of feasibility on purchase intention ($b=-0.11$, $p>0.10$). These findings provide partial support to the first hypothesis. They confirm that lack of product availability triggers feasibility in a stronger manner than involvement. However, they do not support the indirect effect of lack of product availability on the intention to buy.

On the other hand, the pattern of results indicated that, within the subgroup of the limited edition condition, where lack of availability is a positive signal, the effect of product availability on involvement was marginally significant ($b=0.40$, $p<0.07$), whereas the effect of product availability on perceived feasibility was not ($b=-0.14$, $p>0.10$). In this case, the effect of involvement on purchase intention was found to be stronger ($b=0.75$, $p<0.05$) than the effect of feasibility on purchase intention ($b=0.18$, $p=0.06$). These findings are in line with the predictions of the second hypothesis.

2.3 Discussion

The results of the first study confirmed our expectations. As predicted by H1, when lack of product availability served as a negative signal, it enhanced the perceived feasibility consideration more than involvement toward the product. More

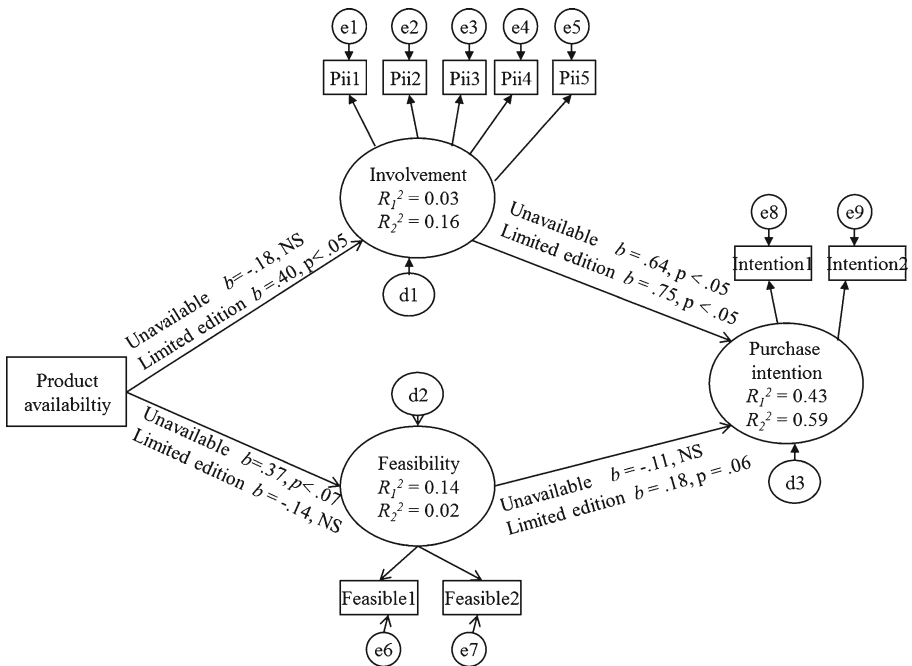


Fig. 1 The effects of lack of product availability on purchase intention via the mediating variables of feasibility and involvement, within the subgroups of unavailable and limited edition

interestingly, under this route of influence, product availability did not subsequently influence the intention to buy the product, since the effects of perceived feasibility or involvement on purchase intention were not significant. As predicted in H2, when lack of product availability constituted a positive signal on the essence of the product (i.e., limited edition), it was found to elevate involvement toward the product in determining the intention to purchase the product.

In the following study, we shed more light on the role of product availability as triggering thoughts related to the essence of the product or those associated with the ease of attaining the product, under each of the availability states.

3 Study 2

In the second study, we expand our universe by focusing on two additional conditions of product availability in addition to those examined in study one: (a) available today (a reflection of availability in the future tested in study one) and (b) not available due to extensive demand, which represents another positive state of unavailability such as limited demand focused upon in study one. The objective of this study was to capture the decision considerations that product availability triggers in each of the conditions, such as those related to the essence of the product or to the practical aspects of purchasing, while the addition of these two conditions serves to include some degree of replication in our findings, by including a second condition of availability and a second condition representative of lack of availability.

A pre-test among 66 participants confirmed our expectations regarding the perceived valence of each of the availability conditions. When the product was available today, it was rated as more attractive ($M=5.55$) than when it was to be available in the future ($M=3.92$, $t_{(31)}=2.76$, $p<0.01$). It was also rated as more attractive relative to the future availability condition, under the limited edition condition ($M=5.67$, $t_{(29)}=3.54$, $p<0.005$) and when lack of availability was due to extensive demand ($M=5.27$, $t_{(26)}=2.51$, $p<0.02$). That is, as expected, the available, limited edition, and extensive demand conditions were perceived in a more positive manner compared with the available in the future condition.

