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Attitudes and purchase intention towards eco-friendly products among Nepalese youth

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Abstract

This research study aimed to examine the green purchase attitudes of Nepalese youths. Due to the rapid technological changes the environment may be affected positively or negatively. This research is conducted to identify factors affecting young Nepalese consumers' intention in purchasing eco-friendly products and targeted on the youths with the age ranging from 18 to 35 years. Therefore, there are two independent variables identified in this research project that could affect youth consumer attitude toward intention to purchase green products. These include the attitudes toward environmental protection and knowledge & awareness of eco-friendly products whereas the other variables such as eco labels, educational level and the experience had been identified as the intervening variables all of which had the major impact on the green purchase intention (GPI). Primary data were collected through the questionnaire in order to inspect the research objectives. In total 115 resposnes were collected and the reliability test, descriptive analysis, hypothesis test and Pearson correlation analysis are carried out. Consequently, this study carried out to determine the significance of contributing youth attitudes toward intention to purchase green products in Nepalese scenario.

Key words: Green Marketing, Green purchases Intention, Eco friendly products, youths.

Introduction

The concept of environmentalism and becoming green was not so prominent before the late 1980s. The green movement first started in Great Britain. British consumers played an initial role of "Greening" movement. Company's contribution to environmental degradation and damage influenced consumers to adopt the greening movement. Thus, eco-friendly marketing concepts spread beyond the Great Britain boundary. Furthermore, some realists raised their voices about sustainable green consumerism that does not harm environment Polonsky [8] Prothero [9].

In Nepal, the market for eco-friendly products is yet to become a mainstream. There is very little academic information available about green consumers in under-developed countries like Nepal, National Geographic [7]. It is within the background of this research gap that the present research will be conducted to assess Nepalese

consumers' pro-environmental concerns, knowledge of environmental issues, awareness of eco-friendly products, and any potential effect that these factors may have on green buying behavior.

Many studies have revealed that consumers who are concerned with the environment and are knowledgeable about the environmental issues, when shopping try to purchase only eco-friendly products, Laroche et al. [6]. Increasing pro- environmental concerns and awareness of eco-friendly products among consumers have resulted in their green buying behaviour. Recent increase in the number of individuals who are willing to pay more for the eco-friendly suggests that the market for eco-friendly products is ever expanding, Laroche et al. [6]. Previous research conducted internationally suggests that the eco-friendly category of consumers is continuing to evolve and that consumers tend to vary in terms of their acceptance of eco-friendly products and lifestyle, Jungermann & Jungermann [5]. Buying eco-friendly products have become trendy among consumers with pro-environmental concerns and awareness of eco-friendly products. Therefore, marketers can now assist organizations in establishing and communicating a strong environmental image, and help to create a clear competitive advantage to their consumers, Bohlen, et al. [3].

Similarly, Alwitt and Berger [2] study found that 70% of consumers show their concern for the environment, but their actions are inconsistent with these attitudes when it comes to consuming products and services. They commented that the likeness of a product depends on attitude with a varying degree of confidence, certainty, accessibility or knowledge. Therefore, many researchers moved to social psychological research in the attitude area to improve a comprehensive theory of consumer behavior Ajzen & Fishbein, [1] .

But in overall, consumers who are more aware about environmental protection are more concerned about ecological lifestyles. People want to improve their lifestyles by taking new challenges. They consider that environmental protection is not only the responsibility of firms and institutions, but it is also their responsibility as consumers. People's personalities manipulate what attitudes they have toward the environment, Fraj & Martinez [4].

Objectives of Research

This study attempts to find out if Nepalese young consumers' pro-environmental concerns, awareness and knowledge about environment related issues impact their buying behavior to prefer and buy eco- friendly products and pay a premium price for such products. This study will portray a tentative scenario where Nepal and Nepalese young consumers stand on environmental consciousness and eco-consumerism. This can help society to make progressive efforts towards green consumerism in future days whatever the research result will be.

The major objectives of this study include:

a) To assess various individual factors affecting the Green Purchase Intention (GPI) of youths.

b) To examine if contextual factors i.e. information on eco-labels, consumers' product experience and their education level affect their Green Purchase Intention (GPI).

Hypothesis

The hypothesis to be tested are set as follows:

H1: People, who have positive attitude towards environmental protection, will have a favorable correlation with Green Purchase Intention (GPI).

