



# **The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment**

Hinrik Hinriksson

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Author name: Hinrik Hinriksson

Author ID number: 060690-3089

Department of Psychology

School of Business

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## Abstract

E-mail marketing literature has mostly been studied with attitudinal measures but only a few articles have been published where behavioral measures on consumer choice have been exploited. An experiment based on the principles of the Behavioral Perspective Model (BPM) was conducted to analyze consumer choice. Two different types of emails based on different aspects of the BPM were sent to two groups from the same marketing database of registered consumers interested in receiving special offers from a hardware and home improvement chain in Iceland. A segmentation of the marketing database was performed prior to the experiment based on the target product appropriateness. The experiment was based on A-B-C and A-C-B withdrawal designs and consisted of sending B = utilitarian (economic/physical) and C = informational (social) advertising stimuli with a clear call for action. Key measurements consisted of participants receiving the email, opening it, clicking on the images/links, and buying the target product. Findings showed informational favoring results concerning opening rates and clicks on image/link in opened e-mails. Also, an appropriate segmentation of a marketing database seemed to induce greater openings of e-mails with consumers. Future studies should focus on gaining greater control over consumer behavior in their natural environment.

Key-words: E-mail marketing, Behavioral Perspective Model, consumer behavior, market segmentation, consumer behavior analysis

## Útdráttur

Fáar vísindarannsóknir hafa verið gerðar um hvernig tölvupóstur geta nýst við markaðssetningu. Til þessa hefur þetta efni einungis verið rannsakað með viðhorfsmælingum en aðeins örfáar rannsóknir hafa verið byggðar frá atferlisfræðilegu sjónarhorni þar sem val neytenda er greint. Tilraun byggð á atferlislíkani Gordon R. Foxall var framkvæmd í þeim tilgangi að greina val neytenda. Tvær mismunandi gerðir af tölvupóstum byggðir á mismunandi sjónarmiðum atferlislíkansins voru sendir á tvo hópa sem tilheyrðu sama hópi viðskiptavina sem höfðu skráð sig í Kjaraklúbb Húsasmiðjunnar. Áður en tilraunin var framkvæmd voru viðskiptavinir kjaraklúbbsins flokkaðir eftir því hverjir ættu best við miðað við auglýsta vöru. Tilraunin var byggð á A-B-C og A-C-B afturhvarfssniði sem innihélt sendingu B = nytja (hagsýnt/áþreifanlegt) og C = upplýsinga (félagslegt) auglýsingaáreiti. Helstu mælingar samanstóðu af tíðni afhentra tölvupósta, opnaðra tölvupósta, smella á tengil og kaup á vörunni. Niðurstöður sýndu að opnanir tölvupósta og smell á tengil í opnuðum tölvupóstum urðu líklegri meðal þeirra sem hvattir voru með upplýsingaáreiti. Viðeigandi flokkun á kjaraklúbb Húsasmiðjunnar orsakaði einnig fleiri opnanir tölvupósta. Framtíðar rannsóknir á þessu efni ættu að leitast við að öðlast frekari skilning á stjórnun hegðunar neytenda í hans náttúrulega umhverfi.

Lykilhugtök: Markaðssetning með tölvupósti, Atferlislíkan Foxall's, neytendahegðun, markaðshlutun, atferlisgreining neytenda

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## Foreword and Acknowledgments

Submitted in partial fulfilment of the requirements of the BSc Psychology degree, Reykjavík University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

The author wishes to thank his supervisor for his receptivity and providing the possibility of studying this subject matter. His excellent advice, support and flexibility concerning late changes and due dates were crucial for this BSc thesis to become a reality. The author also wishes to thank Húsasmiðjan and Zenter for the collaboration, especially the program manager of Húsasmiðjan for his altruistic contribution and the managing director of Zenter. Finally, the author wishes to thank my brother's girlfriend for looking into the English vocabulary used in the current study.

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## Application of the Behavioral Perspective Model in E-mail Marketing

E-mail marketing literature has a short empirical history. It is limited, apparent and has recently been studied primarily using attitudinal measures. None of the attitudinal studies were conducted from a behavioral perspective, which entails the necessity of a study based on behavioral analyses and laws. Currently only a few articles have been published in this field, which results in a small scope of knowledge about the effects of e-mails on consumer behaviour (Sigurdsson, Menon, Sigurdarson, Kristjansson, & Foxall, 2013). As e-mail marketing is still in its rudimentary stage, there is a need for more well-established studies which can help form theories within the field of e-mail marketing (El-Gohary, 2010). As publicity of articles in this particular field is minimal, only a brief literature review summarizes the past research. Di Ianni (2000) found that e-mail response rates ascend from 10% to 17% when e-mails are sent to a targeted permission-based group rather than untargeted. Despite the increase in response rates, there is a myriad of other factors that could potentially contribute to a rise in response rates. Chittenden and Rettie (2003) identified factors influencing both the response and unsubscribe rates of e-mail permission-based (opt-in) list of customers. Results suggest that the lengthier an e-mail is, the less likely customer is to respond and is more likely to unsubscribe. However, the more aesthetically pleasing an email is, the probability is greater that the consumer will respond. The subject line was finally found to influence consumers' responses whereas an incentive subject line increases the predictability of the responses. In addition findings from Chittenden and Rettie's study (2003) suggested that the most frequent responders were consumers ranging from 30 to 40 years of age. Marinova, Murphy, and Massey (2002) found similar factors crucial for e-mail marketing emphasizing that the subject line is arguably the most important field for e-mail marketers. The text within the subject line plays a major role in the receiver's temptation to read the message. Findings show a statistically significant difference in opt-out rates

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supporting subject line personalization over no personalization. Furthermore, Colkin (2001) found congruent results illuminating that when a recipient's name was added to the subject line, its response rate doubled to more than 12% over non-personalized e-mails. As found in Chittenden and Rettie's (2003) study, the color of the e-mail background seemed to affect the response rates of e-mails as well. Research findings have suggested that three of their four experimental colors increased response rates compared to no color at all where yellow corresponded to the most responses (Zviran, Te'eni, & Gross, 2006). Also, there is proof indicating that visits to the companies physical store occurred more frequently from consumers who viewed the e-mails as useful (Martin, Van Durme, Raulas, & Merisavo, 2003). Finally, consumers' positive experience of e-mails, brand loyalty, and content which concerns the consumers' interests, have positively affected the opening rates of e-mails (Tezinde, Smith, & Murphy, 2002). Sterne (1996) found that promoting messages are more likely to succeed when the receiver has agreed and given permission for its appearance. This finding insinuates that researchers studying consumer behavior should focus on permission-based e-mail lists. As long as the company seeks for the permission to send their consumers e-mails and respect those boundaries, the company has the ability to build a personal and efficient relationship with the consumer (Chittenden & Rettie, 2003).

Although previous studies can be useful, admiring, and informative there remains a significant concern. Most, if not all the studies, were performed in a closed setting where limited reinforcers were available and where the researcher had control of reinforcement deliveries (Schwartz & Lacey, 1988). Behavior analysis uses systematic measurements where behavior is explained with quantifiable data. In addition, behavioral studies construct a situation where the researcher is only partly in control. The researcher puts his trust on numerical variables to measure how the consumer reacts to stimuli in his natural environment. Furthermore, the researcher does not enquire about the consumers' present or future behavior

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(Foxall, 2010). Within the field of consumer behaviour analysis there has only been one systematic long-term research performed in a non-laboratory setting from an operant perspective. That is the Consumer Behavior Analysis research program (Foxall, 2010).