3.1 Method

Participants Eighty participants took part in an online survey in exchange for approximately US\$3 ($M_{\text{age}}=32$, 51 % women). Participants were randomly assigned to each of the four conditions: (a) available in the future, (b) available today, (c) limited availability due to limited edition, and (d) not available due to extensive demand. Conditions (b) and (d) were not considered in the first study.

Product description In this study, the product of interest was identical to the one used in the first study, a T-shirt. One quarter of the subjects were told that it would be launched in their country in a year from now; the second quarter was informed that it is about to be launched in their country presently; the third quarter were told that the T-shirt is currently available in their own country but in limited edition and only in selected stores, and the rest were told that the T-shirt is not available due to overwhelming demand.

Procedure The study was undertaken through the use of an online survey. Participants were introduced to the new product concept and then were asked to answer a set of questions regarding the considerations they take into account when forming an impression about the product: (a) expected product benefits, (b) perceived product quality, (c) ease of attaining the product, and (d) level of availability. The first two considerations represent essential product features, and the latter two considerations stand for those associated with the feasibility of purchasing the product, rather than to the essence of the product.

Finally, as a manipulation check, participants were asked to rate the product's perceived availability: "The T-shirt is available to purchase". All measures were taken on a seven-point scale, from 1 (very low) to 7 (very high).

3.2 Results

Manipulation check ANOVA of perceived availability as a function of availability conditions revealed a significant main effect ($F_{(3,77)}=5.15$, $p<0.05$). As expected, under the presently available condition and the available in a limited edition condition, the product was rated as more available ($M=3.94$ and $M=4.45$; respectively) than in the available in the future condition and in the not available due to extensive demand condition ($M=2.56$ and $M=2.88$, respectively). Post hoc tests confirmed that

the difference within the available and within the non-available ratings was not significant; however, the difference between each of the available ratings and the each of the non-available ratings were significant. Specifically, the difference between the available condition and future availability condition was significant ($t_{(33)}=2.21, p<0.05$), and the difference between the former condition and the non-available condition due to extensive demand was marginally significant ($t_{(41)}=1.93, p=0.06$). The difference between the limited edition condition and the future availability condition ($t_{(36)}=3.37, p<0.005$) and the difference between the limited edition condition and the non-available condition due to extensive demand ($t_{(44)}=3.19, p<0.01$) were also significant.

Relative considerations Repeated-measure analysis of the extent to which participants reported relying on considerations related to the essence of the product and those related to practical aspects of purchasing it, as a function of availability conditions, revealed a significant interaction between consideration type and availability state ($F_{(3,76)}=7.75, p<0.01$). In line with our expectations, when lack of availability was perceived positively, the essence of the product was more critical in forming product evaluations than the practical aspects of purchasing it whereas, when lack of availability was perceived negatively, the practical aspects played an equal role in purchasing considerations as compared with the product's essence. Specifically, when (lack) of product availability was perceived (un)favorably, as described in the first two conditions, participants did not report a significant difference in their extent of reliance on features related to the essence of the product and on those related to the feasible facets of buying ($M_{\text{available}}=4.00$ versus $M_{\text{available}}=4.09, t_{(16)}<1; M_{\text{unavailable}}=4.23$ versus $M_{\text{unavailable}}=4.23, t_{(16)}<1$; respectively). In contrast, when lack of product availability is perceived in a positive manner, as in the limited edition and extensive demand conditions, participants reported on higher reliance on considerations related to essence of the product than on practical ones ($M_{\text{limited edition}}=5.10$ versus $M_{\text{limited edition}}=3.02, t_{(19)}=4.10, p<0.005; M_{\text{demand}}=4.09$ versus $M_{\text{demand}}=2.53, t_{(25)}=4.3, p<0.005$; respectively).

3.3 Discussion

The findings of the second study confirmed that, when lack of availability is perceived positively, consumers focus more on aspects related to the critical features of the product, such as expected benefits and perceived quality, than when lack of availability is perceived negatively. When (un)availability was perceived (un)favorably, practical and critical aspects were similar in their impact on product evaluation formation. We therefore conclude that the indirect effect of product availability on purchase intention not only goes through different routes of influence: involvement or perceived feasibility (as shown in study 1); but also leads consumers to rely on different product aspects when generating their purchase decision (study 2). That is, under the involvement path of influence, product quality, value, and benefit considerations impact the decision, whereas under the feasibility route, peripheral aspects also influence the intention to buy.

4 General discussion

The present research provides a comprehensive framework examining the effect of lack of product availability on purchase intention. It not only integrates past research that examined both the positive and negative effects of unavailability, but also uncovers the underlying mechanism of the product availability effect on purchase intention.