H2: People, who have knowledge and awareness of eco-friendly products, will have a favorable correlation with Green Purchase Intention (GPI).

H3: People, who trust the information conveyed on eco-labels, will have a favorable correlation with Green Purchase Intention (GPI).

H4: People, who had positive experience of eco-friendly products in the past, will have a favorable correlation with Green Purchase Intention (GPI).

Methodology

Area of Study: The youths currently studying and working within Kathmandu valley.

Sample size: Out of the youths from Kathmandu, 115 students from different parts of Kathmandu were selected for the response collection.

Sample technique: This was a descriptive research study based on convenience sampling technique.

Sources of data: Primary as well as secondary data sources were used in the research. Questionnaire was the main instrument for collecting primary data. All together 125 questionnaires were distributed but only 115 were collected hence got the 92% response rate. The secondary sources for data collection were mostly an internet for literature survey and books and journals to get some relevant information regarding the topic.

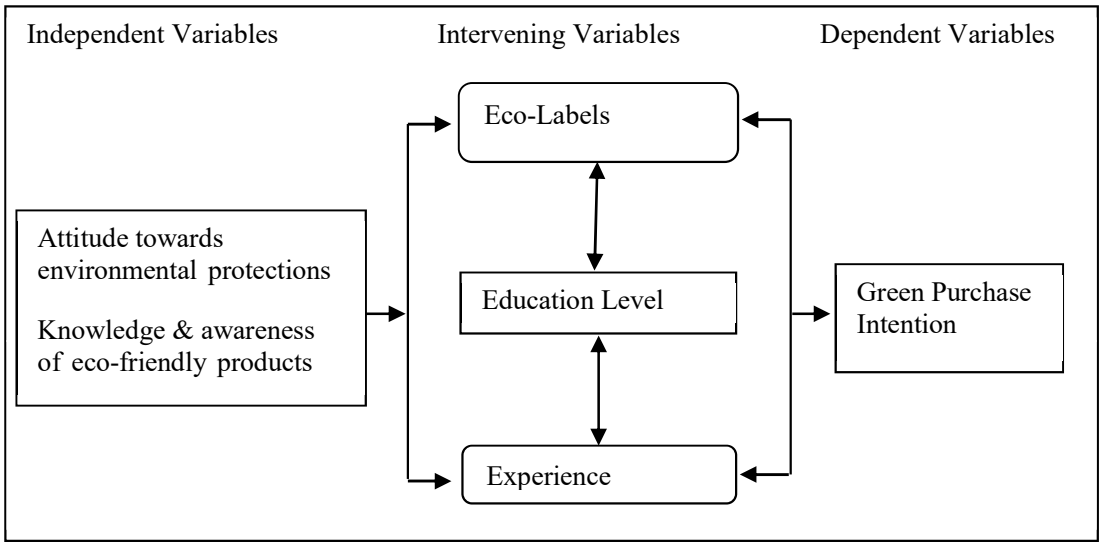
The overall research study was based on the questionnaire with the following scales and categories:

Scales of response: 1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Strongly Agree

Categories of Questionnaire: Category 1: Pro-environmental concern; Category 2: Knowledge & Awareness; Category 3: Eco labels; Category 4: Consumer Experience; Category 5: Willingness to pay more; Category 6: Green Purchase Intention

Validity and reliability: For the validity of the questionnaire, a pilot test was conducted with the help of random 10 youths through personal contact. On the basis of their recommendation, the required changes in the questionnaire had been made. The reliability of the category wise questionnaire was checked through Cronbach's alpha which was found to be in the range of 0.725 to 0.876; which is greater than the stated value i.e.0.7; hence the reliability of the questionnaire verified.

Conceptual Framework



Respondents' Profile

This section deals with the demographic analysis and interpretation of primary data collected through questionnaires. This helps to get insight into the demographic characteristics of the respondents under study. The respondent profile includes gender, qualification, occupation, age-group and income level.

