Attitudes of Young Adults Towards Cleaning Agents

Marja Aulanko

Department of Home Economics and Craft Science, University of Helsinki email: marja.aulanko@helsinki.fi

Abstract

The variety of cleaning agents in the market is huge and a consumer may have difficulties in making a choice. The aim of this research was to find out what young adults think about cleaning agents. The material was collected from Finnish and British university students who wrote down their thoughts about cleaning agents. Four themes were emphasized in the writings: marketing, technical factors, lifestyle and knowledge. The young adults' attitudes were largely unanimous, whether or not the respondents had studied cleaning issues. However, the British respondents emphasized safety issues, while the Finnish students emphasized environmental themes. The knowledge which the students desired concerned the basics of cleaning regardless of the respondents' background.

Keywords: Cleaning Agent, Young Adults, Consumer Choices

Introduction

Cleaning agents are an essential part of household maintenance. The aim of a cleaning agent is to release dirt or other unwanted products from hard surfaces or textiles, a process enhanced by mechanics, time and suitable temperature. Dry particles become stuck through electrical forces, but soiling agents can also be fastened by water, oil or grease. Waxes, fats, proteins and pigments are particularly difficult. A soiling agent is often the mixture of many components. Coloured soil is rather troublesome. Although soil could be removed, pigments can remain on the surface and demand special treatment. Different soiling agents behave in different ways in the cleaning process. Some can be dissolved; some must be emulsified in liquid and not allowed to settle down again on the surface. Textiles or hard surfaces can be sensitive to certain chemicals; nevertheless, they need to be kept clean.

Modern cleaning agents need special properties. There are numerous new surface and textile materials that have their own demands regarding cleaning chemicals. Moreover, ways of life have changed, for example, clothes are changed often. They may not be especially dirty, but modern life has brought new kinds of soils that may be difficult to identify and release. An international kitchen, for instance, has brought new kinds of stains to private homes. Because people spend less and less time at home, all household work needs to be done quickly. Detergents should be efficient but safe. Meanwhile, environmental issues present their own challenges to cleaning.

Cleaning Agents

The variety of cleaning agents in the market is huge. There are special products for households, for institutions and for industry. Previously, cleaning instructions were based on soap, alcohol, oil and wild plants. The depressions have taught people resourcefulness. Laundry has been washed with such things as potatoes, because raw potato will foam. (Heikkilä, 1988, p. 24) Compared with modern cleaning chemicals, many old-fashioned

ways of cleaning were quite harsh. Nowadays renewable raw materials increasingly replace ingredients based on mineral oil. Renewable materials include for example starch- and cellulose-based components, which are made from corn, potatoes and cotton. (Henkel KGaA, 2007, p. 16) Forms of cleaning products vary. Along with traditional liquids and powders, concentrates have become more common in recent years. There are also tablets and gels.

It is generally thought that the cleaning agents used in professional settings are very strong. In practice, however, the risks in the domestic use of cleaning agents are much bigger than in professional settings, the reason being that in households; knowledge about the cleaning agents may be very poor and based more on the information given by advertisers than on hard facts. In the professional work cleaning agents are used in a controlled way, and the users have been educated in their correct use. Hauthal and Wagner (2004, p. 13) present some requirements for modern cleaning agents: good cleaning performance, favourable price, care of materials, environmentally friendly, consumer safety, hygienic together with such additional features as pleasant fragrance, convenience and 2-in-1 products.

Choice of Cleaning Agents

Attitudes towards household work may influence attitudes towards cleaning agents. The environment and the culture may have influence as well. Kristiina Aalto (1996, p. 30) has found four attitudes in cleaning: cleaning, evasive cleaning, routine cleaning and cleaning procedure development. It can be assumed that the choices of cleaning agents also reflect these attitudes. It can be assumed that sporal cleaners think about the purposefulness of products when they clean. Evasive cleaners may use whatever cleaning agents are at hand. On the other hand it is possible that they aim to buy as efficient detergents as possible to pass the job quickly. Routine cleaners probably use products to which they are accustomed. Those who try to develop cleaning procedure may choose cleaning products on the basis of achieving

results which are as good as possible from the viewpoint of the whole.

