

# Consumer's Impulse Buying Behavior: Do Visual Merchandising, Store Atmosphere, Availability of Money, and Promotional Activity Affect it?

Evelyn Wijaya<sup>1\*</sup>; Onny Setyawan<sup>2</sup>

<sup>1,2</sup>Management Department, Faculty of Business, Institut Bisnis dan Teknologi Pelita Indonesia  
Jln. Jend. Ahmad Yani No.78-88, Riau 28127, Indonesia

<sup>1</sup>evelyn.wijaya@lecturer.pelitaindonesia.ac.id; <sup>2</sup>onny.setyawan@lecturer.pelitaindonesia.ac.id

Received: 21<sup>st</sup> May 2020/ Revised: 23<sup>rd</sup> June 2020/ Accepted: 2<sup>nd</sup> July 2020

**How to Cite:** Wijaya, E., & Setyawan, O. (2020). Consumer's Impulse Buying Behavior: Do Visual Merchandising, Store Atmosphere, Availability of Money, and Promotional Activity Affect it? *Binus Business Review*, 11(3), 209-215. <https://doi.org/10.21512/bbr.v11i3.6464>

---

## ABSTRACT

The research aimed to analyze the influence of visual merchandising, store atmosphere, availability of money, and promotional activity on impulse buying behavior in MINISO Pekanbaru. The research applied a quantitative method, and the population was consumers who purchased any product in MINISO Pekanbaru. The sample amounted to 150 respondents with an accidental sampling technique. The instrument used was a questionnaire by asking questions to respondents. Analysis was conducted by using a multiple regression linear approach with IBM SPSS 23. The results show that the store atmosphere does not significantly influence impulse buying behavior. Meanwhile, visual merchandising, availability of money, and promotional activity significantly affect the impulse buying behavior. The results imply that MINISO Pekanbaru has implemented a proper marketing strategy to attract consumers to buy impulsively. However, MINISO Pekanbaru needs to re-consider the display and information placement about the products so that the consumers feel comfortable and content to spend a longer time there.

**Keywords:** impulse buying behavior, visual merchandising, store atmosphere, money availability, promotional activity

## INTRODUCTION

Retail business growth in Indonesia has shown quite a significant decreasing trend for several years. Retail business growth even reached 11,372% in 2015. Then, it reduced to 10,459% in 2016. It only decreased more, reaching 0,708% in 2017. In 2018, retail business growth increased to 7,660%, but it experienced another significant drop reaching -0,524% due to uncondusive economic conditions (CEIC, n.d).

Modern retail business growth in Indonesia cannot be separated from the consumers' behavior stimulus. The perspective on consumer behavior assumes that the environment is capable of forcing the consumers to purchase without previously building any feeling or trust toward a product. It has caused shifting and change of shopping behavior by the consumers.

The consumers who previously do planned shopping has changed into unplanned shopping. Impulse buying is a phenomenon that dominates the buying behavior of the retail business. Impulse buying defines unplanned and sudden purchases without purpose beforehand when consumers come closer to the store Nandha, Andriani, and Edriana (2017). Based on the survey conducted by AC Nielsen, it is known that, on average, in Surabaya, 85% of consumers always do shopping that they do not previously plan. Meanwhile, consumers who previously plan their purchasing amount only 15% (Adiputra, 2015).

MINISO is a Japanese brand operating since 2011. It has a home and lifestyle concept. It sells household appliances and supplies and fashion products such as clothing, bags, and other accessories (MINISO, n.d). With the rapid growth

and increasingly fierce competition between retail companies, it is forced to do various strategies and innovations to attract consumers' buying intention and maintain the existing market. One of them is by utilizing consumers' emotional motives to do impulse buying. To prove the survey results conducted by AC Nielsen, the researchers conducted a pre-survey to 40 respondents to know whether consumers often purchased spontaneously and without a previous plan in MINISO Pekanbaru. The pre-survey result stated that as many as 70% of consumers purchased spontaneously, and only 30% of the consumers who purchased in accordance with their initial plan. It can be explained that impulse buying behavior holds an essential role in increasing sales.