Demographic description of the respondents

	Demographics	Frequency	Percentage
Gender	Male	69	60%
	Female	46	40%
	Total	**115**	**100%**
Age	18-23 years	10	9%
	24-29 years	65	57%
	30-35 years	41	36%
	Total	**115**	**100%**
Education	Bachelors	45	39%
	Masters	70	61%
	Total	**115**	**100%**
Occupation	Students	72	63%
	Professionals	43	37%
	Total	**115**	**100%**
Monthly Income level	Below Rs. 15000	16	14%
	Rs. 15000 – Rs.25000	43	37%
	Rs. 25000 – Rs. 35000	32	28%
	Above Rs. 35000	17	15%
	Not Earning	7	6%
	Total	**115**	**100%**

Source: Field Survey, 2019

Demographic Analysis

Table describes the demographic details of the respondents which consists of 60% male and 40% female with the age group classification of 18-23 years, 24-29 years and 30-35 years by 9%, 57% and 36% respectively. Out of the total respondents 39% and 61% of the students had bachelors and masters degrees respectively. Most of the respondents were students covering 63% and the professionals covering 37% out of total. Among the respondents 37% were getting monthly income of Rs. 15000 to Rs. 25000. Out of them 14% of respondents were earning below Rs. 15000 and 6% of the respondents were not earning any amount.

Descriptive Statistics of the questionnaire

Category	Statements	Mean	Rank	Average
Attitude	I would describe myself as environmentally responsible.	3.62	3	**3.51**
	I am worried about the worsening of the quality of Nepalese ecological environment.	3.89	1	
	When I purchase products, I try to make efforts to buy products that are low in pollutants.	3.23	4	
	I am interested in asking about the environmental consequences of a product before buying it.	2.98	5	
	To be honest, I feel that environmental problems affect my personal (every day) life.	3.82	2	

Category	Statements	Mean	Rank	Average
Knowledge & Awareness	I am aware about following eco-friendly products: a) Biodegradable	3.89	1	**3.79**
	b) Recyclable	3.69	2	
	c) Organic	3.89	1	
	d) Energy efficient	3.67	3	
	I am aware that purchasing eco-friendly products will contribute to the sustainable ecological future.	3.87	-	
Eco Labels as a choice of purchase	When I want to buy a product, I look at the eco-labels to see if it contains things that are eco-friendly.	3.04	3	**3.33**
	If the product is eco-labelled, this information changes my choice of purchase.	3.52	1	
	I trust the information of eco-labels on eco-friendly products.	3.43	2	
Product Experience	I trust the quality of eco-friendly product	3.43	4	**3.72**
	Based on the brand/product image, I strongly feel about buying eco-friendly product.	3.87	1	
	I would recommend the eco-friendly products to other if it has performed well as promised in the past.	3.73	3	
	I intend to purchase eco-friendly products in the future as well.	3.83	2	
Willingness to pay more	I agree that the price of eco-friendly products is supposed to be higher.	3.61	1	**3.41**
	I am willing to pay more for eco-friendly products.	3.20	2	
Green Purchase Intention	Whenever I have thought of buying some products, I first asked for eco-friendly products if available.	2.71	4	**3.18**
	I have purchased light bulbs that were more expensive but saved energy.	3.71	1	
	I make energy effort to reduce the use of plastic bags.	3.68	2	
	I have always purchased spray (deodorant, perfumes, hair spray, room fresheners, etc.) that are ozone free.	2.67	5	
	I have convinced members of my family or friends to buy organic foods which are least harmful to the environment.	3.13	3	

Source: Field Survey, 2019

Result Analysis

a) Attitude toward environmental protection

In Table 3.2, Q1.1, Q1.2, Q1.3 and Q1.5 scored mean value above 3 (mid-range value) which also implies that respondents agreed on the respective issues regarding attitude towards environmental protection. Among the set of questions of this independent variable, Q1.2 was the most prioritized issue which scored the highest mean value i.e. 3.89 indicating that people were worried about the quality of Nepalese ecological environment. On the other hand, Q1.4 with a mean value of 2.98 showed that people were least interested in asking about the environmental consequences of a product before buying it. However, the aggregate mean value of the attitude towards environmental protection (independent variable) is 3.51 implying that the overall attitude of the respondents regarding environmental protection was positive which indicates that respondents were environmentally responsible and also thought that environmental problems affect their everyday life.