Timonen (2002, pp. 167–172) has stated in her doctoral dissertation that sensible consumers act mainly in three ways: They search for the best price, they search for a certain product by some logo or mark, and they seek either to avoid some property (like chlorine) or to find a certain property (like low energy consumption). If the property cannot differentiate between products, then either price or name brand can be of help in making a choice. As Brackmann and Viefhaus (1999, p. 51) have stated, quality in function is important to consumers as well as the ratio of price to performance.

Aalto (1998, p. 3) has observed that in choices regarding textile care, environmental viewpoints are not the primary criteria, rather viewpoints that are visual or connected with self-esteem and lifestyle may prevail. In particular, the appearance – the packaging and form - of many laundry chemicals can prove very attractive. Many-coloured powders and pearls attract some consumers. The user gets the first experience of a product by means of sight, hearing, touch and smell. These qualities actually have very little to do with the product's performance, but they can give a strong character to a brand. Jordan (2000, p. 78) remarks that personal ideologies influence the aesthetics by which people appreciate products.

In the planning of a product all things are not emphasised in the same way. It can be assumed that the users' emphases are not similar either. An important issue is a product's influence on lifestyle. There is a question of those things that influence a customer's imagination and make the product pleasant at the moment of buying. Such things have an effect on consumer choice. Factors connected with the look and the performance of a product have an influence on the consumer's understanding of the product and determine whether it is bought. (Cagan & Vogel, 2003, pp. 228–231). Mutanen reports on research based on British and American material which deals with the attitudes towards television advertisements. According to the research, attitudes towards products are more positive if advertisements arouse emotions. If the advertisements do not arouse feelings, they do not have much impact, even though they include plenty of new information. (Mutanen, 2007, p. 4).

Currently, the variety of cleaning agents is so great that a consumer may have difficulties in making a choice. Vuori and Toivonen (1996, pp. 8–9) see four critical aspects in the relationship of consumers to products: 1) the attractiveness of a product or a product group; 2) the situation in which a product is selected from competing products; 3) the period of use, during which users get experience with the product; and 4) the renewal or the change of a product. All these aspects are important from the point of view of satisfaction. During these phases a consumer experiences of the product and its usability.

The concept of usability describes the functional quality or the quality of a user's everyday experience. Sinkkonen, Kuoppala, Parkkinen & Vastamäki (2002, p. 67) describe people's functional states with the concept pairs

'conscious – unconscious', 'controlled – automatic' and 'considering – experienced'. These descriptions can also be applied to attitudes towards cleaning agents. People are not always aware of the reasons for their choices. Some opinions that appear not to be based on anything may have their roots in attitudes received in childhood. Some brands have been on the market for decades, and it is possible that they have been passed from mother to daughter without any special consideration. Brackmann, Mayer and Viefhaus (2001, p. 35) believe that different lifestyles will result from more affluence, more flexibility and also from more mobility and bring about changes in consumers' needs.

Objectives

The aim of this research was to find out what young adults think of cleaning agents. In modern society there are many trends and phenomena that influence young people's thoughts. Young people whose experience of life is limited and whose education is still underway are often very absolute in their opinions. The strengthening of green thoughts and the goal of living a natural life guide opinions in a certain direction as does emphasis on efficiency, trends and economic profit. The goal was to find out what young adults think – not what they have learnt - as well as to discover what things regarding cleaning they wanted more information about and what things in their opinion were important. The aim was also to see if young adults who lived in a different culture and whose education was different think in the same way.

Methods

The material was collected from Finnish and British university students' writings. Finnish students (N=68) studied to become home economics teachers and British students (N=21) participated in consumer studies but had not taken part in any studies regarding cleaning. The students were asked to write down their thoughts about cleaning agents. They did not get more instructions, because the instructions might have had some influence on their thoughts. The writing took about ten minutes. The writings were analysed by means of content analysis. The material was categorised and the most emphasised categories were taken under examination.