Consumer Behavior Analysis (CBA) represents itself as the utilization of behavior economics in the field of consumer choice, particularly in the context of economics that place emphasis on the market. Moreover, it attempts to enhance the balance by reviewing the nature of behaviorist explanation and its capacity to enlighten consumer research (Foxall, 1998, 2003).

In order to explain a consumer behavior in his natural environment requires the location of behavior in time and space at the intersection of consumers' learning history and current behavior setting. This has led to the development of the Behavioral Perspective Model (BPM) of consumer choice. Consumer Behavior Analysis applies basic behavioral laws and principles to real life consumer behaviour, which makes the interpretation and prediction of consumer behavior next to straightforward. When buying a particular product, an individual can be reinforced with the physical benefits of the product but also with the social approval following the purchase of the product. At the same time, however, the individuals may be feeling punished with the fact that they are losing generalized conditioned reinforcers, such as money and/or efforts put in the purchasing process. In addition, the individual may receive frigid feedback from others concerning the acquisition of the product (Alhadeff, 1982). This representation describes the basis of the Behavioral Perspective Model. It presumes that consumer behavior is based on both utilitarian (mediated by the product) and informational (mediated by other persons) consequences. The customer evaluates the utilitarian and informational consequences either being more reinforcing than punishing or vice versa. Utilitarian consequences derive from the practical application of the product itself. They are in fact the functional results of buying products or services. Informational consequences on the other hand derive from a social foundation and depend primarily on the actions and

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reactions of other people around oneself (Foxall, Oliveira-Castro, James, Yani-de Soriano, & Sigurdsson, 2006). Persons whose actions are well noticed are for example celebrities.

Celebrity attachment is associated with positive attitudes towards advertisement and brands.

Also, attachment influences purchase intent (Ilicic & Webster, 2011).

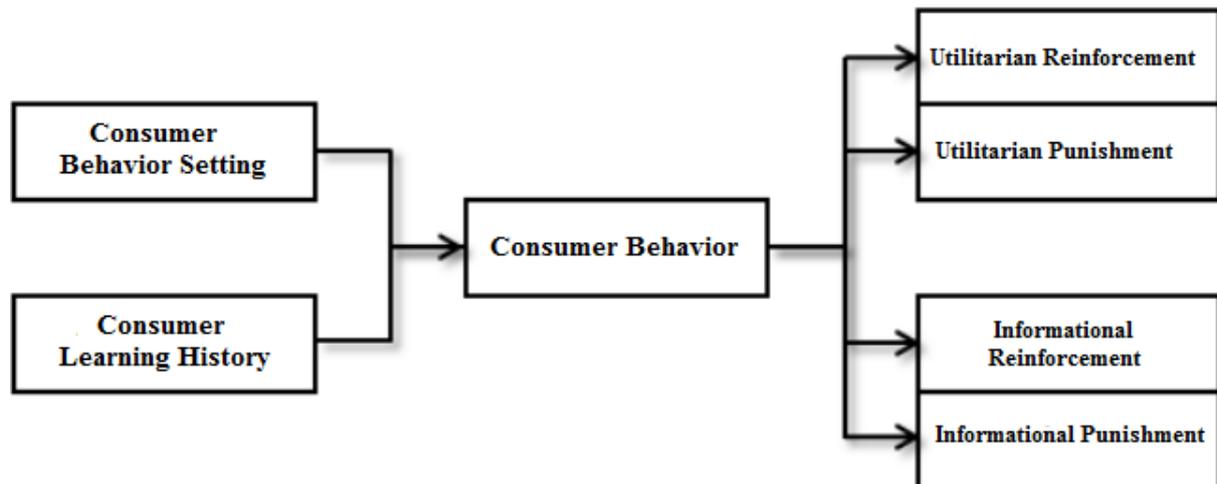


Figure 1. A Graphical Presentation of the Behavior Perspective Model.

Apart from the utilitarian and informational reinforcers, the consumer's learning history is a variable significant in the consumer behavior process. The behavioral consequences a consumer comes in contact with, forms the consumer's learning history of reinforcement and punishment in a given situation. Figure 1 illustrates in graphical form how these consequences then interact with the consumer behavior setting influencing the likelihood of behavior taking place in the same or similar situations in future occasions (Foxall et al., 2006). If a marketer knows of consumer's learning history then he or she is in a place worth striving for as he or she would know the appropriate products to present. Market segmentation is a process based on factual information, which by market researchers discover key attributes about consumers (the consumer learning history) that can be used to create distinct target market groups (Foxall, 1981).

A recent study exploiting the laws of the BPM found results indicating that members of a publishing house are more likely to buy a target product when prompted with a utilitarian

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or informational reinforcing e-mail than with no e-mail. Utilitarian reinforcement induced more sales of the target product than informational reinforcement. However, informational reinforcement induced more frequent e-mail openings (Sigurdsson et al., 2013). According to BPM, a combination of utilitarian and informational reinforcement delivers the best results (Foxall et al., 2006). In the current study, utilitarian reinforcement is compared to a combination of informational and utilitarian (more informational) reinforcement through an e-mail marketing experiment. Findings are expected to favour informational (the combination of informational and utilitarian) reinforcement in preference to utilitarian reinforcement.

### **Method**

#### **Participants and Procedure**

All participants were members of The “Special Offer Club”, a specific list of Húsasmiðjan consumers who had previously given permission to receive e-mails with special offers on products that Húsasmiðjan has to offer. They were unaware of their participation in the experiment.

A segmentation of the marketing database was performed prior to the experiment based on the target product appropriateness. Participants were divided into two groups depending on the results from two questions included in a questionnaire that had previously been sent to every member of the Special Offer Club. To encourage response rates, Húsasmiðjan offered participants the chance to win a brand new bicycle for their participation. In all 5,989 out of 41,667 members (2,742 females, 2,999 males, and 247 were listed as firms) answered the first question: “Do you enjoy riding a bike?” with „Yes“. These members were then divided into two groups depending on results from the second question: “Do you own a bicycle?”. A total of 2,352 participants (940 females, 1,324 males and 88 firms) were placed in group 1 (bicycle not needed) as they answered the question with either a “Yes“ or “No, but I have access to a bicycle“. Group 2 (bicycle needed) consisted of 3,637

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participants (1,802 females, 1,675 males, and 159 firms) who answered the same questions with either a “No“ or “Yes, but I have to buy a new one“. Between the 23rd – 29th of April 2013, a baseline was measured of total bicycle helmets sold during no specific intervention. On the 30th of April an informational reinforcing advert was sent through emails to group 1 at 10:36 am. Seven minutes later at 10:43 a.m. a utilitarian reinforcing advert was sent to group 2. A week later on May 7th, the same informational reinforcing advert was then sent to group 2 at 12:53 p.m. and the utilitarian reinforcing one to group 1 at 12:52 p.m. During the time the responses were monitored or during period of April 30th until May 14th Húsasmiðjan offered 25% discount on all bicycle helmets. Additionally, response results from two other non-segmented e-mail projects were examined and compared to results from the current e-mail project. One promoting outdoor products and one promoting skiing products (see appendices, p. 28-31).