Several factors can affect impulse buying behavior. First, visual merchandising reflects the technique in presenting the appearance of products to attract the consumers' interest (Sudarsono, 2017). It is done by showing brands and products as interesting as possible to create a good impression and comfort when the consumers shop. Hence, it can influence the consumers' emotional motive to buy impulsively. It is a determining factor for modern retail in winning the business competition. Pancaningrum (2017) and Widyastuti (2018) found that visual merchandising significantly influenced the increase in impulse buying. However, it is different from Muthiah, Parawansa, and Munir (2018) and Sudarsono (2017). They suggested that visual merchandising did not significantly influence the impulse buying. Based on the explanation, the first hypothesis is:

H1: Visual merchandising has a significant influence on impulse buying behavior

Second, store atmosphere is one of the major factors that can affect individuals while shopping. If the atmosphere is good and comfortable, it can enhance consumers' buying behavior. The store atmosphere must be designed attractively to keep consumers for a longer time and purchase products with higher willingness. It reflects the environment design through visual communication, lighting, color, music, and scent to drive the consumers' emotional response and perception and influence the consumers to purchase the product (Muthiah *et al.*, 2018). Store atmosphere that gives a good impression for the consumers will make the consumers feel calm, comfortable, and feel at home that they spend more time in the booth. Booth with the good atmosphere will stimulate consumers' emotions to do impulse buying. The impulse buying happens due to touch, hear, smell, or taste the available products at stores. If salespeople observe consumers' needs and give them the information, it will increase the chances of purchase (Rasheed, Yaqup, & Baig, 2017). Akram, Hui, Khan, Hashim, and Rasheed (2016), Choirul and Artanti (2019), Febriana (2017), Pratomo and Supriono (2017), Rasheed *et al.* (2017), and Widyastuti (2018) agreed that store atmosphere significantly influenced

the increase of impulse buying. However, Muthiah *et al.* (2018) and Yudiantantri and Nora (2019) found that store atmosphere did not significantly affect impulse buying. Therefore, the second hypothesis is as follows.

H2: Store atmosphere has a significant influence on impulse buying behavior

Third, other factors that can drive impulse buying behavior is the availability of money. It reflects the consumers' ability in terms of owned financial resources. Consumers' decisions regarding certain products or brands are strongly influenced by the number of economic resources (income and wealth) they own (Engel, Blackwell, & Miniard, 1994). Bigger financial resources owned by the consumers will encourage consumers to do impulse buying. Nandha *et al.* (2017) mentioned that the availability of money had a significant positive effect on impulse buying behavior. However, it is different from Pradhan (2016), who found a negative influence between the availability of money and impulse buying behavior. The third hypothesis is:

H3: Availability of money has a significant influence on impulse buying behavior

Fourth, promotional activity reflects the promotion programs offered by the retail as an effort to encourage or increase selling (Rosyida & Anjarwati, 2016). Fundamentally, consumers do impulse buying because they are interested in the offered promotion, such as discounts, lottery coupons, and attractive prizes. A decrease in price makes a positive image on the consumer's mind, while an increase in price causes a negative image. When the price of the item is increased or decreased, it will directly affect impulse buying behavior. Through the promotional activity, the company can attract new consumers, influence them to try new products, encourage them to buy more, increase the impulsive buying, and try to do close cooperation with retailers. In short, consumers become more impulsive when they find promotional items (Rasheed *et al.*, 2017). Rasheed *et al.* (2017) and Wauran and Poluan (2016) agreed that promotional activity had a significant positive effect on impulse buying. Meanwhile, Pradhan (2016) stated a negative influence between the promotion and impulse buying behavior.

H4: Promotional activity has a significant influence on impulse buying behavior

The research objective is to analyze the influence of visual merchandising, store atmosphere, availability of money, promotional activity on impulse buying behavior in MINISO Pekanbaru. The research is expected to provide retail managers about how to create marketing strategies to improve consumers' impulse buying behavior.

## METHODS

The population reflects the generalization of an area consisting of object/subject with specific qualities and characteristics determined by the researchers to be studied (Sugiyono, 2012). The population in the research is consumers who purchase any product in MINISO Pekanbaru. Meanwhile, the sample reflects the number and characteristics of the population (Sugiyono, 2012). The determination of the sample amount uses the Roscoe formula with an accidental sampling technique. The researchers choose the respondents by approaching the respondents in the crowded places and selecting prospective respondents they run into. Hence, the sample is 150 respondents. The data collection is conducted for four months (November 2019 – February 2020).