So far, existing research has examined the effects of product availability on purchase intention in two different contexts. Under the involvement context, lack of availability resulted in lower involvement levels and, consequently, a lowered intention to buy the product (see Liberman and Chaiken 1996; Petty et al. 1983; Sengupta and Fitzsimmons 2004; Steinhart and Mazursky 2010) whereas, under the scarcity literature, lack of product availability was considered as an enhancer of the intention to buy the product (Amaldoss and Jain 2010; Balachander and Stock 2009; Fromkin et al. 1971; Lynn 1992; Verhallen 1982). This research merges these two perspectives and by so doing, increases the overall understanding of the effect of lack of product availability on intention, either via involvement or via perceived product feasibility.

Findings reveal that the product availability manipulation has a dual effect, which either bypasses or relies on involvement when influencing purchase intention. The bypass effect was found to be a function of the ease of obtaining the product. Specifically, in line with the traditional involvement route of influence, when lack of product availability was perceived in a positive manner, it elevated involvement and consequently the intention to buy. However, when lack of product availability was perceived negatively, it enacted perceived feasibility rather than the involvement toward the product. We further confirmed that the purchase considerations that each of the availability states trigger are related to either the product's essence or to practical aspects which facilitate one's ability to buy the product.

From a theoretical point of view, this paper specifies the conditions under which product availability may be used as a proxy of involvement. Under the involvement line of research, positive product availability was assumed to trigger high involvement levels, and negative lack of product availability was expected to induce low involvement levels. In this research, we show that these product availability perceptions may bypass the involvement construct in determining purchase intention and demonstrate that a favorable state of lack of product availability may be more relevant in enacting involvement levels and, consequently, the intention to buy. Therefore, in future research, product availability may be used to trigger involvement by pointing out lack of availability as a positive signal, such as via product scarcity, extensive demand, or a limited edition.

There are other possible indirect effects of lack of product availability on the intention to buy, which were not covered in this research, for example, when lack of product availability is perceived negatively and it is a reflection of the value of the product (rather than a reflection of the ease of buying), such as in case of a production malfunction. In this case, lack of availability may represent low product quality and thus influence the decision to buy via involvement rather than via perceived feasibility. In addition, there may be cases when lack of product availability is perceived positively and is strongly related to the feasibility of buying rather than to product

importance. This may occur when dealing with seasonal products, which one expects to find on the shelves only in specific periods of time. These conditions are less likely to be a function of the company's intentional marketing strategy but a product of (un)expected circumstances and therefore were not examined in our studies. However, in order to increase the understanding of product availability on buying behaviors, these conditions may be considered in future research.

In research to come, it may be also interesting to consider the impact of other important product aspects, such as price, competition, patents, distribution channels, and legislation, which were found to considerably impact consumer choices, and examine the way these aspects interact with product availability perceptions. For example, the strategy of limited edition is usually executed in the case of luxury products, which are also expensive. Thus, the interplay between price and product availability strategy may reveal intriguing implications. In addition, since price is linked to perceived quality, if raised, it can lead to shortages, which are seen as a favorable reflection of lack of availability. Similarly, distribution channels can be purposely restricted, creating shortages and demand for the specific brand, resulting in involvement, as the shortage is viewed favorably as a reflection of demand excess with no other brand perceived as substitutable. In the current research, for both studies, we controlled their influence by presenting an identical product description in all experimental conditions and manipulating only the availability states. Thus, we kept other product aspects constant across conditions. Consideration of these aspects may increase the practical implications of the effect of product availability on the intention to buy.

In addition, from a practical perspective, the present research has interesting implications about the settings under which each of the product availability strategies should be employed, for example, for low-involvement products, such as matches and toothpaste, where consumers consider peripheral cues along their decision process, and where the offers may be perceived as substitutable; a strategy which focuses on positive product availability is in line with this type of consideration, since consumers will perceive the practical aspects of product availability. On the other hand, for high-involvement products, such as a smart-phone and a 3D TV, where consumers rely on the core benefits of the products when generating their judgments and where the products are less likely to be perceived substitutable, highlighting lack of availability in a positive manner may be a better strategy. Consider, can a Samsung phone which may look like an iPhone really feel like an iPhone in terms of what it does? In this latter case, consumers will draw on product benefits derived from its limited availability, as the shortages of stocked units for the iPhone 5 in its first weekend of sales can attest.

Acknowledgments The authors acknowledge the financial assistance provided by the Kmart and Davidson centers.

References

- Amaldoss, W., & Jain, S. (2005). Conspicuous consumption and sophisticated thinking. *Management Science*, *51*, 1449–1466.
- Amaldoss, W., & Jain, S. (2008). A strategic analysis of reference group effects. *Marketing Science*, *27*, 932–942.