Results and Discussion

It was easy to identify four themes emphasised in the material: marketing, technical factors, lifestyle and knowledge. These themes stood out regardless of the country. Environmental and economic issues overlapped with these themes and are dealt with among all themes. In the following text authentic quotations illustrate the main themes.

Marketing

The respondents considered the marketing factors very strong. With emphasis they stated that advertisers endeavour to give the feeling that the products being promoted have better properties compared with older products. The young adults believed that many people

choose their products based only on advertisements because they do not have information about the products. As mentioned above, Vuori and Toivonen (1996, p. 8–9) consider that advertising, the first phase is to attract customers. The assumed improvements persuade people to buy. People believe that marketers create strong images that persuade customers to buy. Researches regard persuasion as part of social influence. Advertisers consider consumers' feelings an important way to spread their message. (Ryynänen, 2007, pp. 24, 36).

Detergents are developed more and more all the time and advertising campaigns make us soon believe that the sleeve ends and the shirt must be washed using different laundry agents. Many consumers do not have any knowledge about what is the content of cleaning chemicals or at least they do not know of their effects. Many people have chosen the product according to advertisements. (Finnish student)

The brands are connected with price, although the most expensive products are not regarded as the best. Timonen (2000, p. 167–169) has observed that the price and the familiarity of a product are important reasons for consumers' choices. Aalto (1998, p. 51) has arrived at the same conclusion. The respondents considered whether price has connections with a product's performance and whether cheap products are as good as name brands. Brackmann and Viefhaus (1999, p. 50) have observed the ratio of price to performance as being important to customers.

I am especially interested and I have wondered if the price differences have a comparative significance in relation to the quality of products. When the budget is small, mostly the cheapest product is bought. (Finnish student)

Many people are faithful to a certain brand. It is easier to buy the same product repeatedly because the choice is routine.

I use always a few brands. (Finnish student) Habit and familiarity are easily a person's second nature. (Finnish student)

Aalto (1998, p. 51) observed that routines were emphasised in her subjects' choice of detergents. A change of brands demands a consideration of choice. Vuori and Toivonen's (1996, p. 8–9) thought of the competition of brands is easy to see. The choice process and the change of brands demand the follow-up of trends and product development. On the other hand, some respondents said that it was nice to use different products.

I really know that I could manage with one detergent or two, but I think that cleaning is more sensible if I have a specific detergent for every situation and every room. It is nice to play with many bottles and choose a detergent with a different scent for every room! (Finnish student)

According to the respondents, women are more informed about choices than men. Therefore, advertising is directed to women. Cleaning agents belong to the area of traditional women's work, which partly directs

advertising. This opinion is supported by Autio's observations according to which boys state that women have adopted a consumer role and girls go shopping. (Autio, 2006, p. 64) A French philosopher Henri Lefebre thinks that organised everyday life will be materialized mainly in women's world. Women buy and consume consumer-goods and they are the objects of marketing strategies. (Kortti, 2007, p. 108).

People's needs are not always preferred in marketing. What is most important is that there are alternatives. When the number of alternatives increases, man-made needs are created. Many young adults thought that unessential matters were emphasised in marketing.

I think that there are far too many selling tricks on the market and they lead consumers astray (the structure of a product, scent, shape, colour, bottle or box etc. (Finnish student)

Advertisers try to make consumers buy new products based on wrong argument. (Finnish student)

In laundry detergents the most irritating thing is the huge variety with big price differences and novelties when after a more exact examination it can be seen that they contain very similar components. It seems as if the consumers would be deliberately led astray. (Finnish student)

Technical Factors

Although the respondents were all very similar in their views, one national difference could be observed around the theme of technical factors: the British respondents emphasised safety issues, while the Finnish students dealt with environmental ones. According to discussions with a British student group a year later, one reason for this difference may be geographical. The British respondents lived in London, which is a big city, while the Finnish students had been used to living near waters and forests. The other reason may be the difference in education. The Finnish respondents had taken part in courses in which cleaning agents and their use had been discussed. Thus, they were not so worried about safety as the British students.

