

# The Effects of Perceived Scarcity and Anticipated Emotions on Purchase Intention (A Study on Social Commerce)

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Abstract: Marketers frequently create product uncertainty to generate consumers purchase intention. Of all marketing moves, scarcity tactics are commonly used by retailers, especially in fast fashion business, to escalate interest and intention to buy. Through a quantitative approach, this research seeks to provide an understanding of how consumers respond to scarcity environment strategically created by retailers and its effects on purchase intention. Data were collected from online and traditional surveys involving 100 women who have shopping experience through social commerce (e-commerce which uses social networking sites to facilitate social interaction between seller and buyer). Finding confirms that human-induced scarcity influences consumers purchase intentions by affecting emotional outcomes. When facing scarcity environment, consumers tend to anticipate some emotions that will further motivate purchase. The anticipated emotions motivating purchase are grouped into two categories, positive emotions of purchase (posAEp) and negative emotions of non-purchase (negAEnp). If consumers have assumptions that purchasing a desired product would generate positive emotions, like satisfaction, they would consider buying the product. On the other hand, their purchase intention increase for the reason that they want to avoid negative emotions as a consequence of missing the product. The emotions elicited by consumers after exposed to scarcity environment are proven to increase purchase intention. Thus, it is suggested that deliberately creating scarcity is able to enhance purchase intention. In addition to providing managers with useful insights into constructing a marketing strategy, from a methodological standpoint this research contributes to the consumer and retail literature by elaborating the correlation between perceived scarcity, anticipated emotions and purchase intention.

Keywords: Perceived scarcity, anticipated emotions, purchase intention, marketing

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# **INTRODUCTION**

Having a business in the field of retail is undeniably promising as it can generate high profit. However, in this era of advanced technology there have been so many challenges in running a business, especially retail business, due to an increasing number of competitors from all over the world. This might be one of many things that becomes an obstacle or even a fear for retailers. A sector within retail industry that is rapidly growing is fashion industry, contributing 18.15% or 166 trillion Indonesia Rupiahs to Gross Domestic Products (GDP) (Baand Pusat Statistik, 2017; Bernik, Azis, Kartini, & Harsanto, 2015). According to Indonesia Agency for Creative Economy (BEKRAF), fashion industry is the second biggest subsector in creative industry. This sector also plays a big role in increasing employement and increase exports every year. In 2017 exports from Indonesia to all other countries was 13.29 billion USD or increased 8.7% compared to the prior year.

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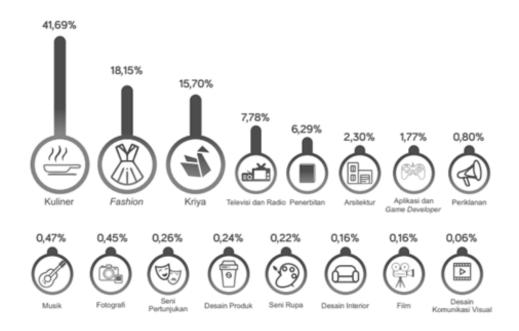


Figure 1 Creative Economy Contribution to GDP in 2016 (Source: Baand Pusat Statistik (2017))

In order to succeed in this intense competition, there are several factors that retailers need to take into account. Kotler and Amstrong (2015) said that one of the most essential factors needed to grow a business is marketing strategy. Of all marketing moves, scarcity tactics are ones that are commonly used by retailers, especially in fast fashion business, to escalate interest and intention to buy. Retailers often create product scarcity strategically so that consumers are urged to buy products they sell.

There are several big companies that already adapted scarcity strategy to boost sales. Sony was one of those companies implementing scarcity tactics when it launched its renowned game console PlayStation2 in 2000. PlayStation2 was deemed the most popular game console becuse of its function and state of the art technology. In addition to its features, the popularity of PlayStation2 was because of its scarcity strategy (Digital Trends, 2000). In early 2000, Sony announced that there would be one million units of PlayStation2 launched across United States in October. However, in its first lauch Sony only released less than 500 thousands units of PlayStation2 thus causing product shortage. "There's going to be a lot of frustrated people on October 26," said John Davison, editor of Electronic Gaming Monthly. "Between launch and Christmas it'll be tough to get one unless you're in the right place at the right time or you preordered."