b) Knowledge and awareness of eco-friendly products

Table 3.2 shows the overall knowledge and awareness of eco-friendly products. All the questions in category 2 scored value above 3 (mid-range value) which also implies that respondents agreed on the respective issues regarding knowledge and awareness of eco-friendly products. Among the set of questions of this independent variable, Q2.1 scored the highest value i.e. 3.89 indicating increased individual awareness on purchasing eco- friendly products which will contribute to the sustainable ecological future. Similarly, this part of questionnaire also revealed that people were aware of eco-friendly products namely: a) Biodegradable, b) Recyclable, c) Organic, and d) Energy efficient; the mean score of all questions being above 3. In comparison to all other eco-friendly products, people were least aware of organic products followed by biodegradable products, which scored 3.67 and 3.69 respectively on mean score. However, the aggregate mean value of the knowledge and awareness of eco-friendly products (independent variable) is 3.79 implying that the overall knowledge and awareness level of the respondents on eco-friendly products is high.

c) Eco labels as a choice of purchase

Table 3.2, third section shows the overall concern of respondents on eco-labels of eco-friendly products. In this analysis all the responses scored value above 3 (mid-range value) which also implies that respondents were concerned regarding information of eco-labels on eco-friendly products. Among the set of questions of this intervening variable, Q3.2 scored the highest value i.e. 3.52 indicating that if the products were labelled as eco-friendly, this information will change their choice of purchase. On the other hand, Q3.1 with a mean value of 3.04 showed that people were comparatively less concerned in looking at the information to see if it contains things that are eco-friendly while purchasing products. The aggregate mean value of respondents' concern regarding eco-labels (independent variable) is 3.33 implying that the overall concern of the respondents for information conveyed on eco-labels was positive. In other words, it also indicates that respondents trusted the information provided on eco-friendly products.

d) Product experience

In Table 3.2 forth section, every questions scored value above 3 (mid-range value) which also implies that respondents showed positive behavior regarding eco-friendly products if the product experience in the past has been convincing. Among the set of questions of this intervening variable, Q4.2 scored the highest value i.e. 3.87 indicating that people would recommend the eco-friendly products to other if it has performed well as promised in the past. Similarly, Q4.1 and Q4.3 also showed a similar conclusion regarding their trust on the eco-friendly products and their purchase behavior in future as well.

The aggregate mean value of respondents' experience of eco-friendly products is 3.72 implying that respondents had positive experience on eco-friendly products. In other words, it also indicates that respondents trust the quality of eco-friendly products and are intended to purchase them in future as well.