The British students viewed cleaning chemicals as being very strong. Strong detergents were considered very efficient, but harmful effects were also connected with them.

Chemicals which are used in cleaning of hard surfaces are very dangerous, but very efficient in doing their work. (British student)

The young adults took it for granted that cleaning chemicals were troublesome in some way. They were especially concerned about the problems caused by breathing the chemicals.

All cleaning chemicals are poisonous in some way and they are harmful to the environment and people. They can be dangerous to respiratory organs and some can burn skin and eyes. That is why it is important to know what they contain and which are alternatives. (British student)

Some respondents were concerned about children and old people who were thought to suffer from the ill-effects of cleaning agents.

I think some chemicals are not suitable to households where there are small children, old people and other people who are not in good health. I think that we should have more information about injurious effects when cleaning agents are used at home. (British student)

Some students had experienced skin problems.

I have noticed how dry and ulcered my hands become and sometimes they begin to itch afterwards. (British student)

Brackmann and Viefhaus (1999, p. 51) have observed that knowledge about the allergic effects of perfumes or preservatives has an influence on choice. On 1 June 2007, the new EU REACH (Registration, Evaluation and Authorisation of Chemicals) regulations came into force. According to these regulations, manufacturers and importers will be required to gather information on the properties of their substances as a means of encouraging safe management. This regulation will improve the protection of both human health and the environment from the risks of chemicals. (Virdi, 2007, pp. 62–63).

Young adults wanted the bottles of cleaning chemicals to be supplied with instruction labels and information about what happens if chemicals are used in the wrong way. People were not well informed about the effects of detergents, they believed.

But I think that it is dangerous to use strong chemicals and I do not know much about them. (British student)

Do these chemicals have any effect on unborn children if pregnant women use them? (British student)

Environmentally friendly factors were emphasised by the young Finnish adults.

I think that there are not enough environmentally friendly products in regular grocery shops. (Finnish student)

The effects of cleaning agents on people and the environment must be considered. Natural agents must be brought out and their positive effects must be understood, although some other alternative would be more economic. (Finnish student)

Although ecological factors were considered important, inefficiency and high prices were also issues. Virdi (2007, p.62) also deals with this theme in the European Cleaning Journal. According to her article, Europeans tend to believe that if something is green, it cannot work. People assume that green products are expensive and perform poorly, as did the students in this research. Some respondents mentioned eco-labels, but the nature of eco-labels was not always understood. If a product has the right to an eco-label, its performance must be as good as the average performance in the same product group.

I prefer to choose an environmentally friendly and functional product, although I have to pay more for it than for a cheap brand. Products that have

received an eco-label can be recommended if one can afford them. (Finnish student)

When an eco-labelled laundry detergent is used, there is the risk that some stains remain. Or do they? (Finnish student)

Many also wondered whether the claims to have environmentally friendly properties were true. The average consumer cannot always know which products are truly environmentally friendly. The eco-labels are one indication and a consumer can only rely on them.

I think that it is very difficult to find an ecological laundry detergent and to be honest, I do not know if there are many. (British student)

It has also been said that eco-labels, despite their appearance of objectivity, are not based on science. That is why it cannot be guaranteed that products with eco-labels are any better for the environment than products that meet all legal requirements. (Heinze, 2004, p. 792–800)

Many cleaning chemicals have a strong scent. The unpleasant odours of raw materials are hidden by scents. However, many people are sensitive to perfumes. The attitudes towards scents were of two kinds.

The environmentally friendly products are not attractive because they are expensive and their scent is not good. (British student)

An environmentally friendly and scentless alternative will find its way into my home. (Finnish student)

Speed was emphasised by many respondents. The use of cleaning agents allows time for other activities.

When I use strong cleaning chemicals, I have noticed that I need to work less to remove stains. (British student)

The less time you use for cleaning, the more time you can use for more pleasant things. (British student)

Ease and handiness are the words of the day. (Finnish student)

Lifestyle factors.