The research is categorized as causality research. The instrument used is a questionnaire by asking questions to respondents. Respondents are

asked to give their responses to the questions in the questionnaire. Then, every qualitative answer is quantified by giving scores measured by the Likert scale (1–5) from strongly agree to strongly disagree. The data analysis technique used is the linear regression analysis. Before designing the regression equation, initial testing is carried out, including the validity test, reliability test, and classic assumption test. Those are to test the feasibility of the research model used. The variables and indicators of the study are described in detail in Table 1.

## RESULTS AND DISCUSSIONS

The research is carried by distributing a questionnaire to 150 consumers who purchase products in MINISO Pekanbaru. The respondents are divided based on gender, age, and income. The profile of respondents can be seen in Table 2.

Table 1 Operational Variables

Variable	Indicator
Visual Merchandising	Windows display Mannequin display Floor merchandising Promotional signage
Store Atmosphere	Exterior General interior Layout Interior point of interest display
Availability of Money	Financial ability Extra money
Promotional Activity	Discount Various schemes Offer organized by store Various promotional activity Requirements of product in festive seasons
Impulse Buying Behavior	Cognitive Emotional

Table 2 Demographic Profile of Respondents

Demography	Category	Frequency	%
Gender	Male	84	56
	Female	66	44
Age	< 20	24	16
	21 – 30	114	76
	31 – 40	9	6
	> 40	3	2
Income	< Rp2.000.000,00	29	19,33
	Rp2.000.000,00 – Rp4.000.000,00	71	47,33
	> Rp4.000.000,00	50	33,34

Based on gender, most of the respondents are female, amounting to 84 people (56%). The rest is males (66 respondents or 44%). The number of female respondents is higher compared to male respondents because most of the products sold on MINISO Pekanbaru are identical to the products used by women.

For the age, 24 people (16%) are 20 years old and under. Then, 114 people (76%) are 21 to 30 years old. Meanwhile, the respondents with the age of 31–40 years are 9 (6%), and 3 respondents (2%) are above 40 years old. Therefore, the majority of respondents are 21 to 30 years old. They are included in the millennial category. Based on the further survey results, it shows that respondents do impulse buying because the products sold on MINISO Pekanbaru have unique and interesting designs. In this era, millennials love to use unique products that are different than the general ones.

For income, 29 respondents (19,33%) have an income of less than Rp2.000.000,00. Then, for the income between Rp2.000.000,00 to Rp4.000.000,00, there are 71 respondents (47,33%). About 50 respondents (33,34%) have an income of more than Rp4.000.000,00. Hence, the majority of the respondents have an income between Rp2.000.000,00 to Rp4.000.000,00. This result explains that the millennials who purchase the product in MINISO Pekanbaru have sufficient financial ability to do impulse buying. Based on the further survey, it is found that half of the consumers who become the respondents have their income, and they do not rely on their parents' income.

To test the questionnaire as a research instrument, the researchers utilize the validity and reliability tests. The result of the validity and reliability tests show that all statement items for the variable have a Corrected Item-Total Correlation (CITC) value greater than 0,30. The Cronbach's alpha value is also greater than 0,60. Therefore, items on all research variables are declared valid and reliable for further testing. Table 3 (see Appendix) shows the results of validity and reliability tests.

Other than validity and reliability tests, there are several tests done. Kolmogorov Smirnov Test (K-S) can be used to know whether there is data normality or not. K-S test results show that the value of Kolmogorov-Smirnov Z for impulse buying behavior (Y) is 0,732 with an Asymp. Significant (2-tailed) value of 0,658 > 0,05. It means that data are normally distributed, showing that sample data is good and feasible to be used in the research.

Then, the heteroscedasticity test can be detected by using Gletser Test. The results show the visual merchandising ( $X_1$ ) with a significance of 0,118, store atmosphere ( $X_2$ ) with a significance of 0,076, availability of money ( $X_3$ ) with a significance of 0,826, and promotional activity ( $X_4$ ) with a significance of 0,080. The entire variables have a significant value above 0,05. It can be concluded that there is no heteroscedasticity symptom in the data.

Next, multicollinearity is a condition with one or more independent variables that correlate perfectly or close to perfect with other independent variables. The results show the value of the Variance Inflation Factor (VIF) of the visual merchandising ( $X_1$ ) is 1,396. For the store atmosphere ( $X_2$ ), it is 1,499. VIF of availability of money ( $X_3$ ) is 1,658, and promotional activity ( $X_4$ ) is 1,338. The entire variables have a VIF value under 10. So, it means that there is no multicollinearity in the data.