In previous researches, it is said that marketing strategy done by creating product scarcity could result in consumers automatic response and short-term thinking thus they presume that the more limited the availability of a product, the more valuable it will be (Cialdini, 2001; Kinata, 2016). Scarcity strategy has also been implemented by several other big companies, especially fast fashion companies like Zara, H&M, and Forever 21. Those companies produce quite limited products because they are determined to follow trends. They limit the quantity of products per size, colour, or style.

Scarcity that is strategically created as part of marketing strategy by limiting product availability is called supply-side scarcity (Gupta, 2013; Nuansoi, Suntiniyompukdee, & Tahlah, 2017). Aggarwal, Jun, and Huh (2011) stated that this scarcity could escalate consumers perceived value towards products and increase desire to own products, product quantity and satisfaction. In his research, Gupta pointed that perceived scarcity could raise intention to buy because it caused urgency to buy. This happens because consumers are insecure that they can not get the limited products. Perceived scarcity was also believed that it could result in some emotional outcomes such as anticipated regret.

Bagozzi, Belanche, Casaló, and Flavián (2016) in his research found that there are several other Anticipated Emotions (AEs) that affect intention to buy beside anticipated regret. He classified anticipated emotions to two groups, AEs motivating purchase and AEs motivating nonpurchase. In this study, it is important to investigate the effect of AEs motivating purchase because this study aims to analyse the effect of AEs toward intention to buy.

AEs motivating purchase is seperated into two groups, positive AEs of purchase (posAEp) and negative AEs of nonpurchase (negAEnp). Eight positive AEs toward purchase are peaceful, satisfied, hopeful, happy, pleased, joyful,

delighted, and excited and 12 negative AEs related to purchase are upset, anxious, nervous, discontented, disappointed, uneasy, tense, worried, threatened, ashamed, guilty, and regretful. In general, consumers may have assumption that they will experience those positive emotions if they decide to buy the desired product, and they also probably feel those negative emotions if they decide to skip the product. As they do not want to feel those negative emotions resulted from their nonpurchase decision, their intention to buy will increase. This study examined perceived scarcity which happened in an online store that carry out its commercial activities by utilizing Instagram. Che, Cheung, and Thadani (2017) in their research said that Instagram was one of social medias that was utilized for social commerce or e-commerce that uses social networking sites to facilitate social interaction between buyer and seller. Insatgam was also said to have been the most popular social media when it comes to commercial platform as it was declared as social media with the second highest order quantity. One popular brand in Indonesia that uses social commerce to sell their product is Vanilla Hijab. This brand was used to examine perceived scarcity in this study because it is the most-followed Instagram online shop in Indonesia with around 1.2 million followers. Based on the information on its Instagram account, Vanilla Hijab always sells out thousands of their products in minutes after the launch of each collection.

# THEORITICAL OVERVIEW

#### **Perceived Scarcity**

Scarcity is an an aspect that influence economic behavior (Azizam, Ismail, Sulong, Nor, & Ahmed, 2015; Verhallen & Robben, 1994). It can limit consumers freedom to get the products they want, causing them to have greater desire to own the products. Scarcity can increase consumers perceived value toward products and opportunity, increase the amount of purchase, decrease the search of other products and result in satisfaction (Li, 2017; Osés-Eraso, Udina, & Viladrich-Grau, 2008). Considering those effects, marketer often strategically create product scarcity to boost sales (Lynn, 1991; Srisangkaew, 2017). They can create scarcity by limiting product quantity or time availability. They also often use marketing sentence like almost out of stock due to high demand, 80% sold, and limited edition (Gierl & Huettl, 2010).

# AEs

In their research, Mellers and McGraw (2001) declared that one important factor that plays a big role in decision making is an intention to seek happiness and avoid unhappiness. People tend to anticipate how their decisions could affect their feelings (Patrick & Drislane, 2015). Thus, before making a decision consumers will consider what kind of emotions they will experience as a result of their action or inaction. Bagozzi et al. (2016) pointed out that AEs is defined as consumers prediction toward their emotions after doing action or inaction.