It is natural to use cleaning chemicals. According to Jordan (2004, p.75), research has shown that people tend to think of products as if they were personalities, and they tend to express a preference for products that they perceive as reflecting their own personalities. Cleaning agents are necessary, although their significance is not thought about. They belong to everyday life.

Cleaning chemicals belong to the western lifestyle. (British student)

Cleaning chemicals have an important place in the life of a modern individual. Their place in the need hierarchy may be right after warmth, nutrition and love. (Finnish student)

Laundry and cleaning agents are self-evident when there are stains! They are industrial products which are necessary, although they cannot be considered such. (Finnish student)

In the choice of cleaning agents many principles prevail

that in some way reflect people's attitudes. Environmentally responsible people, for instance, search for products with eco labels. Many people have an environmentally friendly lifestyle, and their aim is to decrease the use of detergents.

I would not like to use too much laundry and cleaning agents. I can make the weekly cleaning without any detergents. The wide use of them has gone over the border of vanity. (Finnish student)

This insensibility may rise against us. Waters become polluted and organs become poisoned. (Finnish student)

Ecologically responsible attitudes are supported by Brackmann et al. (2001, p. 35). They forecast that in the future, consumers will increasingly prefer products of a natural origin.

Although some people have some knowledge about the properties of cleaning agents and others consider protecting nature to be important, chemicals are not chosen for those reasons. One's own pleasure is important and in the choice of cleaning agents it means a certain scent or brand.

When I choose cleaning agents, I do not necessarily take more ecological product but I may choose according to my own liking. It means that although things are known, I do not always act accordingly. (Finnish student)

Middelhauve (2001, p. 43) points out that after the decade when ecological aspects were emphasised, the convenience and special effects are becoming more and more important to consumers. This consideration is supported by Jordan (2000, p. 189), who remarks that buyers may subconsciously want to convince themselves that a purchase is rational and find reasons to justify the purchase. Statistics show that the professional use of cleaning agents has increased in Sweden. One reason for this may be the increased number of special products. (Lundell, 2007, p. 19). It is possible that the same trend can be observed in household cleaning sooner or later.

Knowledge related factors.

Respondents indicated they would prefer more information about existing products to greater variety of choice.

Real information about the properties of products is given very little unless one intentionally goes into the theme and searches for information. (Finnish student)

Young adults wanted to get more knowledge about the basics of cleaning agents and their use.

I need information about different cleaning methods – what is efficient on different types of dirt. (Finnish student)

When should something be washed and when it is exaggerated, for example, with clothes. (Finnish student)

Practical and ergonomical cleaning methods? In which temperature and with what kinds of equipment do the detergents work best? How should

detergents be dosed? Is cleaning natural chemistry? (Finnish student)

Laundry issues turned out to be problematic. One reason was the significance of different types of laundry agents. Many-sided comparisons of powders, liquids and tablets were regarded as important.

A consumer should know the correct use, objects and dosages of cleaning agents. (Finnish student) It would be useful to know if it is occasionally possible to do laundry by hand using a dishwashing agent. (Finnish student)

The significance of a dosing ball was not clear, either. The different operations of a washing machine were not understood and the need for more knowledge was evident. However, the primary problems were the compositions of cleaning agents and the effects of different components.

At the moment I need basic knowledge, so that I can sensibly compare the choices in the store. (Finnish student)

It would be important to know how cleaning chemicals and especially laundry chemicals react in different temperatures. (Finnish student)

The information that I need is why and how ... I like to make conclusions from the reasons and the consequences of reactions on the practical level. (Finnish student)

The respondents were interested in the ecological effects of cleaning agents.

I would need more information about environmental issues → what every product really causes when it returns to nature. (Finnish student) I think that more should be told consumers about the influences of cleaning agents on our environment and health. Too much hygiene should be given up! (Finnish student)

All young adults were not aware of the fact that cleaning agents should be used such as they are. Some people wanted to know which detergents should not be combined if there are bottles which are not full. Some respondents had had unpleasant experiences in mixing of cleaning agents.