### **Setting, Product, Response Definition and Measurement**

Current research was conducted in collaboration with two Icelandic firms. Zenter, an Icelandic market research firm that specializes in e-mail marketing and Húsasmiðjan (The House Workshop), a market-oriented sales and services company that provides, sells, and distributes goods and services. The target product in the experiment were bicycle helmets. Records from the Zenter software provided data with numbers of recieved and opened emails. Also, clicks on the URL link or image to access the web shop and the quantities sold of the target product were monitored. Finally the Zenter software monitored unsubscribes from the Special Offer Club database (opt-outs). All these measurements come aggregated in graphical format as they happen via the Zenter software.

### **System Validity and Reliability**

To record the consumer responses, a software developed by Zenter was used. The Zenter software was also used in a previous research similar to the current research. Therefore, the deliverability of emails had been verified before in accordance with the optimum practices.

### **Design and Intervention**

The experiment was based on A-B-C and A-C-B withdrawal design. It consisted of sending B = utilitarian (functional/physical) and C = informational (social) advertising stimuli with a clear call for action. Market segmentation of participants in advance was done for the purpose of participants being appropriate and more likely to buy the target product. Further separation of members in the Special Offer Club depending on the order of interventions was also done to counter-balance the effects of external variables such as the effects of a particular point in time. This was done by dividing the database into two groups which gave more control for extraneous variables due to more experimental comparisons. There were two different interventions (independent variables) designed based on the principles of Foxall's Behavior model. On the one hand an intervention (email advert) in line with utilitarian reinforcement was designed to prompt the purchase of bicycle helmets (See appendices p. 24-25). The advert displays a photo of a young girl falling on a tricycle without a helmet. The advert also illuminates several facts about riding a bike without a helmet such as the fact that 75% of fatal bicycle accidents to this day could have been prevented with the use of helmets. This utilitarian advert had the purpose of portraying the obvious physical benefits of using a helmet while riding a bicycle. A second intervention predicated on informational (a combination of informational and utilitarian reinforcement) consequences was also designed to prompt the purchasing of bicycle helmets (see appendices p. 26-27). In the advert, three Icelandic celebrities (well known for their cool sense of being) were shown wearing bicycle

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helmets. Two of them, Ágúst Bent and Erpur Eyvindarson, are influential rap musicians and the third, Logi Geirsson, is a former handball player for the Icelandic national team and an Olympic silver medalist. This portrayal delivers the message that it is cool to wear a bicycle helmet as it contributes to the informational and social benefits of using them. Also, as consumers are offered 25% discount on the target product they receive utilitarian consequences.

### Results

#### Descriptive Statistics

Table 1 displays the ratio of e-mail responses for types of stimuli based on the order of intervention. As seen in the table, the opening rate of informational reinforcing e-mails received during prior intervention was 35.88% but only 30.85% for utilitarian reinforcing emails. Additionally, 28.08% of consumers who opened the informational reinforcing e-mail during prior intervention, clicked on the image/link. During latter intervention the ratio of clicks on informational reinforcing e-mails decreased to 16.9%. As for total sales of the target product only 3.6% of consumers who bought the target product were prompted with informational reinforcing e-mails during prior intervention. During latter intervention consumers receiving e-mails either utilitarian or informational reinforcing, accounted for 19.7% (8.7 + 10.7) of total sales of the target product.

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Table 1

*E-mail Response Ratios (Percentages) for Types of Stimuli Based on the Order of Intervention*

Variables	Baseline	Prior Intervention		Latter Intervention	
		Utilitarian	Informational	Utilitarian	Informational
Openings <sup>a</sup>		30.85	35.88	31.27	31.20
Clicks on image/link <sup>b</sup>		22.82	28.08	18.81	16.9
Sales <sup>c</sup>	13.8	13.1	3.6	8.7	10.7
Opt-outs <sup>a</sup>		0	0	0.04	0.03

Note. Baseline measures were in effect from 23rd to 29th of April, prior intervention was in effect from 30th of April to 6th of May and the latter intervention from 7th to 14th of May 2013. Ratios are based on different totals. Values are adapted from Zenter reports (see appendices, p. 32-26)

<sup>a</sup>Ratios are based on total e-mails received. <sup>b</sup>Ratios are based on total e-mails opened. <sup>c</sup>Ratios are based on total sales of target product.

Table 2 shows the ratio of e-mail responses in the case of bicycle necessity. As depicted in the table, only 16.9% of consumers who are lacking a bicycle clicked on the image/link after opening the informational reinforcing e-mail. Considering ratios from Table 2, 13.1% of total target products sold were bought from consumers who needed a bicycle and received utilitarian reinforcing e-mails. Finally, only 0.04% of consumers who do not need bicycles opted to unsubscribe from the marketing database when prompted with utilitarian reinforcing stimuli.

Table 2

*E-mail Response Ratios (Percentages) for Types of Stimuli Based on Database Segmentation*

Variables	Consumers needing a bicycle		Consumers not needing a bicycle	
	Utilitarian	Informational	Utilitarian	Informational
Openings <sup>a</sup>	30.85	31.20	31.27	35.88
Clicks on image/link <sup>b</sup>	22.82	16.9	18.81	28.08
Sales <sup>c</sup>	13.1	10.7	8.7	3.6
Opt-outs <sup>a</sup>	0	0.03	0.04	0

Note. Ratios are based on different totals. Values are adapted from Zenter reports (see appendices, p. 32-26)

<sup>a</sup>Ratios are based on total e-mails received. <sup>b</sup>Ratios are based on total e-mails opened. <sup>c</sup>Ratios are based on total sales of target product.

### Loglinear Analysis

#### *Order of intervention, type of stimuli and clicks on image/link*

To examine the relationship between the order of intervention, type of stimuli and clicks on image/link a three-way loglinear analysis produced a final model that retained all effects. The likelihood ratio of this model was  $X^2(0) = 0, p = 1$  (see appendices, Table 6, p. 40). This indicated that the highest-order interaction (the order of intervention x type of stimuli x open clicks) was significant  $X^2(1) = 6.34, p < .05$  (see appendices, Table 7, p. 40). To break down this effect, separate chi-square tests on the type of stimuli and clicks on image/link variables were performed separately for prior and latter interventions. For the prior intervention there was a significant association between the type of stimuli and clicks on image/link,  $X^2(1) = 7.01, p < 0.01$ ; this was not true in the latter intervention,  $X^2(1) = 1.13, p > .05$  (see appendices, Table 8, p. 41). This seems to represent the fact that, based on the odds ratio, the odds of consumers clicking on the email link/image were 1.32 times higher when

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prompted with an informational stimulating email than if prompted with a utilitarian one during prior intervention.