Furthermore, the coefficient of determination ( $R^2$ ) reflects the proportion of variability in calculated data based on a statistical model. The bigger value of the coefficient of determination shows the increasingly stronger influence between the X variable and Y variable. The determination coefficient test results are shown in Table 4.

Table 4 The Result of Coefficient of Determination ( $R^2$ )

Model	R	R-Square	Adjusted R-Square
1	0,582	0,338	0,320

Table 4 shows the  $R^2$  value of 0,320. It means that the impulse buying behavior is explained by the visual merchandising, store atmosphere, availability of money, and promotional activity variables about 32%. Furthermore, the remaining 68% is explained by other variables that are not examined in the study.

The hypothesis test (t-test) is used to test the partial influence from X variable (visual merchandising, store atmosphere, availability of money, and promotional activity) on the Y variable (impulse buying behavior). The test is done by comparing the value of t-count and t-table or by observing significant respectively. It determines whether the hypotheses previously made are fulfilled or not. The results are in Table 5.

Table 5 The Result of T-Test

Variable	T-Value	T-Table	Sig.
Visual Merchandising	3,459	2,352	0,001
Store Atmosphere	0,142	1,287	0,887
Availability of Money	2,941	2,352	0,004
Promotional Activity	2,507	1,655	0,013

Based on Table 4, the hypothesis test result aims to see the influence of the independent and dependent variables partially. It shows that visual merchandising has a significant positive influence on impulse buying behavior with the significance of 0,001, which is smaller than 0,05. So, H1 is accepted. However, the store atmosphere does not significantly affect impulse



buying behavior with the significance of 0,887, which is bigger than 0,05. Thus, H2 is rejected.

The availability of money influences impulse buying behavior significantly and positively. It is with the significance of 0,004, which is smaller than 0,05. Hence, H3 is accepted. Similarly, the promotional activity also has a significant positive influence on impulse buying behavior with the significance of 0,013, which is smaller than 0,05. Therefore, like H1 and H3, H4 is accepted.

The visual merchandising is a factor perceived as an essential factor by the respondents in influencing their impulse buying behavior. It is in line with the result of the hypothesis test that visual merchandising has a positive and significant impact on impulse buying behavior. The result is in line with research by Pancaningrum (2017) and Widyastuti (2018). However, it is different from Muthiah *et al.* (2018) and Sudarsono (2017). The more interesting the visual merchandising shown by MINISO Pekanbaru is, the more it will encourage consumers' impulse buying behavior. MINISO Pekanbaru has a visual strategy, namely a golden display. When consumers see the store, the golden display will be the first thing they see as an attraction. It makes the consumers enter the store and see the products better than those displayed in the golden display.

Moreover, MINISO Pekanbaru has good product placement. They are organized neatly, which MINISO Pekanbaru will place the bestseller and limited products in the front part of the store. This situation will encourage the creation of impulse buying behavior.

The respondents mention that the store atmosphere is not an essential factor in their impulse buying behavior. It is shown in the hypothesis test results that store atmosphere does not significantly influence impulse buying behavior. This result is supported by Muthiah *et al.* (2018) and Yudiantantri and Nora (2019). On the contrary, the research has different results compared to Akram *et al.* (2016), Choirul and Artanti (2019), Febriana (2017), Pratomo and Supriono (2017), Rasheed *et al.* (2017), and Widyastuti (2018). MINISO Pekanbaru does not consider store atmosphere as a variable that can influence impulse buying behavior. It is because the location of MINISO Pekanbaru is in the shopping center. Therefore, the consumers' convenience during shopping transactions is determined based on the atmosphere created by the shopping center.

The availability of money is a factor perceived as an important factor by the respondents in influencing their impulse buying behavior. It is in line with the result of the hypothesis test that the availability of money has a positive and significant effect on impulse buying behavior. The research is in line with research by Nandha *et al.* (2017). However, it is different from Pradhan (2016). The more prominent financial ability of the consumers encourages them to buy impulsively. Consumers always bring more money when they visit shopping centers. It will be beneficial for MINISO

Pekanbaru because of its location in one of the shopping centers particularly. Thus, this situation also encourages the creation of impulse buying behavior.