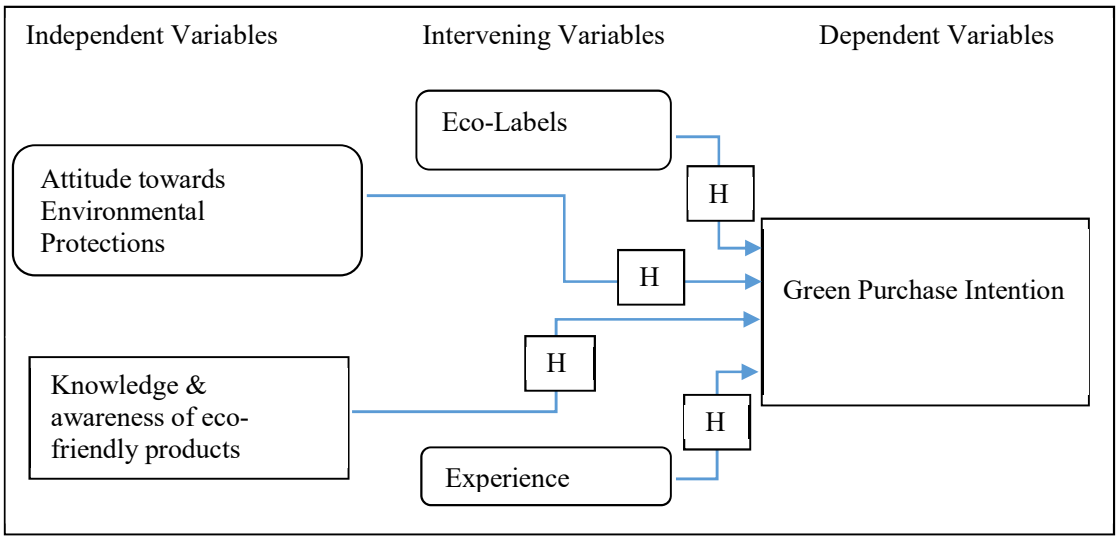
e) Willingness to pay more

Table 3.2 fifth section shows the willingness of respondents to pay more for the eco-friendly products. Both the questions i.e. Q5.1 and Q5.2scored value above 3 (mid-range value) which also implies that overall willingness to pay more for the eco-friendly products was positive. Among the set of questions, Q5.1 scored the highest value i.e. 3.61 indicating that people agreed on the fact that the price of eco-friendly products is supposed to be higher. But at the same time, when the same people were asked whether they were willing to pay more for the products, their response was not as positive as in the first case. The mean score of Q5.2 is 3.20 which is lower than that of Q5.1 i.e. 3.61. The aggregate mean value of respondents' willingness to pay for the eco- friendly products is 3.41 implying that people were willing to pay more for the products. They also thought that the price of such products is supposed to be higher, which is a good sign for the marketers, who are doing business on such eco-friendly products.

f) Green Purchase Intention

Table 3.2 sixth section shows the overall intention of respondents towards purchasing eco-friendly products. In that section Q6.2, Q6.3 and Q6.5 scored value above 3 (mid-range value) which also implies that respondents agreed on the respective issues regarding green purchase intention. Among the set of questions of the dependent variable, Q6.2 scored the highest value i.e. 3.71 indicating that people had favorable attitude towards purchasing energy saving appliances. Similar were the responses on recyclable and organic products with respective mean scores of 3.68 and 3.13 respectively. On the other hand, people did not have favorable attitude towards ozone free sprays which is shown by the lowest mean score of 2.67. More interestingly, eco-friendly products were not the first choice of the people while showing purchase behavior. In other words, whenever they had thought of buying some products, they hardly asked for eco-friendly products if it is available. The aggregate mean value of green purchase intention (dependent variable) is 3.18 implying that the overall intention of people in purchasing green products was positive. Especially, people were aware and tend to purchase recyclable, energy efficient and organic products

Hypotheses Testing



For the purpose of testing stated hypothesis, the correlation analysis and p-value tests were used with the help of SPSS software.

Correlation Analysis

Correlation Analysis

		Attitude Towards Environmental Protection	Knowledge & Awareness	Eco Labels	Product Experience
Green Purchase Intention (GPI)	**Pearson Correlation**	0.715**	0.631**	0.674**	0.622**
	Sig. (2 tailed) = 0.000				
	N = 115				

**. Correlation is significant at the 0.01 level (2-tailed).

Table shows the correlation analysis between dependent variable Green Purchase Intention (GPI) and other independent/intervening variables i.e. attitude towards environmental protection Knowledge & awareness, Eco labels and Product experience. Since the p value is less than alpha i.e. $p(0.000) < \alpha(0.01)$, the correlations are significant between GPI and other mentioned variables. There was positive relationship between GPI and all other variables individually. Hence, HYPOTHESIS 1 (H1) – people, who have positive attitude towards environmental protection, will have a favourable correlation with Green Purchase Intention (GPI) – is accepted.

Further, with the correlation coefficient value of 0.631, it can be said that there was positive relationship between knowledge and awareness of eco-friendly products and green purchase intention. That showed that people who had knowledge and awareness of eco-friendly products had a favorable Green Purchase Intention (GPI). Hence,

HYPOTHESIS 2 (H2) – people, who have knowledge and awareness of eco-friendly products, will have a favourable correlation with Green Purchase Intention (GPI) – is accepted.

Again, with the correlation coefficient value of 0.674, it can be said that there was positive relationship between information conveyed on eco-labels and green purchase intention. In other words, people who trusted the information conveyed on eco-labels had a favorable Green Purchase Intention (GPI). Hence, HYPOTHESIS 3 (H3) – people, who trust the information conveyed on eco-labels, will have a favorable correlation with Green Purchase Intention (GPI) – is accepted.

Now, with the correlation coefficient value of 0.622, it can be said that there was positive relationship in between product experience and green purchase intention. In other words, people who had positive experience of eco-friendly products in the past had a favorable Green Purchase Intention (GPI). Hence, HYPOTHESIS 4 (H4) – people, who had positive experience of eco-friendly products in the past, will have a favourable correlation with Green Purchase Intention (GPI) – is accepted.