### *Bicycle necessity, type of stimuli and clicks on image/link*

The relationship between bicycle necessity, type of stimuli, and clicks on image/link was examined as the three-way loglinear analysis produced a final model that retained all effects. The likelihood ratio of this model was  $X^2(0) = 0, p = 1$  (see appendices, Table 9, p. 42). This indicated that the highest-order interaction (bicycle necessity x type of stimuli x open clicks) was significant  $X^2(1) = 6.34, p < .05$  (see appendices, Table 10, p. 42). To break down this effect, separate chi-square tests on the type of stimuli and openings variables were performed separately for the groups needing a bicycle and groups not needing a bicycle. For the group needing a bicycle there was a significant association between the type of stimuli and clicks on image/link,  $X^2(1) = 13.16, p < 0.01$ ; this was also true in the group not needing a bicycle,  $X^2(1) = 19.56, p < .01$  (see appendices, Table 11, p. 43). Odds ratios indicated that the odds of clicking on the link/image were 1.5 when prompted with a utilitarian stimuli than with informational stimuli with participants needing a bicycle. However, the odds were 1.72 higher when prompted with an informational stimuli than with utilitarian stimuli with participants not needing a bicycle. Therefore, the analysis seems to reveal a fundamental difference in participants needing and not needing a bicycle: participants needing a bicycle were more likely to click on the link/image when prompted with a utilitarian stimuli rather than informational stimuli, whereas participants not needing a bicycle were more likely to click on the link/image after the prompt of informational stimuli than a utilitarian one.

### *Order of intervention, type of stimuli and openings*

The relationship between the order of intervention, type of stimuli, and openings was examined. The three-way loglinear analysis produced a final model that retained all effects. The likelihood ratio of this model was  $X^2(0) = 0, p = 1$  (see appendices, Table 3, p. 38). This

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indicated that the highest-order interaction (the order of intervention x type of stimuli x openings of emails) was significant  $X^2(1) = 8.67, p < .01$  (see appendices, Table 4, p. 38). To break down this effect, separate chi-square tests on the type of stimuli and openings variables were performed separately for prior and latter interventions. For the prior intervention there was a significant association between the type of stimuli and whether or not consumers opened their emails,  $X^2(1) = 17.28, p < .001$ ; this was not true in the latter intervention,  $X^2(1) = 0.002, p > .05$  (see appendices, Table 5, p. 39). Odds ratios indicated that the odds of email openings were 1.26 higher when prompted with informational stimuli than with utilitarian stimuli during prior intervention. This seems to represent the fact that based on the odds ratio, the odds of consumers opening emails were 1.26 times higher if they were prompted with an informational stimulating e-mail than if prompted with a utilitarian one during prior intervention. Irrespective of time of intervention there was also a significant association between the type of stimuli and whether or not consumers opened their e-mails,  $X^2(1) = 6.43, p < .05$ . (see appendices, Table 5, p. 39). Odds ratios indicated that the odds of email openings were 1.11 higher when prompted with an informational stimuli than with utilitarian stimuli irrespective of time of intervention.

### *E-mail projects and openings*

Finally, the relationship between e-mail projects and openings was tested with Pearson's chi-square test. There was a significant association between e-mail projects and whether consumers opened e-mails or not,  $X^2(2) = 395.18, p < .01$  (see appendices, Table 13, p. 45). This seems to represent the fact that based on the odds ratio, the odds of consumer opening e-mails are either 1.5 or 1.94 times higher when consumers received appropriate e-mails compared to when they did not.

## Discussion

The current study illustrates the application of the BPM and market segmentation in e-mail marketing and how it is used as a tool to understand consumers' responses.

Considering results there are several factors that influence both opening rates of e-mails and after opening it, whether the consumer clicks on the image/link or not.

Results from the loglinear analysis showed that most differences in e-mail responses were found during prior intervention and favoring the informational stimuli. For opening rates, consumers receiving informational stimuli were more likely to open emails than those who received the utilitarian stimuli. This was the case both during prior intervention and in total irrespective of the order of intervention. As for clicks on image/link in opened e-mails there was again a difference on types of stimuli favouring the informational stimuli in preference to the utilitarian stimuli during prior intervention. According to the BPM, a combination of utilitarian and informational reinforcement is supposed to deliver the best result (Foxall et al., 2006). Based on these results this interpretation is statistically confirmed. These findings are also consistent with previous findings where opening rates of informational messages were double that of utilitarian messages (Sigurdsson et al., 2013). Also, as celebrity attachment is associated with positive attitudes towards advertisement and brands (Ilicic & Webster, 2011), the celebrities exposed in the informational reinforcing e-mails may have contributed to the informational favoring results.

When clicks on the image/link were examined based on consumers' bicycle necessity a fundamental difference was found on types of stimuli. Consumers who needed bicycles were more likely to click on the image/link when prompted with utilitarian stimuli than with informational stimuli. However, reverse effects were found with consumers who do not need bicycles. One would think based on these reversed results that those who needed bicycles and presumably needed helmets as well, may have realized their need of helmets seeing the life-

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threatening facts about non-helmet bicycle riding. Therefore, they may have clicked on the image/link to look further into the matter. However, the reverse effect was presumably caused by the order of intervention. Consumers who need bicycles received the utilitarian stimuli during prior intervention and consumers who do not need bicycles received the informational stimuli during prior intervention as well. When consumers received another e-mail (during latter intervention) promoting the same product they presumably did not bother to click on the image/link again.

As for sales of the target product, only a few were sold in each intervention period. A comparison to baseline measures was not appropriate as a 25% discount was on bicycle helmets during both interventions but not during baseline measures. The target product in this current study is presumably not suitable for comparison on total sales as total sales were monitored in all of Iceland. Around 300 thousand people live in Iceland but only 6 thousand received e-mails.

Finally, opening rates were examined based on three different e-mail projects, which resulted with a noteworthy finding. The e-mail project used in the current study induced significantly more e-mail openings than the other two e-mail products (e-mails promoting outdoor products and emails promoting skiing products). For example consumer receiving e-mail promoting bicycle helmets was almost two times more likely to open it than a consumer receiving e-mail promoting skiing products. The e-mail project used in the current study promoted bicycle helmets and e-mails were only sent to those who had previously informed Húsasmiðjan of their enjoyment of riding bicycles. In the other two e-mail projects, e-mails were sent to consumers promoting products that may not have been in the consumers' best interests. This result underlines the importance of the appropriate marketing segmentation and is consistent with previous findings from Tezinde et al. (2002) study where content concerning consumer's interests was found to influence opening rates.