Last, promotional activity is a factor seen as an important factor by the respondents in influencing their impulse buying behavior. It is in line with the result of the hypothesis test. The promotional activity affects impulse buying behavior positively and significantly. The result is in line with the research by Rasheed *et al.* (2017) and Wauran and Poluan (2016). On the contrary, it is different from Pradhan (2016). The more attractive the promotion offered by MINISO Pekanbaru will encourage the creation of impulse buying behavior. Often, MINISO Pekanbaru sells seasonal products (Marvel, We Bare Bears, Pink Panther, and so on) to attract the consumers' interest to do impulse buying. They are interested in making the unplanned purchase because they see discounts and offers for seasonal products.

## CONCLUSIONS

The research objective is to get an insight into consumers' impulse buying behavior and the factors that affect it in MINISO Pekanbaru. The research indicates that impulse buying behavior is a very common phenomenon among consumers. Based on the tests, visual merchandising, availability of money, and promotional activity have a significant positive effect on impulse buying behavior. It means that MINISO Pekanbaru has implemented a proper marketing strategy to attract consumers to do impulse buying. It has a visual strategy, namely a golden display that can create consumers' curiosity to enter and see the products. In the end, the consumers will make unplanned purchases. In addition, it also offers seasonal products (Marvel, We Bare Bears, Pink Panthers, and others) that consumers, especially millennials, will be interested in and make a purchase of the offered seasonal products. However, the research result shows that the store atmosphere does not significantly influence impulse buying behavior. It implies that MINISO Pekanbaru needs to re-consider the condition of display and information placement about the products so that consumers feel comfortable and content to spend a longer time there. It should create an atmosphere that can encourage consumers to make unplanned purchases. Finally, the researchers recommend MINISO Pekanbaru to develop marketing strategies to attract consumers to do impulse buying. It can use promotional activity such as a discount, launching seasonal products, and utilizing social media as a promotional tool.

The current research is only limited to the use of variables related to the consumers' buying behavior on MINISO Pekanbaru. Hence, the obtained results are not perfect. For further research, it is expected to include a marketing variable to detect factors that can influence impulse buying behavior such as shopping enjoyment, self-esteem, private label product, hedonic shopping motivation, and others.