Conclusions

Although the results cannot be generalised because the object group was relatively small and limited, the material was nevertheless sufficient for an indicative examination. It is possible to assume that a bigger object group would not have changed the findings. The method of collecting the material was deliberate. The short writings brought out the essential thoughts. The young adults' attitudes were largely unanimous, whether or not the respondents had studied cleaning issues. However, the British respondents emphasised safety issues, while the Finnish students emphasised environmental themes. There were no difficulties in interpretation. The writings brought out clearly the general attitudes towards cleaning agents as well as the themes about which the respondents wanted more information. It is thus possible to state that the aims were achieved.

The knowledge which the students desired concerned the basics of cleaning, regardless of the respondents' background. Cleaning issues start to become interesting when young people have to maintain their own households. For this reason information should be produced in a way that interests young people.

Lifestyle factors were emphasised by the respondents. However, the strength of a product seemed to be the only remarkable factor. Those who used strong chemicals wanted to finish a job quickly in order to use their time for other activities. Those who avoided strong chemicals preferred ecological lifestyles. Other elements of the cleaning process were not considered, although the general discussion of energy and water consumption, for example, was up-to-date.

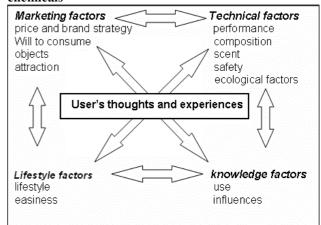
Sensible housekeeping means that the variety of cleaning agents at home is not unnecessarily large, as some respondents stated. Some people said that it was a pleasure when there were plenty of different cleaning agents, and every object to be cleaned had its own special cleaning product. From the viewpoint of the whole, it is not sensible but as a lifestyle factor it may be important to some. It indicates some kind of individualism.

The young adults' responses followed the lines presented by Timonen (2002, pp. 167–172). Price was important as well as brand name. However, the brand did not present any trend factor but showed a preference for products that testified to the efficiency of advertising. It is evident that the respondents connected the properties of cleaning agents more with brands than with the types of detergents. As to the laundry agents, the respondents spoke of agents that were used in the washing of white, coloured or easily damaged materials. As for cleaning agents for hard surfaces, a similar classification according to use was not seen. This indicates that young people have more experiences in doing laundry than in cleaning rooms. To keep clothes in good condition, a consumer has to pay attention to textile care, which simultaneously teaches laundry process. On the one hand, students' dwellings do not offer similar possibilities to practice cleaning different hard surfaces. On the other hand, in everyday cleaning many types of cleaning agents are not needed and the special treatments of surfaces do not belong to students' everyday life.

According to Timonen, one reason for choosing a particular cleaning agent may be to avoid some property. The components that caused allergy turned out to belong to this group. Niva, Heiskanen & Timonen (1996, p. 15) and Aalto (2002, p. 58) have found that in decision making, scent as well as allergy factors are very important.

On the basis of the considerations above, the following model (Figure 1) can be presented.

Fig 1. Consumers' attitudes towards cleaning chemicals



Lifestyle factors and technical factors overlapped somewhat. The technical properties promote the realisation of a chosen lifestyle. A trendy and quick lifestyle demands products that are efficient and work rapidly. A nice scent makes for pleasure. Those who respect ecological values pay attention to environmental properties and product safety. The marketing factor and the knowledge factor have also some connections to choice, but attitudes towards marketing were not very positive. Sufficient basic knowledge enables the evaluation of marketing arguments in a realistic way.

References

Aalto, K. (1996). *Kotisiivous osana arjen hallintaa*. (English summary: Cleaning at home as a part of everyday life) Julkaisuja 4-1996.Helsinki: Kuluttajatutkimuskeskus.

Aalto, K. (1998). Vaatteiden käytön ja hoidon ympäristövaikutukset. Tuoteinformaatio ja kuluttajan vaikutusmahdollisuudet. (English summary: Environmental effects of the use and care of clothing – product information and alternatives for consumer choice) Julkaisuja 10 – 1998. Helsinki: Kuluttajatutkimuskeskus. Aalto, K. (2002). Kotitalouksien tekstiilienhoitokäytännöt ja niiden ympäristömyönteisyys. Julkaisuja 2-2002. Helsinki: Kuluttajatutkimuskeskus.