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The current research is in a way an advancement of a previous study using the BPM in the field of consumer behavior analysis. In the previous research Sigurdsson et al. (2013) noted in the wake of their findings that consumers who responded to emails either a utilitarian or informational stimuli tended to induce maximum responses during the first two days after the emails were sent. For that reason the period of time responses from each email were measured, was shortened from two weeks to only one week per email in the current study. The mean sale of the target product per day in each period was meant to be more useful than the earlier study. Moreover, the need to look deeper into the consumer's learning history was recommended in the previous study and is accounted for in the current study. The study was conducted by sending in a questionnaire prior to performing the experiment concerning the appropriate matter. Both the collaborating firm and the researcher gained valuable information about consumers as they had pinpointed consumers deemed appropriate for the target product. Rather than sending unavailing emails to consumers who do not find bicycle rides amusing, they have the advantage of sending emails to the "appropriate" group of people. Every participant in the study not only enjoyed riding a bicycle but also may have felt the desire to answer the questionnaire due to the possibility of winning a brand new bicycle. Again, in the previous research Sigurdsson et al. (2013) described a possible reason why results showed a higher impact of utilitarian reinforcement than the informational one. In their experiment the utilitarian reinforcement provided more tangible and immediate economic benefits. Consumers were offered two target products for the price of one when prompted with the utilitarian advertising stimuli but only one target product for the same price when prompted with informational advertising stimuli. In the current study consumers are offered the same immediate economic benefits in both interventions as they are offered the target product with a 25% discount. As a result of the economic benefits, the informational stimuli become a mix of both informational and utilitarian reinforcement. With this

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modification from the previous study, the reinforcing effects of both interventions are more evened out as the informational reinforcing effect of this particular product (a bicycle helmet) is a minor point compared to the utilitarian effects. The utilitarian benefit deriving from wearing bicycle helmets ranges from minor cuts to saving one's own life. From any aspect it is safe to say that the informational benefits deriving from bicycle helmets, for example being cool, are of less important. Consequently, it is challenging to present a product designed for utilitarian purposes from an informational/social perspective. In addition, the social level of bicycle helmets may not be high due to their unfashionable appearance. Selecting a bicycle helmet as a target product derived from another suggestion from the previous study as it was recommended to experiment different products and other forms of stimuli. Also, bicycle helmet sales vary throughout the seasons in Iceland. Most bicycle products are sold during the springtime when the experiment had taken place, which contributed to greater results.

Despite improvements from the previous study, there are several limitations in the current study that might be possible to overcome in future research. To begin with, a common limitation inherent with the withdrawal design is the carry-over effect, which relates to the problem when results from the previous phase merge into the next phase. Therefore, a consumer receiving utilitarian stimuli during prior intervention could decide to wait a week until they actually purchase the product. A limitation compared to the previous study is the ability to order the target product with an easily accessible click on the email itself. In the current study, consumers were required to click on the web shop URL first and order it from there. With a prominent „order button“ in front of consumers after opening the e-mails, consumers may have been more tempted to buy helmets. Concerning the new approaches used in the current study, improvements can be made. The market segmentation of consumers previous to the study is the first of its kind in an e-mail marketing study concerning the BPM. Therefore, the segmentation can always be further improved and more precise. The

## The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

questionnaire could have been directed at bicycle helmets rather than bicycles in general to make participants appropriate for the target product. Also, consumers could have been divided into groups depending on whether they enjoyed riding a bicycle or not but a large difference in samples prevented that separation. Instead, groups were divided depending on their need for bicycles, which might not be the most suitable segmentation as it does not provide definite information about the need of bicycle helmets. In addition, by dividing the groups depending on another variable (whether consumers needed bicycles or not) before the research variables were used, it created difficulties concerning the evaluation of the current findings. For example, if results showed statistical differences with e-mail openings between the types of stimuli, this difference could also be the cause of consumers' bicycle needs. Also the 25% discount on bicycle helmets during the period of both interventions biased any evaluation compared to the baseline. These limitations should be kept in mind in interpreting the findings.

Even with these limitations, findings of the current study have both applied and theoretical implications. A study concerning consumer behavior analysis in the environment of e-mail marketing is a valuable extension to the short empirical history of e-mail marketing. As the BPM is a relatively new model there is a need for studies such as the current one that demonstrate its effectiveness. From the applied perspective the findings provide valuable information to marketers as results for example implicate that opening rates of e-mails increase when inviting e-mails are sent to appropriate consumers. Data from and about consumers that companies collect are considered to be the company's property. That data is available for marketing campaigns as long as the customer does not „opt out“, or explicitly asks to be removed from the mailing list. Companies must make more use of this invaluable information that is within the companies reach. Time and money can easily be saved by sending appropriate messages to appropriate consumers.

## **Conclusion**

In reference to previous studies, future studies should continue to aim at expanding the literature into an open and affluent, non-laboratory consumer setting (a natural setting) to analyze the consumer's response to e-mail marketing. The environment has numerous reinforces affecting behavior whereas the researcher is in less control. Out of all who are studying behavior economics, researchers covering consumer behavior in the market place, presumably have the least control over the environment. In related fields, such as organizational behavior management, clinical psychology and school psychology, the control is far greater than in consumer marketing (Lea, 1978; Lea, Tarpy, & Webley, 1987). Thus future researchers must work on obtaining a greater control over consumer behavior in their respective natural environment. In summation, researchers must continue studying different aspects of the BPM and at the same time examine the consumers' learning history with similar techniques as used in the current study but also through platforms different from e-mails. This would immensely increase the knowledge and the few articles that have been published within the field of consumer behavior analysis. By doing this, a greater control over consumer behavior in the marketplace may be attained.

## References

- Alhadeff, D. A. (1982). *Microeconomics and Human Behavior: Toward a New Synthesis of Economics and Psychology*. Berkeley: University of California Press. Retrieved from [http://www.google.com/books?hl=en&lr=&id=HiBiaCZttQcC&oi=fnd&pg=PR11&dq=microeconomics+and+human+behavior&ots=87j1Z2pZTu&sig=VeFD\\_Popl6Qm9kC65gJv8S\\_qqks](http://www.google.com/books?hl=en&lr=&id=HiBiaCZttQcC&oi=fnd&pg=PR11&dq=microeconomics+and+human+behavior&ots=87j1Z2pZTu&sig=VeFD_Popl6Qm9kC65gJv8S_qqks)
- Chittenden, L., & Rettie, R. (2003). An evaluation of e-mail marketing and factors affecting response. *Journal of Targeting, Measurement and Analysis for Marketing*, 11(3), 203–217.
- Colkin, E. (2001). Marketing capitalizes on e-mail. *InformationWeek*, (847), 55–56.
- Di Ianni, A. (2000). The e-business enterprise and the “Web-first” principle of e-marketing. *Journal of Direct, Data and Digital Marketing Practice*, 2(2), 158–170.
- El-Gohary, H. (2010). E-marketing-A literature review from a small businesses perspective. *International Journal of Business and Social Science*, 1(1), 214–244.
- Foxall, G. R. (1981). *Strategic marketing management*. Taylor & Francis.
- Foxall, G. R. (1998). Radical behaviorist interpretation: Generating and evaluating an account of consumer behavior. *The Behavior Analyst*, 21(2), 321.
- Foxall, G. R. (2003). The behavior analysis of consumer choice: An introduction to The Special Issue. *Journal of Economic Psychology*, 24(5), 581–588.
- Foxall, G. R., Oliveira-Castro, J. M., James, V. K., Yani-de Soriano, M., & Sigurdsson, V. (2006). Consumer behavior analysis and social marketing: the case of environmental conservation. *Behavior and Social Issues.*, 15(1), 101–124.
- Foxall, Gordon R. (2010). Invitation to consumer behavior analysis. *Journal of Organizational Behavior Management*, 30(2), 92–109.  
doi:10.1080/01608061003756307