## REFERENCES

- Adiputra, E. (2015). Perilaku pembelian tidak terencana (impulse buying) di pusat perbenjaan modern di Surabaya. *An-Nisbah: Jurnal Ekonomi Syariah*, 1(2), 155-180.
- Akram, U., Hui, P., Khan, M. K., Hashim, M., & Rasheed, S. (2016). Impact of store atmosphere on impulse buying behaviour: Moderating effect of demographic variables. *International Journal of U-and E-Service, Science and Technology*, 9(7), 43-60.
- CEIC. (n.d). *Indonesia pertumbuhan penjualan ritel*. Retrieved September 12<sup>th</sup> 2019, from <https://www.ceicdata.com/id/indicator/indonesia/retail-sales-growth>
- Choirul, A., & Artanti, Y. (2019). Millennia's impulsive buying behavior: Does positive emotion mediate? *Journal of Economics, Business, & Accountancy Ventura*, 22(2), 223-236.
- Engel, J. S., Blackwell, R. D., & Miniard, P. W. (1994). *Perilaku konsumen*. Jakarta: Binarupa Aksara.
- Febriana, F. C. (2017). Pengaruh suasana toko, keragaman produk, dan harga terhadap impulse buying pada Toko Kompas Ngronggo Kota Kediri. *Simki-Economic*, 01(11), 1-13.
- MINISO. (n.d). *Brand profile*. Retrieved September 12<sup>th</sup> 2019, retrieved from <https://www.miniso.com/EN/Brand/Intro>
- Muthiah, I., Parawansa, D., & Munir, A. R. (2018). The effect of visual merchandising, product display dan store atmosphere on impulse buying behavior (Case study on Matahari department store in Makassar city). *Hasanuddin Journal of Applied Business and Entrepreneurship*, 1(2), 88-103.
- Nandha, O., Andriani, K., & Edriana, P. (2017). The effect of store environment, availability of money and time, hedonic consumption tendency on emotional states and its impact on impulse buying behaviour. *Russian Journal of Agricultural and Socio-Economic Sciences*, 63(3), 72-78.
- Pancaningrum, E. (2017). Visual merchandise dan atmosfer toko: Pengaruhnya terhadap keputusan pembelian impuls. *Jurnal Ilmu Ekonomi dan Pembangunan*, 17(1), 23-40.
- Pradhan, V. (2016). Study on impulsive buying behavior among consumers in supermarket in Kathmandu Valley. *Journal of Business and Social Sciences Research*, 1(2), 215-233.
- Pratomo, B. W., & Supriono, S. (2017). Pengaruh store atmosphere terhadap shopping emotion dan impulse buying (Studi pada "Supermarket Giant" Dinoyo Malang). *Jurnal Administrasi Bisnis*, 50(1), 178-183.
- Rasheed, A., Yaqub, R. M. S., & Baig, F. J. (2017). Factors affecting impulse buying behaviors in shopping malls: Evidence from Bahawalpur region, Pakistan. *Journal of Marketing and Consumer Research*, 39, 1-20.
- Rosyida, S., & Anjarwati, A. L. (2016). Pengaruh store atmosfer dan promosi penjualan terhadap pembelian impulsif dengan emosi positif sebagai variabel intervening. *Jurnal Riset Ekonomi dan Manajemen*, 16(1), 105-127.
- Sudarsono, J. G. (2017). Pengaruh visual merchandising terhadap impulse buying melalui positive emotion pada Zara surabaya. *Jurnal Manajemen Pemasaran*, 11(1), 16-25.
- Sugiyono. (2012). *Metode penelitian bisnis*. Bandung: Alfabeta.
- Wauran, P., & Poluan, J. G. (2016). Pengaruh promosi penjualan dan servicescape terhadap impulse buying dengan shopping emotion sebagai variabel intervening (Studi pada konsumen Freshmart Manado). *Jurnal Berkala Ilmiah Efisiensi*, 16(4), 532-544.
- Widyastuti, P. (2018). Does visual merchandising, store atmosphere and private label product influence impulse buying? Evidence in Jakarta. *Journal of Business and Retail Management Research*, 12(3), 140-148.
- Yudiatantri, A., & Nora, L. (2019). The effect of store atmosphere and packaging design toward impulsive buying with shopping lifestyle as a moderating variable at Carrefour in Jakarta. *KnE Social Sciences*, 3(26), 474-491.

## APPENDIX

Table 3 The Results of Validity and Reliability Tests

Variable	Indicator	Validity	Reliability
Visual Merchandising (X <sub>1</sub> )	X <sub>1.1</sub>	0,577	0,840
	X <sub>1.2</sub>	0,525	
	X <sub>1.3</sub>	0,598	
	X <sub>1.4</sub>	0,661	
	X <sub>1.5</sub>	0,501	
	X <sub>1.6</sub>	0,625	
	X <sub>1.7</sub>	0,518	
	X <sub>1.8</sub>	0,567	
Store Atmosphere (X <sub>2</sub> )	X <sub>2.1</sub>	0,333	0,849
	X <sub>2.2</sub>	0,543	
	X <sub>2.3</sub>	0,524	
	X <sub>2.4</sub>	0,505	
	X <sub>2.5</sub>	0,394	
	X <sub>2.6</sub>	0,587	
	X <sub>2.7</sub>	0,551	
	X <sub>2.8</sub>	0,353	
	X <sub>2.9</sub>	0,523	
	X <sub>2.10</sub>	0,562	
	X <sub>2.11</sub>	0,614	
	X <sub>2.12</sub>	0,573	
	X <sub>2.13</sub>	0,517	
Availability of Money (X <sub>3</sub> )	X <sub>3.1</sub>	0,603	0,723
	X <sub>3.2</sub>	0,441	
	X <sub>3.3</sub>	0,457	
	X <sub>3.4</sub>	0,553	
Promotional Activity (X <sub>4</sub> )	X <sub>4.1</sub>	0,632	0,817
	X <sub>4.2</sub>	0,564	
	X <sub>4.3</sub>	0,474	
	X <sub>4.4</sub>	0,585	
	X <sub>4.5</sub>	0,614	
	X <sub>4.6</sub>	0,621	
Impulse Buying Behavior (Y)	Y <sub>1</sub>	0,629	0,782
	Y <sub>2</sub>	0,531	
	Y <sub>3</sub>	0,585	
	Y <sub>4</sub>	0,401	
	Y <sub>5</sub>	0,661	