This study examined AEs motivating purchase, which is seperated into two groups, positive AEs of purchase (posAEp) and negative AEs of nonpurchase (negAEnp). Eight positive AEs toward purchase are peaceful, satisfied, hopeful, happy, pleased, joyful, delighted, and excited and 12 negative AEs related to purchase are upset, anxious, nervous, discontented, disappointed, uneasy, tense, worried, threatened, ashamed, guilty, and regretful.

#### Intention to Buy

Before deciding to buy a product, consumers have an intention to buy which is defined as an attempt to buy a product consciously (Shabbir, Kirmani, Iqbal, & Khan, 2009). Kotler and Keller added that intention to buy was an urgency to buy products or services in order to fulfill consumers needs. Moreover, Dodds, Monroe, and Grewal (1991) said that intention to buy was consumers likelihood to buy products or services after they felt interested and wanted to consume products they saw.

## **Research Proposal**

Building on the above theoretical review, it is proposed that perceived scarcity plays a role in increasing consumers intention to buy. Gupta (2013) said products that are limited in quantity would be perceived more valuable and thus made consumers do not want to lose chance to get the products. Perceived scarcity also arouse some psychological effects like anticipated regret and other anticipated emotions. Anticipated emotions according to Bagozzi et al. (2016) had positive correlation with intention to buy. Consumers usually predict what kind of emotions they would experience if they choose to make action (buy a product) or inaction (do not buy a product). In order to get positive emotions from buying a product and avoid negative emotions from missing a product, consumers will be urged to buy the desired

products.

# The Influence of Perceived Scarcity toward Anticipated Emotions and Intention to Buy

Before making a decision, especially in purchasing, consumers usually pass through some processes and have some consideration. That happens due to some factors like marketing strategy that is used by marketers. One of many marketing strategies widely done by marketers is by creating product scarcity.

In his research, Gupta (2013) said that one of anticipated emotions, namely anticipated regret, has an influence on perceived scarcity and urgency to buy. In environment where consumers are aware of scarcity, by learning from promotion or other marketing aspects, consumers feel several emotions. Swain, Hanna, and Abendroth (2006) added that one strategy to communicate perceived scarcity was to apply limited time promotion. During that promotion period, consumers understand that the promotion would not be valid forever, otherwise it only applied temporarily. Thus, they will experience emotional outcomes resulted from the understanding of the marketing tactics. Emotions elicited vary from positive to negative, thus it is assumed that perceived scarcity influence anticipated emotions.

H1: Perceived scarcity influence positive AEs of purchase (posAEp).

H2: Perceived scarcity influence negative AEs of nonpurchase (negAEnp).

H3: Perceived scarcity influence intention to buy.

#### The Influence of AEs toward Intention to Buy

One aspects that influences consumers intention to buy is emotions elicited from individuals (Bagozzi et al., 2016). Before making a decision consumers will consider what kind of emotions they will experience as a result of their action or inaction, in this case purchase or nonpurchase. The presumed emotions were called AEs. When they realize that a certain product is limited, they will have a desire to experience positive emotions (posAEp) that they anticipate will result from purchasing the product. They also want to avoid negative emotions (negAEnp) that they predict will come up if they do not purchase the products. To fulfill their emotional needs and to avoid unexpected negtive feelings, consumers intention to buy will increase as they realize the consequences of their action or inaction.

H4: AEs of purchase (posAEp) influence intention to buy.

**H5:** *AEs of nonpurchase (negAEnp) influence intention to buy.* 

#### METHODOLOGY

This study conducted a questionnaire survey to collect data for hypotheses testing. In order to ensure the content and validity, all questionnaire items were adapted from existing questionnaire with good reliability, and validity to fit into the research context. Table 1 summarizes the operational definition of each variable, the sources of measurement scale, and the number of original items.