Discussion

The history of green marketing as a marketing strategy is not so long. In this study, it can be seen that eco labels, product experience and willingness to pay more acted as potential background factors for young consumers' attitude, knowledge and awareness formation. So, marketers should deliver positive and emotional appeals to educate young consumers' product preferences. Accordingly, marketers can take initiatives to increase knowledge building activities like eco-workshops in colleges and organizations, field trips, and tree plantation. Furthermore, from the empirical findings, it can be seen that there has been a rise in intention to buy eco-friendly products, especially in the 24-29 age-group. Thus, national and international green marketers should target this segment (24-29 age-groups) with knowledge building activities. In this study, the researcher has found that these two are strong predictors of buying eco-friendly products. So, this has led to increasing necessity and importance in the side of marketer to educate people more about such products and has also pressurized them to meet and maintain the required and expected quality level of such products.

References:

[1] Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology, 11*(1), 1-33.

[2] Alwitt, L. F., & Berger, I. E. (1993). Understanding the link between environmental attitudes and consumer product usage. *Advances in Consumer Research, 20*(1), 189-194.

[3] Bohlen, G., Schlegelmilch, B. B., & Diamantopoulos, A. (1993). Measuring Ecological Concern: A Multi-construct Perspective. *Journal of Marketing Management, 12*(3), 415- 430.

[4] Fraj. E & Martinez, E. (2006). "Environmental Value and Lifestyle as Determining Factors of Ecological Consumer Behavior: An Empirical Analysis". Journal of Consumer Marketing, Vol. 23, Issue 3, 133- 144.

[5] Jungermann, W. C., & Jungermann, C. E. (2010). Sustainability Marketing: A Global Perspective. *The Journal of Environmental Education*, *39*(1), 10-19.

[6] Laroche, M. et al. (2002). Cultural Differences in Environmental Knowledge, Attitudes, and Behaviors of Canadian Consumers. *Canadian Journal of Administrative Sciences*, 267-283.

[7] National Geographic. (2010). Consumer Choice and the environment- A worldwide tracking survey. *Greendex 2010*, *3*(1), 1-13.

[8] Polonsky, M. J., & Rosenberger III, P. J. (2001, September-October). Re-evaluating Green Marketing: A Strategic Approach. Business Horizons, 44(5), 21-30.

[9] Prothero, A. (1990). Green Consumerism & the Societal Marketing Concept Marketing strategies for the 1990s. Journal of Marketing Management, 6(2), 87-103.

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Manuscript of a paper should have a cover page providing the title of the paper, the name(s), address(es), phone, fax numbers and email address(es) of all authors and acknowledgements, if any.

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Introduction: Briefly describe the objective of the research and explain why it is important.

Methods: Describe the research plan, the materials (or subjects), and the method used. Explain in detail the Data, sample and population, and the variables used.

Results: Present results in a clear, logical sequence. If tables are used, do not duplicate tabular data in text, but do describe important trends and points.

Discussion: Describe the limitations of the research plan, material (or subject), and methods, considering both the objective and the outcome of the study. When results differ from those of previous researchers, explain the discrepancy.

Figures and Tables: Each Figure/Table should be printed on a separate sheet, Figures and Tables are to be separately numbered, titled and attached at the end of the text serially. The position of the figure or table should be indicated in the text on a separate line with the words "Table I about here".

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Example: "…Ahuja et al. [1]. ..... studied [2, 4]. Areibi and Yang [2] obtained .....

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[1] Ahuja, R.K., Magnati, T.L. and Orlin, J.B. , 1993, Network flows: theory, algorithms and applications, Prentice Hall, Englewood Cliffs, New Jersey.

[2] Areibi, S. and Yang, Z., 2004, Effective memetic algorithms for VLSI design = Genetic algorithms + Local search + Multi-level clustering, Evolutionary Computation, 12, 327-353.

[3] Baumann, N., 2007, Evacuation by earliest arrival flows, PhD thesis, Department of Mathematics, University of Dortmund, Germany.

[4] Borah, M., Owens, R.M. and Irwin, M.J., 1995, Transistor sizing for minimizing power consumption of CMOS circuits under delay constraint, International Symposium on Low Power Design, 167 -172.