Autio, M. (2006). *Kuluttajuuden rakentuminen nuorten kertomuksissa*. (English summary: The construction of consumerism in young people's narratives). Helsinki: Suomalaisen Kirjallisuuden Seura.

Brackmann, B. & Viefhaus, A. (1999). Trends in detergent care products. *39th International Detergency Conference September* (pp. 46–54). Krefeld: WFK – Forschungsinstitut für Reinigungstechnologie.

Brackmann, B., Mayer, A. & Viefhaus, A. (2001). Trend research can identify by 2010 entirely new groups of consumers. 40th International Detergency Conference (pp. 35–42). Krefeld: WFK - Forschungsinstitut für Reinigungstechnologie.

Cagan, J. & Vogel, C.M. (2003). *Kehitä kärkituote. Ideasta innovaatioksi*. Helsinki: Talentum.

Hauthal, H.G. & Wagner, G. (2004). Household cleaning,

care and maintenance products. Chemistry, application, ecology and consumer safety. Augsburg: Verlag für Chemische Industrie. H Ziolkowsky GmbH.

Heikkilä, T. (1988). *Saippuasta nykyaikaisiin pesuaineisiin*. (English abstract: From soap to modern detergents) Helsinki: Tekniikan museo.

Heinze, J. E. (2004). Science versus politics in the environmental regulatory process. In U. Zoller (Ed.) *Handbook of detergents. Part B: Environmental impact.* (pp. 785–802). New York: Marcel Dekker.

Henkel KGaA. (2007). Sustanability report 2006. Düsseldorf.

Jordan, P. (2000). *Designing pleasure products*. An introduction to the new human factors. London, New York. Taylor & Francis.

Kortti, J. (2007). Sukupuoli mainonnan ja mainonnan tutkimuksen historiassa. In V. Heinonen & J. Kortti (Eds.) *Vaikuttamista ja valintoja* (pp. 105–129). Helsinki. Gaudeamus.

Lundell, L. (2007). Kemikalier ökar igen. Rent 3,19.

Middelhauve, B. (2001). New ingredients for detergents and cleansers – short lived or added value for the future. 40^{th} International Detergency Conference (p. 43. Krefeld: WFK - Forschungsinstitut für Reinigungstechnologie.

Mutanen, A. (2007). OSTA- nappulaa etsimässä. Tiede 3,

44–46.

Niva, M, Heiskanen, E. & Timonen, P. (1996). *Ympäristöinformaatio kuluttajan päätöksenteossa*. Kuluttajatutkimuskeskuksen julkaisuja 11-1996. Helsinki: Kuluttajatutkimuskeskus.

Ryynänen, T. (2007). Kuinka mainonta suostuttelee? Teoreettisia suuntauksia sekä kuluttajan ja suostuttelun suhteita. In V. Heinonen & J. Kortti (Eds.): *Vaikuttamista ja valintoja* (pp. 20–47). Helsinki. Gaudeamus.

Sinkkonen, I., Kuoppala, H., Parkkinen, J. & Vastamäki, R. (2002). *Käytettävyyden psykologia*. Helsinki: IT Press. Timonen, P. (2002). *Pyykillä – arkinen järkeily ja ympäristövastuullisuus valinnoissa*. (English summary: Doing the laundry – mundane reasoning and environmentally responsible choices.) Helsinki: Kuluttajatutkimuskeskus. National Consumer Research Centre.

Virdi, A. (2007.) How green can chemicals be? *European Cleaning Journal* 15 (2), 62–63.

Vuori, M. & Toivonen, S. (1996). Käytettävyyden merkitys tuotteiden menestystekijänä. In *Käytettävyys II. Käytettävyys tuotekehityksessä: innovatiivisuutta ja varmistamista.* (pp. 5–9). Helsinki: Sähkö- ja elektroniikkateollisuusliitto.