- Amaldoss, W., & Jain, S. (2010). Reference groups and product line decisions: An experimental investigation of limited editions and product proliferation. *Management Science*, *56*, 621–644.
- Apsler, R. P., & Sears, D. O. (1968). Warning, personal involvement, and attitude change. *Journal of Personality and Social Psychology*, *9*, 162–166.
- Balachander, S., & Stock, A. (2009). Limited edition products: When and when not to offer them. *Marketing Science*, *28*(2), 336–355.
- Conlon, C. T., and Mortimer, J. H., (2009). “Demand estimation under incomplete product availability,” *NBER Working Paper No. W14315*.
- Fromkin, H.L., Olson, J.C., Dipboye, R.L. and Barnaby, D. (1971). “A commodity theory analysis of consumer preferences for scarce products,” in *Proceedings 79th Annual Convention APA*.
- Goldsmith, R. E. (2002). Explaining and predicting consumer intention to purchase over the Internet: An exploratory study. *Journal of Marketing Theory and Practice*, *10*, 22–28.
- Hausman, A., & Siekpe, J. (2009). The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, *62*(1), 5–13.
- Jamieson, L. F., & Bass, F. M. (1989). Adjusting stated intention measures to predict trial purchase of new products: A comparison of models and methods. *Journal of Marketing Research*, *26*(3), 336–345.
- Johar, G. V. (1995). Consumer involvement and deception from implied advertising claims. *Journal of Marketing Research*, *32*, 267–279.
- Lee, M. Y., Kim, Y. K., Pelton, L., Knight, D., & Forney, J. (2008). Factors affecting Mexican college students’ purchase intention toward a US apparel brand. *Journal of Fashion Marketing and Management*, *12*(3), 294–307.
- Lieberman, A., & Chaiken, S. (1996). The direct effect of personal relevance on attitudes. *Personality and Social Psychology Bulletin*, *22*, 269.
- Lynn, M. (1992). Scarcity’s enhancement of desirability: The role of naive economic theories. *Basic and Applied Social Psychology*, *13*, 61–78.
- Mazursky, D., & Ganzach, Y. (1998). Does involvement moderate time-dependent biases in consumer multi-attribute judgment? *Journal of Business Research*, *41*, 95–103.
- Mittal, B. (1995). A comparative analysis of four scales of consumer involvement. *Psychology and Marketing*, *12*, 663–682.
- Moon, J., Chadee, D., & Tikoo, S. (2008). Culture, product type, and price influences on consumer purchase intention to buy personalized products online. *Journal of Business Research*, *61*(1), 31–41.
- Moutinho, L., & Bian, X. (2011). The role of brand image, product involvement, and knowledge in explaining consumer purchase behavior of counterfeit: Direct and indirect effects. *European Journal of Marketing*, *45*(1/2), 191–216.
- Park, C. H. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International Journal of Retail and Distribution Management*, *31*(1), 16–29.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*, 135–146.
- Poiesz, T. B. C., & de Bont, C. J. P. M. (1995). Do we need involvement to understand consumer behavior. *Advances in Consumer Research*, *22*, 448–452.
- Sawyer, A. G., & Howard, D. J. (1991). Effects of omitting conclusions in advertisements to involved and uninvolved audiences. *Journal of Marketing Research*, *28*, 467–474.
- Sengupta, J., & Fitzsimons, G. J. (2004). The effect of analyzing reasons on the stability of brand attitudes: A reconciliation of opposing predictors. *Journal of Consumer Research*, *31*, 705–711.
- Shamdasani, P. N., Stanaland, A. J. S., & Tan, J. (2001). Location, location, location: Insights for advertising placement on the web. *Journal of Advertising Research*, *41*, 7–21.
- Stayinfront Inc. (2011). “Winning at the shelf,” *White paper*. Fairfield, NJ
- Steinhart, Y., & Mazursky, D. (2010). Purchase availability and involvement antecedents among financial products. *International Journal of Bank Marketing*, *28*(2), 113–135.
- Verhallen, T. M. M. (1982). Scarcity and consumer choice behavior. *Journal of Economic Psychology*, *2*, 299–322.
- Verhallen, T. M. M., & Robben, H. S. J. (1994). Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, *15*(2), 315–331.
- Wang, J., & Lee, A. Y. (2006). The role of regulatory focus in preference construction. *Journal of Marketing Research*, *43*, 28–38.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, *12*, 341–352.
- Zaichkowsky, J. L. (1986). Conceptualizing involvement. *Journal of Advertising*, *15*, 4–14.
- Zhang, S., & Markman, A. B. (2001). Processing product unique features: Eligibility and involvement in preference construction. *Journal of Consumer Psychology*, *11*, 13–27.