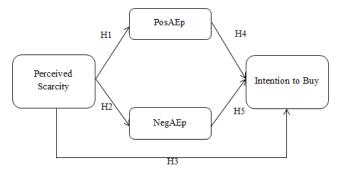
This study invited ten representative samples to participate in the pretest of the questionnaire. The pretest was done to ensure that the object of study could reflect scarcity condition. The unit of analysis is women at the age of 16-40 who actively use Instagram and had already visited @vanillahijab account. Online questionnaire was used for data collection and purposive sampling was used to increase the degree of generalization of the sample. The data collection lasted for two weeks, and finally 142 valid questionnaires were retrieved.

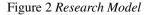
To test the hypothesis, this study used Structural Equation Modeling (SEM) with Partial Least Square (PLS). The first step of the analysis was validity and reliability test which was done to ensure the fitness of each indicators and the proposed model.

Table 1 VARIABLE DEFINITION AND OPERATIONALIZATION

Variable	Definition	Source	Items	
PS	Assumption that a product is limited in	Gupta (2013)	5	
	quantity and producr scarcity is strategi-			
	cally created by marketers.			

Table 1 CONTINUE			
Variable	Definition	Source	Items
РАЕР	Positive emotions anticipated by con- sumers if they decide to buy desired products.	Bagozzi et al. (2016)	8
NAENP	Negative emotions anticipated by con- sumers if they do not decide to buy de- sired products.	Bagozzi et al. (2016)	12
ITB	an urgency to buy products or services in order to fulfill consumers needs.	Bagozzi et al. (2016)	3





#### RESULTS

The sample of this study is mainly composed of young female with relatively low incomes, which is similar to the profiles reported in some recent surveys conducted MIC. It is said that that most of the online group-buying buyers were female with ages ranging from 20 to 29.

Of the 142 respondents in this study, all were female, 86 (60.6%) were between 23 and 30 years of age, and the ages of 114 samples (80.3%) were ranging from 19-30. Furthermore, near half of the samples (45.7%) were student, and 97 (68.3%) of them have monthly incomes less than IDR 3,500,000.

The similarity among different surveys indicates that the sample in this study can be seen as a representative sample of the larger population of group-buying users, who possessed sufficient experience to answer the questions posed by the questionnaire used in this study. Table 2 lists the demographic characteristics of the respondents.

Data will be analyzed by PLS, and SmartPLS 2.0 will be employed as the primary tool for data. The analysis using standard PLS procedure is composed of analyzing the data in two stages, and the results will be presented below. First, the measurement model is assessed for validity and reliability; then, the structural model is evaluated to test the hypotheses.

Measures	Items	Frequency	Percentage
Age	16-18	11	7.7
	19-22	28	19.7
	23-25	53	37.3
	26-30	33	23.2
	31-40	7	4.9
Occupation	Student	65	45.7
	Employement	54	38
	NEET	20	14
	Others	3	2.1
Monthly Income	$\geq$ IDR 1,500,000	7	4.9
	1,500,001 2,500,000	48	33.8
	2,500,001 3,500,000	42	29.6
	3,500,001 5,000,000	30	21.1
	> 5.000.001	15	10.6

Table 2 DEMOGRAPHIC INFORMATION OF RESPONDENTS

#### **Outer Model Evaluation (Measurement Model)title**

Validity test: An indicator can be considered valid if its loading factor  $\sim 0.5$ . The output of SmartPLS is as follow:

	PS	PAEP	NAENP	ITB
X1	0.63528			
X2	0.54351			
X3	0.53284			
X4	0.62398			
X5	0.52348			
Y1		0.73984		
Y2		0.63874		
Y3		0.52387		
Y4		0.53982		
Y5		0.62398		
Y6		0.52398		
Y7		0.52938		
Y8		0.69874		
Y9			0.52387	
Y10			0.58762	
Y11			0.59827	
Y12			0.59243	
Y13			0.52983	
Y14			0.55698	
Y15			0.69249	
Y16			0.52498	
Y17			0.57349	
Y18			0.62497	
Y19			0.68598	
Y20			0.59472	
Y21				0.73249
Y22				0.53948
Y23				0.52984

Table 3 RESULTS OF VALIDITY TEST (LOADING FACTOR)

Based on the validity test result by examining loading factor of each indicators, it is found that the value of all loading factors are above 0.5. Thus, all the indicators used in this study are valid and no further validity test is needed. **Reliability test:** Reliability test was done by examining the value of Composite Reliability (CR). Accepted value of CR is if it is  $\geq 0.7$ .