## The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

- Ilicic, J., & Webster, C. M. (2011). Effects of multiple endorsements and consumer–celebrity attachment on attitude and purchase intention. *Australasian Marketing Journal (AMJ)*, 19(4), 230–237. doi:10.1016/j.ausmj.2011.07.005
- Lea, S. E. (1978). The psychology and economics of demand. *Psychological Bulletin*, 85(3), 441.
- Lea, S. E. G., Tarpy, R. M., & Webley, P. (1987). *The individual in the economy. A survey of economic psychology*. Cambridge: Cambridge University Press.
- Marinova, A., Murphy, J., & Massey, B. L. (2002). Permission e-mail marketing as a means of targeted promotion. *Cornell Hotel and Restaurant Administration Quarterly*, 43(1), 61–69.
- Martin, B. A. S., Van Durme, J., Raulas, M., & Merisavo, M. (2003). Email advertising: Exploratory Insights from Finland. *Journal of Advertising Research-New York-*, 43(3), 293–300.
- Schwartz, B., & Lacey, H. (1988). What applied studies of human operant conditioning tell us about humans and about operant conditioning. Retrieved from <http://psycnet.apa.org/psycinfo/1988-97610-003>
- Sigurdsson, V., Menon, V., Sigurdarson, J.P., Kristjansson, J.S., & Foxall, G.R. (2013). A test of The Behavioral Perspective Model in the context of an e-mail marketing experiment. *The Psychological Record*, 63, 295-308.
- Tezinde, T., Smith, B., & Murphy, J. (2002). Getting permission: Exploring factors affecting permission marketing. *Journal of Interactive Marketing*, 16(4), 28–36.
- Zviran, M., Te'eni, D., & Gross, Y. (2006). Does color in email make a difference? *Communications of the ACM*, 49(4), 94–99.

## Appendices

### Intervention A – Utilitarian reinforcing stimuli

**KJARAKLÚBBUR**  
HÚSASMÍÐJUNNAR OG BLÓMAVALS



## Notar þú hjálm þegar þú hjólar?

### Passaðu höfuðið!

25% afsláttur fyrir þig af öllum reiðhjólshjálum til 14.maí 2013.



### Kæri félagi, vissir þú...

...að stór hluti hjólreiðamanna notar ekki hjálm.  
...að 75% banaslysa hjólreiðamanna má rekja til höfuðáverka.  
...að alvarlegustu áverkar á hjólreiðamönnum verða á höfði.  
Heimild: *Safe Kids og World health organization*

## The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

Húsasmiðjan er með mikið úrval reiðhjólahljálma fyrir alla fjölskylduna á verði sem kemur á óvart. Kíktu við í næstu verslun og skoðaðu úrvalið.

[Reiðhjólahljálmar frá Author](#) (ath! verð eru sýnd án afsláttar)

[Reiðhjólahljálmar frá öðrum framleiðendum](#) (ath! verð eru sýnd án afsláttar)

[Leiðbeiningar um val á reiðhjólahljálmi](#)

*Ath! Tilboðið gildir ekki af vörum merktum „lægsta lága verð Húsasmiðjunnar“ enda lægsta verð sem við bjóðum hverju sinni.*

---

**Tilboð gildir til 14.maí 2013**

**Húsasmiðjan á Facebook | [Skrá mig af póstlistanum](#)**



**Húsasmiðjan og Blómaval | Holtagörðum | 104 Reykjavík | [husa@husa.is](mailto:husa@husa.is) | [husa.is](http://husa.is)**

Þessi tölvupóstur var sendur á netfangið

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**Intervention B – Informational reinforcing stimuli**

**KJARAKLÚBBUR**  
HÚSASMÍÐJUNNAR OG BLÓMAVALS



**„Það er töff að vera með hjálm!“**

---

**Logi Geirs, Ágúst Bent og Erpur eru sammála um það!**



---

**25% afsláttur fyrir þig...**

...af öllum reiðhjóláhjálum til 14.maí 2013.

Kæri félagi,

Kjaraklúbburinn hitti fyrir handboltahetjuna *Loga Geirsson* ásamt tónlistarmönnum knáa *Ágúst Bent* og *Erp Eyvindarson*. Þeir eru allir sammála því að „**það er töff að vera með hjálm!**“ Í tilefni þess bjóðum við þér nú 25% afslátt af hjálum til 14.maí

Húsasmíðjan er með mikið úrval reiðhjóláhjálma fyrir alla fjölskylduna á verði sem kemur á óvart. Kíktu við í næstu verslun og skoðaðu úrvalið.

# The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

[Reiðhjólaljálmar frá Author](#) (ath! verð eru sýnd án afsláttar)

[Reiðhjólaljálmar frá öðrum framleiðendum](#) (ath! verð eru sýnd án afsláttar)

[Leiðbeiningar um val á reiðhjólaljálmi](#)

*Ath! Tilboðið gildir ekki af vörum merktum „lægsta lága verð Húsasmiðjunnar“ enda lægsta verð sem við bjóðum hverju sinni.*

---

**Tilboðið gildir fyrir þig til 14.maí 2013**

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**E-mail promoting outdoor products**

**KJARAKLÚBBUR**  
HÚSASMÍÐJUNNAR OG BLÓMAVALS



**30-50% afsláttur af  
útvistarfatnaði og gönguskóm!**

---

**Úti er allt of kalt!**

Kæri félagi,

Við bjóðum þér nú **30-50% afslátt af útvistarfötum og gönguskóm**. Komdu í heimsókn og nýttu þér þetta kostaboð fyrir 18. apríl 2013.

Eigum mikið úrval af allskyns útvistarfatnaði og gönguskóm. Athugið að úrval getur verið mismunandi milli verslana.

**Kveðja,  
Kjaraklúbburinn**



---

**Tilboð gildir fyrir þig til 18. apríl 2013  
- VERÐDÆMI -**

# The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment



## Úlpa með loðkraga

50% AFSLÁTTUR

**Tilboð: 8.995,-**

~~Verð áður: 17.990,-~~

vnr.5871648



## Úlpa með loðkraga

50% AFSLÁTTUR

**Tilboð: 8.995,-**

~~Verð áður: 17.990,-~~

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**E-mail promoting skiing products**

**KJARAKLÚBBUR**  
HÚSASMÍÐJUNNAR OG BLÓMAVALS



## Á skíðum skemmti ég mér...

---

### Skíðavörur - hjálmar og fatnaður

Kæri félagi,

Við bjóðum þér 25% AFSLÁTT af skíðahjálum, undirfötum, húfum, vettlingum, snjóboxum, gönguskóm, úlpum o.fl. Mikið úrval frábær verð!