Table 4 RESULTS OF RELIABILITY TEST

	Results of Reliability Test	
Perceived Scarcity	0.793256	
Positive Anticipated Emotions of Purchase	0.838763	
Negative Anticipated Emotions of Nonpurchase	0.723498	
Intention to Buy	0.724603	

Table 4 illustrates that the value of CR of all constructs are more than 0.7, indicating that all constructs observed fulfil discriminant validiy criteria. The lowest value of composite reliability is negative anticipated emotions of nonpurchase with 0.723498.

# Inner Model Evaluation (Structural Model)

After the estimated model was proven to fit outer model, the next step was to evaluate inner model to see the correlation between latent constructs. It was done by examining estimated path parameter coefficient and its significance. Based on SmartPLS output, below is the *R* Square value.

Table 5 RESULTS OF R SQUARE

	R Square	Support	
PS -> PAEP	0.534823	Yes	
PS -> NAENP	0.348374	Yes	
PS -> ITB	0.453478	Yes	
PAEP -> ITB			
NAENP -> ITB			

The results, illustrated in Table 5, show that the variance of PAEP explained is 0.534823, the variance of NAENP explained is 0. 348374 and the variance of ITB explained is 0.453478. Thus it can be said that H1, H2, H3, H4 and H5 are statistically significant, respectively.

Table 6 <i>RESULTS</i>	OF	HYPO	<b>OTHESES</b>	TESTING

	Original Sam-	Sample Mean	Standard Devia-	Standard Error	T Statistics
	ple (O)	(M)	tion (STDEV)	(STERR)	(O/STERR)
Perceived Scarcity $\rightarrow$ Positive Anticipated Emotions of Purchase	0.437363	0.421273	0.073283	0.073283	5.243874
Perceived Scarcity $\rightarrow$ Negative Anticipated Emotions of Nonpurchase	0.523821	0.231283	0.082827	0.082827	2.342489
Perceived Scarcity $\rightarrow$ Intention to Buy	0.423974	0.312381	0.723473	0.723473	4.243374
Positive Anticipated Emotions of Purchase $\rightarrow$ Intention to Buy	0.630811	0.231487	0.091113	0.091113	3.123945
Negative Anticipated Emotions of Non- purchase $\rightarrow$ Intention to Buy	0.323474	0.424387	0.082319	0.082319	4.234580

Table 6 shows that the correlation between perceived scarcity and positive anticipated emotions of purchase is significant, with *t*-statistics value 5.243874 ( $\geq$  1.96). The value of original sample estimate is positive 0.437363 which implies that perceived scarcity is positively correlated with anticipated emotions of purchase. Its is safe to say that perceived scarcity has positive impact toward anticipated emotions of purchase with coefficient 0.437363.

Like the correlation between between perceived scarcity and positive anticipated emotions of purchase, all other path like perceived scarcity and negative anticipated emotions of nonpurchase; perceived scarcity and intention to buy; positive anticipated emotions of purchase and intention to buy; and negative anticipated emotions of nonpurchase and intention to buy; are all significant, with *t*-statistics value 2.342489, 4.243374, 3.123945 and 4.234580 respectively. The values of original sample estimate are all positive, indicating that all particular variables are positively correlated.

#### DISCUSSION

Retailers have always tried to understand the buying decisions of their consumers and how their decisions can be triggered, affected, and disrupted. Roughly seventy percent of the buying decisions are made in-store and sixty eight percent of those decisions are unplanned (Kotler & Amstrong, 2015). In order to raise consumers interest in products they sell, retailers have to set the right marketing strategy.

In this study, one of many marketing strategies that is being examined is scarcity tactic. In a condition where consumers assume that certain products are limited, they will feel insecure that they could not get the desired products, thus increasing their intention to buy. The study implies that consumers are triggered and urged to buy scarce product as they perceived product value and opportunity to be higher in scarcity settings.

By looking at perceived scarcity condition, this study also explores emotions elicited from the exposure of scarcity environment. There are some emotions motivating purchase anticipated by consumers when they learn that some products are limited. Anticipated emotions motivating purchase was divided into two categories, positive anticipated emotions of purchase (posAEp) and negative anticipated of nonpurchase (negAEnp). Eight positive AEs toward purchase are peaceful, satisfied, hopeful, happy, pleased, joyful, delighted, and excited and 12 negative AEs related to purchase are upset, anxious, nervous, discontented, disappointed, uneasy, tense, worried, threatened, ashamed, guilty, and regretful. It is confirmed that consumers have possibilities to experience all those emotions during their thinking before making a decision.

Consumers will naturally want to satisfy themselves by experiencing some positive emotions that they predict will occur if they buy a certain product. They also do not want to experience unwanted negative emotions if they do not buy the products. For example, someone predicts she will be happy if she buys a blouse that she considers limited, and she also assumes that she will be anxious if she doesnt buy the product. Upon learning the possibility of occurence of those anticipated emotions, she thinks of buying the product. This implies that emotions motivating purchase observed in this study are proven to increase intention to buy. Positive anticipated emotions of purchase (posAEp) and negative anticipated of nonpurchase (negAEnp) usually cooccur, strengthening its effect to increase intention to buy toward scarce product.

The correlation between each variables are determined based on the results of significance test through SmartPLS. The value of original sample (O) are all positive, illustrating postive correlation between variables. In hypotheses test, t-statistics of all hypotheses are above 1.96, inferring that all hypotheses are accepted.

#### CONCLUSION

Through the investigation, it is found that all the hypotheses suggested in this research are proven to be accurate. This means that consumers perceived scarcity has positive impact toward intention to buy. If consumers perceived that a product is scarce, their intention to buy the product will rise. Perceived scarcity also has some emotional effects as it triggers consumers to experience positive AEs of purchase (posAEp) and negative anticipated of nonpurchase (negAEnp). Those emotions usually cooccur after consumers learning that a product is limited in quantity. Before making a decision consumers anticipate those emotions and predict the possibility of its occurence. If they perceive that a product is scarce, then they will feel positive emotions if they purchase that product. Moreover, they predict they will experience negative emotions if they do not purchase the product. As consumers goal in shopping is to seek happiness, they do not want to experience bad emotions if they miss the scarce product, so it will increase their intention to buy.

By analyzing the effects of perceived scarcity and AEs, this research contribute to deepen the understanding about marketing strategy especially in fashion retail. Since the results of this study confirm that scarcity tactics used by retailers are effective to increase intention to buy, it can be used as a useful insight for fashion retailers to set their strategy to boost sales.

While this study adds new reference to the field of marketing strategy, there are still many that any other ressearchers can explore regarding to the topics. Future research and scholars are encouraged to explore other factors that may affect the correlation between perceied scarcity and intention to buy. The factors can possibly strengthen or weaken the effect of perceived scarcity and intention to buy. Wider field of study, aside from social commerce, is also suggested to be observed in future research.

#### REFERENCES

- Aggarwal, P., Jun, S. Y., & Huh, J. H. (2011). Scarcity messages. *Journal of Advertising*, 40(3), 19-30. doi:https:// doi.org/10.2753/joa0091-3367400302
- Azizam, N. A., Ismail, A., Sulong, S., Nor, M. N., & Ahmed, Z. (2015). Economic burden of psoriasis: Review of literature. *International Journal of Business and Administrative Studies*, 1(1), 18-22. doi:https://doi.org/ 10.15405/epsbs.2016.11.02.23
- Baand Pusat Statistik. (2017). *Statistic indonesia 2017*. Retrieved from https://urlzs.com/uRZ2A (Accessed on 15 July, 2018)
- Bagozzi, R. P., Belanche, D., Casaló, L. V., & Flavián, C. (2016). The role of anticipated emotions in purchase intentions. *Psychology & Marketing*, 33(8), 629-645. doi:https://doi.org/10.1002/mar.20905
- Bernik, B., Azis, Y., Kartini, D., & Harsanto, B. (2015). Managing innovation of smes in creative industry for interactive game subsector and TV and Radio subsector based on local wisdom in development of competitiveness business (Case Study SMEs in Bandung). *International Journal of Business and Administrative Studies*, 1(2), 49-53. doi:https://doi.org/10.20469/ijbas.10001-2
- Che, J. W., Cheung, C. M., & Thadani, D. R. (2017). Consumer purchase decision in instagram stores: The role of consumer trust. In *Proceedings of the 50th Hawaii International Conference on System Sciences*, Hawaii, HI.