**ÚTIVISTARFATNAÐUR Á ALLA FJÖLSKYLDUNA!**

*Gildir fyrir þig frá 26.febrúar til 7.mars, eingöngu í verslunum okkar á Akureyri, Ísafirði og Egilsstöðum.*

## The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment



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Þetta tölvupóstskerfi er rekið af [zenter.is](http://zenter.is)

**E-mail project reports from Zenter – Utilitarian e-mail, prior intervention**

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Það bjargar mannslífum að vera með hjálm
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	29/04/2013 15:00
Sett í útsendingarröð	30/04/2013 10:43
Sent út	30/04/2013 10:43
Sent á lista	Autolist: Kjaraklubbur - 15.05.2013
Sent á breytur	<b>Áttu reiðhjól?:</b> Já en þarf að endurnýja, Nei <b>Finnst þér gaman að hjóla?:</b> Já

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	3.637	100,00%
	Opnuð í pósthósti	1.098	30,19%
	Opnuðu í vafra	31	0,85%
	<b>Samtals opnað</b>	<b>1.123</b>	<b>30,88%</b>
	Smellihtúfall	256 / 3.637	7,04%
	Opnið smellihtúfall	256 / 1.123	22,80%
	Opnuðu ekki	2.514	69,12%
	"Hard endurkast"	3	0,08%
	"Mjúkt endurkast"	0	0,00%
	Afskráningar	0	0,00%

# The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

## Informational e-mail, prior intervention

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Það er töff að vera með hjálm!
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	29/04/2013 14:21
Sett í útsendingarröð	30/04/2013 10:36
Sent út	30/04/2013 10:36
Sent á lista	Autolist: Kjaraklúbbur - 15.05.2013
Sent á breytur	<b>Áttu reiðhjól?:</b> Já, Nei en hef aðgang að reiðhjóli <b>Finnst þér gaman að hjóla?:</b> Já

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	2.352	100,00%
	Opnuð í pósthönn	813	34,57%
	Opnuðu í vafra	36	1,53%
	<b>Samtals opnað</b>	<b>844</b>	<b>35,88%</b>
	Smelli hlutfall	237 / 2.352	10,08%
	Opið smelli hlutfall	237 / 844	28,08%
	Opnuðu ekki	1.508	64,12%
	"Hard endurkast"	0	0,00%
	"Mjúkt endurkast"	0	0,00%
	Afskráningar	0	0,00%

# The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

## Utilitarian e-mail, latter intervention

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Það bjargar mannlífum að vera með hjálm
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	07/05/2013 12:51
Sett í útsendingarröð	07/05/2013 12:52
Sent út	07/05/2013 12:52
Sent á lista	Autolist: Kjaraklubbur - 15.05.2013
Sent á breytur	<b>Áttu reiðhjól?:</b> Já, Nei en hef aðgang að reiðhjóli <b>Finnst þér gaman að hjóla?:</b> Já

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	2.363	100,00%
	Opnuð í pósthósti	722	30,55%
	Opnuðu í vafra	23	0,97%
	<b>Samtals opnað</b>	<b>739</b>	<b>31,27%</b>
	Smellihlutfall	139 / 2.363	5,88%
	Opð smellihlutfall	139 / 739	18,81%
	Opnuðu ekki	1.624	68,73%
	"Hard endurkast"	2	0,08%
	"Mjúkt endurkast"	0	0,00%
	Afskráningar	1	0,04%

## The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

### Informational e-mail, latter intervention

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Það er töff að vera með hjálm!
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	07/05/2013 12:52
Sett í útsendingarröð	07/05/2013 12:53
Sent út	07/05/2013 12:53
Sent á lista	Autolist: Kjaraklúbbur - 15.05.2013
Sent á breytur	<b>Áttu reiðhjól?:</b> Já en þarf að endurnýja, Nei <b>Finnst þér gaman að hjóla?:</b> Já

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	3.641	100,00%
	Opnuð í pósthótti	1.103	30,29%
	Opnuðu í vafra	47	1,29%
	<b>Samtals opnað</b>	<b>1.136</b>	<b>31,20%</b>
	Smellið hlutfall	192 / 3.641	5,27%
	Opið smellið hlutfall	192 / 1.136	16,90%
	Opnuðu ekki	2.505	68,80%
	"Hard endurkast"	0	0,00%
	"Mjúkt endurkast"	0	0,00%
	Afskráningar	1	0,03%

### E-mail promoting outdoor products

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Útivistarfatnaður 30-50% afsláttur!
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	15/04/2013 14:57
Sett í útsendingarröð	15/04/2013 15:39
Sent út	15/04/2013 15:39
Sent á lista	Autolist: Kjaraklubbur - 15.05.2013

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	37.229	100,00%
	Opnuð í pósthönd	7.892	21,20%
	Opnuð í vafra	462	1,24%
	<b>Samtals opnað</b>	<b>8.226</b>	<b>22,10%</b>
	Smellihlutfall	602 / 37.229	1,62%
	Opið smellihlutfall	602 / 8.226	7,32%
	Opnuð ekki	29.003	77,90%
	"Hard endurkast"	98	0,26%
	"Mjúkt endurkast"	56	0,15%
	Afskráningar	56	0,15%

## E-mail promoting skiing products

Verkefnið	
Gerð	E-mail
Snið	Kjaraklúbbur - Fréttabréf 7
Efnislína	Á skíðum skemmti ég mér...
Sendandi	Kjaraklúbburinn <kjaraklubbur@husa.is>
Stofnað	26/02/2013 16:49
Sett í útsendingarröð	26/02/2013 16:53
Sent út	26/02/2013 16:53
Sent á lista	Autolist: Kjaraklúbbur - 15.05.2013
Sent á grunnbreytur	<b>Póstnúmer:</b> 400, 401, 410, 415, 420, 425, 700, 701, 710, 715, 720, 730, 735, 740

Viðtakendur			
		Fjöldi	%
	Fjöldi viðtakenda	2.990	100,00%
	Opnuð í póstforriti	512	17,12%
	Opnuðu í vafra	6	0,20%
	<b>Samtals opnað</b>	<b>518</b>	<b>17,32%</b>
	Smellihlutfall	3 / 2.990	0,10%
	Opið smellihlutfall	3 / 518	0,58%
	Opnuðu ekki	2.472	82,68%
	"Hard endurkast"	2	0,07%
	"Mjúkt endurkast"	0	0,00%
	Afskráningar	2	0,07%

**Tables from SPSS - Order of intervention X Type of stimuli X Openings of emails**

Table 3

	Chi-Square	df	Sig.
Likelihood Ratio	,000	0	.
Pearson	,000	0	.

Table 4

Step <sup>a</sup>	Effects	Chi-Square <sup>c</sup>	df	Sig.	Number of Iterations
0	Generating Class <sup>b</sup>		0	.	
	Deleted Effect 1	8,667	1	,003	3
1	Generating Class <sup>b</sup>		0	.	

a. At each step, the effect with the largest significance level for the Likelihood Ratio Change is deleted, provided the significance level is larger than ,050.

b. Statistics are displayed for the best model at each step after step 0.

c. For 'Deleted Effect', this is the change in the Chi-Square after the effect is deleted from the model.

The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

Table 5

		Chi-Square Tests					
Fyrri eða seinni íhlutun		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Fyrri íhlutun	Pearson Chi-Square	17,283 <sup>d</sup>	1	,000	,000	,000	
	Continuity Correction <sup>b</sup>	17,048	1	,000			
	Likelihood Ratio	17,195	1	,000	,000	,000	
	Fisher's Exact Test				,000	,000	
	Linear-by-Linear Association	17,280 <sup>e</sup>	1	,000	,000	,000	,000
	N of Valid Cases	5989					
Seinni íhlutun	Pearson Chi-Square	,002 <sup>f</sup>	1	,963	,977	,493	
	Continuity Correction <sup>b</sup>	,000	1	,986			
	Likelihood Ratio	,002	1	,963	1,000	,493	
	Fisher's Exact Test				,977	,493	
	Linear-by-Linear Association	,002 <sup>g</sup>	1	,963	,977	,493	,023
	N of Valid Cases	6004					
Total	Pearson Chi-Square	6,426 <sup>a</sup>	1	,011	,011	,006	
	Continuity Correction <sup>b</sup>	6,327	1	,012			
	Likelihood Ratio	6,427	1	,011	,011	,006	
	Fisher's Exact Test				,011	,006	
	Linear-by-Linear Association	6,426 <sup>c</sup>	1	,011	,011	,006	,001
	N of Valid Cases	11993					

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 1902,39.

b. Computed only for a 2x2 table

c. The standardized statistic is -2,535.

d. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 761,48.

e. The standardized statistic is -4,157.

f. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 735,19.

g. The standardized statistic is ,046.