Cialdini, R. B. (2001). Influence: Science and practice. Boston, MA: Pearson Education.

- Digital Trends. (2000). The best playstation 2 games of all time. Retrieved from https://urlzs.com/2fTLG
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers product

evaluations. Journal of Marketing Research, 28(3), 307-319. doi:https://doi.org/10.1177/002224379102800305

- Gierl, H., & Huettl, V. (2010). Are scarce products always more attractive? The interaction of different types of scarcity signals with products' suitability for conspicuous consumption. *International Journal of Research in Marketing*, 27(3), 225-235. doi:https://doi.org/10.1016/j.ijresmar.2010.02.002
- Gupta, S. (2013). *The psychological effects of perceived scarcity on consumers buying behavior* (Unpublish master's thesis). University of Nebraska, NE.
- Kinata, E. J. (2016). The effect of market volatility and firm size towards the difference of market reaction around stock-split announcement in Indonesia stock exchange. *Journal of Administrative and Business Studies*, 2(6), 304-313. doi:https://doi.org/10.20474/jabs-2.6.5
- Kotler, P., & Amstrong, G. (2015). Principle of marketing. New York, NY: Pearson Education.
- Li, X. (2017). Cross-cultural interaction and job satisfaction in cross-cultural organizations: A case study of two Thai companies founded and managed by Chinese people. *Journal of Administrative and Business Studies*, 3(6), 255-262. doi:https://doi.org/10.20474/jabs-3.6.1
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57. doi:https://doi.org/10.1002/mar.4220080105
- Mellers, B. A., & McGraw, A. P. (2001). Anticipated emotions as guides to choice. Current Directions in Psychological Science, 10(6), 210-214. doi:https://doi.org/10.1111/1467-8721.00151
- Nuansoi, W., Suntiniyompukdee, A., & Tahlah, A. (2017). Rice production in rattaphum District, Songkhla Province, Thailand. *International Journal of Business and Economic Affairs*, 2(1), 18-30. doi:https://doi.org/10.24088/ ijbea-2017-21004
- Osés-Eraso, N., Udina, F., & Viladrich-Grau, M. (2008). Environmental versus human-induced scarcity in the commons: Do they trigger the same response? *Environmental and Resource Economics*, 40(4), 529-550. doi:https://doi.org/10.1007/s10640-007-9168-6
- Patrick, C. J., & Drislane, L. E. (2015). Triarchic model of psychopathy: Origins, operationalizations, and observed linkages with personality and general psychopathology. *Journal of Personality*, 83(6), 627-643. doi:https:// doi.org/10.1111/jopy.12119
- Shabbir, M. S., Kirmani, M. S., Iqbal, J., & Khan, B. (2009). Coo and brand names affect on consumer behavior and purchase intention in pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 1(3), 84-95. doi:https://doi.org/10.1016/j.jbusres.2019.04.017
- Srisangkaew, K. (2017). Advanced destination marketing strategy for Chanthaburi Province, Thailand. International Journal of Business and Economic Affairs, 2(1), 77-84. doi:https://doi.org/10.24088/ijbea-2017-21010
- Swain, S. D., Hanna, R., & Abendroth, L. J. (2006). How time restrictions work: The roles of urgency, anticipated regret, and deal evaluations. *North American Advances*, 2(33), 523-525.
- Verhallen, T. M., & Robben, H. S. (1994). Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, 15(2), 315-331. doi:https://doi.org/10.1016/0167-4870(94)90007 -8