**Order of intervention X Type of stimuli X Clicks on link/image**

Table 6

	Chi-Square	Df	Sig.
Likelihood Ratio	,000	0	.
Pearson	,000	0	.

Table 7

Step <sup>a</sup>	Effects	Chi-Square <sup>c</sup>	df	Sig.	Number of Iterations
0	Generating Class <sup>b</sup>	,000	0	.	
	Deleted Effect 1	6,340	1	,012	3
1	Generating Class <sup>b</sup>	,000	0	.	

a. At each step, the effect with the largest significance level for the Likelihood Ratio Change is deleted, provided the significance level is larger than ,050.

b. Statistics are displayed for the best model at each step after step 0.

c. For 'Deleted Effect', this is the change in the Chi-Square after the effect is deleted from the model.

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Table 8

Chi-Square Tests							
Fyrri eða seinni íhlutun	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability	
Fyrri íhlutun	Pearson Chi-Square	7,014 <sup>d</sup>	1	,008	,008	,005	
	Continuity Correction <sup>b</sup>	6,738	1	,009			
	Likelihood Ratio	6,979	1	,008	,008	,005	
	Fisher's Exact Test				,008	,005	
	Linear-by-Linear Association	7,010 <sup>e</sup>	1	,008	,008	,005	,001
	N of Valid Cases	1939					
Seinni íhlutun	Pearson Chi-Square	1,133 <sup>f</sup>	1	,287	,292	,158	
	Continuity Correction <sup>b</sup>	1,005	1	,316			
	Likelihood Ratio	1,127	1	,288	,292	,158	
	Fisher's Exact Test				,292	,158	
	Linear-by-Linear Association	1,133 <sup>g</sup>	1	,287	,292	,158	,028
	N of Valid Cases	1868					
Total	Pearson Chi-Square	,088 <sup>a</sup>	1	,766	,783	,398	
	Continuity Correction <sup>b</sup>	,066	1	,797			
	Likelihood Ratio	,088	1	,766	,783	,398	
	Fisher's Exact Test				,783	,398	
	Linear-by-Linear Association	,088 <sup>c</sup>	1	,766	,783	,398	,030
	N of Valid Cases	3807					

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 397,77.

b. Computed only for a 2x2 table

c. The standardized statistic is -,297.

d. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 211,87.

e. The standardized statistic is -2,648.

f. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 130,42.

g. The standardized statistic is 1,064.

**Bicycle necessity X Type of Stimuli X Clicks on link/image**

Table 9

	Chi-Square	Df	Sig.
Likelihood Ratio	,000	0	.
Pearson	,000	0	.

Table 10

Step <sup>a</sup>	Effects	Chi-Square <sup>c</sup>	df	Sig.	Number of Iterations
0	Generating Class <sup>b</sup>	,000	0	.	
	Deleted Effect 1	6,340	1	,012	3
1	Generating Class <sup>b</sup>	,000	0	.	

a. At each step, the effect with the largest significance level for the Likelihood Ratio Change is deleted, provided the significance level is larger than ,050.

b. Statistics are displayed for the best model at each step after step 0.

c. For 'Deleted Effect', this is the change in the Chi-Square after the effect is deleted from the model.

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Table 11

Chi-Square Tests						
Hvort vantar neytenda hjól eða ekki	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Vantar hjól	Pearson Chi-Square	13,159 <sup>d</sup>	1	,000	,000	,000
	Continuity Correction <sup>b</sup>	12,779	1	,000		
	Likelihood Ratio	13,189	1	,000	,000	,000
	Fisher's Exact Test				,000	,000
	Linear-by-Linear Association	13,154 <sup>e</sup>	1	,000	,000	,000
	N of Valid Cases	2236				
	Pearson Chi-Square	19,382 <sup>f</sup>	1	,000	,000	,000
Vantar ekki hjól	Continuity Correction <sup>b</sup>	18,863	1	,000		
	Likelihood Ratio	19,598	1	,000	,000	,000
	Fisher's Exact Test				,000	,000
	Linear-by-Linear Association	19,369 <sup>g</sup>	1	,000	,000	,000
	N of Valid Cases	1571				
	Pearson Chi-Square	,088 <sup>a</sup>	1	,766	,783	,398
	Continuity Correction <sup>b</sup>	,066	1	,797		
Total	Likelihood Ratio	,088	1	,766	,783	,398
	Fisher's Exact Test				,783	,398
	Linear-by-Linear Association	,088 <sup>c</sup>	1	,766	,783	,398
	N of Valid Cases	3807				
						,030

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 397,77.

b. Computed only for a 2x2 table

c. The standardized statistic is -,297.

d. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 220,70.

e. The standardized statistic is 3,627.

f. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 176,15.

g. The standardized statistic is -4,401.

The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

Table 12

**E-mail project X Openings**

**Hvaða verkefni var sent með pósti \* Hversu margir opnuðu póstinn eða ekki Crosstabulation**

		Hversu margir opnuðu póstinn eða ekki		Total
		Opnuðu póst	Opnuðu ekki póst	
			Count	
	Expected Count	1388,1	4600,9	5989,0
	% within Hvaða verkefni var sent með pósti	32,8%	67,2%	100,0%
	% within Hversu margir opnuðu póstinn eða ekki	18,4%	11,3%	13,0%
	% of Total	4,3%	8,7%	13,0%
	Std. Residual	15,5	-8,5	
	Count	8226	29003	37229
	Expected Count	8628,9	28600,1	37229,0
	% within Hvaða verkefni var sent með pósti	22,1%	77,9%	100,0%
	% within Hversu margir opnuðu póstinn eða ekki	76,8%	81,7%	80,6%
	% of Total	17,8%	62,8%	80,6%
	Std. Residual	-4,3	2,4	
	Count	518	2472	2990
	Expected Count	693,0	2297,0	2990,0
	% within Hvaða verkefni var sent með pósti	17,3%	82,7%	100,0%
	% within Hversu margir opnuðu póstinn eða ekki	4,8%	7,0%	6,5%
	% of Total	1,1%	5,3%	6,5%
	Std. Residual	-6,6	3,7	
	Count	10710	35498	46208
	Expected Count	10710,0	35498,0	46208,0
	% within Hvaða verkefni var sent með pósti	23,2%	76,8%	100,0%
	% within Hversu margir opnuðu póstinn eða ekki	100,0%	100,0%	100,0%
	% of Total	23,2%	76,8%	100,0%

# The Application of the Behavioral Perspective Model and Market Segmentation through an E-mail Marketing Experiment

Table 13

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	395,176 <sup>a</sup>	2	,000
Likelihood Ratio	374,847	2	,000
Linear-by-Linear Association	362,404	1	,000
N of Valid Cases	46208		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 693,02.