TALLINN UNIVERSITY OF TECHNOLOGY

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TTÜ STUDENTS' CONSUMER BEHAVIOR: RECOGNITION OF KALEV COMPARED TO FOREIGN ALTERNATIVES

Bachelor's thesis

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ABSTRACT

In the bachelor's thesis the author surveys student-respondents of Tallinn University of Technology. A sample of 123 students of various study backgrounds, both international and local and of different age groups and gross income, participated in the online-questionnaire. The aim of the paper was to study consumer behavior of students of Tallinn University of Technology in brand recognition and consumer preference of chocolate confectionery products of popular brands, including Estonian national "*Kalev*" and foreign alternatives. Non-probability sampling was used to select the students of Tallinn University of Technology by the means of social-media. Results demonstrate that most students including international students consider Estonian national *Kalev* brand to be the most recognized, although in the latter part of the survey, products of other well-known chocolate confectionery trademarks were marked as most preferable, including products of *Fazer*, second most popular chocolate confectionery trademark in Estonia, and *Milka* brands. However, combined number of votes of preference for *Kalev* and *Fazer* products received an equal amount of preference points in total in one case. It is further suggested that the brands with the least popular chocolate confectionery products as marked by respondents conduct a marketing campaign oriented towards Estonian students.

Keywords: **brand recognition, chocolate confectionery, consumer behavior, customer preference, student perception**

INTRODUCTION

Given bachelor's thesis is focused on the study of students' consumer behavior in brand recognition and preference with the primary idea to compare students' recognition of popular available brands on the market with Estonian national "*Kalev*" brand. To compare students' consumption preference in choosing their favorite chocolate confectionery products the research method of online-questionnaire is employed. Tallinn University of Technology (further *TTÜ*) students constitute the non-probability sample for the current consumer survey and thus its population is the primary research target for fulfilment of the aim of the given bachelor's thesis.

Chocolate confectionery remains among the most popular produced and consumed products in the European Union, with 2,633,245 tons being consumed and 2,883,870 tons produced in 2012 according to the *Caobisco Statistical Bulletin* (European Confectionery … 2014, 27). In Estonia, the biggest national confectionery producing trademark is "*Kalev*", which is believed to have the largest chocolate confectionery market share (Estonia in … 2015). Not only is popularity of *Kalev's* food products acknowledged by its statistically measured market share, but is also established in brand contests. For instance, within the Estonia's Best Food Product (*Eesti Parim Toiduaine*) 2018 contest, *Kalev's Maiuspala* chocolate earned the People's Favorite title in April 2018 (Eesti Parima … 2018, Meeldivaim brand … 2018). Simultaneously, popularity of products of other, foreign chocolate confectionery trademarks such as *Fazer*, the second biggest chocolate confectionery trademark, is neither low in Estonia, according to the 2017 *Kantar Emor's* research agency's data (Toidubrändide … 2017, see Appendix 1).

Topicality of the paper is based on availability of previous bachelor's degree studies of consumer behavior in chocolate confectionery. Among available papers, the study within the final thesis by Korotin (2016) was aimed to find possible correlation in consumer preferences for choosing popular brands of milk chocolate available in Estonia, based on the taste tests of proposed products. Bachelor's thesis by Pjatakova (2015) focused on collection of empirical data on consumer motives of Estonian and Russian consumers in consuming chocolate products available in Estonian market. Besides academic final papers, there is a shortage of commercial non-government or government-ordered studies regarding consumer behavior, specifically in the field of chocolate

confectionery. For instance, 2017 study by *Kantar Emor* research agency overviews popularity of different food brands, without specifically outlining chocolate confectionery products (Toidubrändide … 2017, see Appendix 1). There is a shortage of relevant studies, which focus on Estonian students' consumer behavior in chocolate confectionery' brand recognition. Due to this, little attention is paid towards preferences of Estonian students in consuming foreign chocolate confectionery products compared to the Estonian national "*Kalev*" trademark. It is thus complex to say, without conducting respective research, if a complex nature of a student as a type of consumer segment is influencing student's preferences in choosing foreign chocolate confectionery products as opposite to the products of a well-known national brand, or *vice versa*. Given study, on the contrary, will allow to see student's preferences in consuming chocolate confectionery products of different popular brands, available in Estonian market, including *Kalev, Fazer, Mars, Inc*. and *Milka* products.

The **problem** of research of the current bachelor's thesis is the lack of recent studies of Estonian students' consumer behavior in their preference of chocolate confectionery, namely firmly popular products of "*Kalev*" brand and available popular foreign alternatives. To fill the void of the lack of studies, the author surveys students of Tallinn University of Technology by using the online-questionnaire methodology, in order to study brand recognition and preference of students in choosing among the popular brands and products of chocolate confectionery.

The **aim** of the bachelor's thesis is to study consumer behavior of students of Tallinn University of Technology in brand recognition and consumer preference of chocolate confectionery products of popular brands, including Estonian national "*Kalev*" and foreign alternatives. The following **tasks of research** are set:

1. Study the aspects of consumer behavior in brand recognition and preference;
2. Study the market share of popular chocolate confectionery trademarks operating in Estonia;
3. Conduct the online-questionnaire among the students of Tallinn University of Technology to collect their perspective on brand recognition and preference in biggest chocolate confectionery trademarks;
4. Analyze survey results and outline possible consumer trends in preference of popular chocolate products among the students of Tallinn University of Technology based on acquired survey data.

In the bachelor's thesis, several research methods are employed, to collect, analyze the scholarly knowledge in the field of consumer behavior and brand recognition, as well as conduct consumer behavior survey among the sample of TTÜ students. The method of the literature review is a qualitative research method used to analyze the literature, including scholarly articles and survey reports, in order to justify the particular approach to the topic and thoroughly study specific aspects of research (Hart 1998, 1). It is a methodology that allows to build a knowledge based on theory development (Webster & Watson 2002, 13, Levy & Ellis 2006, 182). The process of literature review consists of formulation of a research problem, setting an aim of study, collection and reviewing of authentic academic literature and other helpful material (such as statistics on consumption and data on market share), and finally constructing the literature review in accordance with the problem of research, and citing the studied material. Among the most prominent authors in marketing, the works of Kotler *et al* (2012) and Solomon *et al* (2006) are of particular scholarly usefulness.

Online-questionnaire is the quantitative research method (Leeuw *et al* 2008, 2), which is used to collect TTÜ students' aspects of consumer behavior in chocolate, research their chocolate confectionery brand recognition patterns among popular brands, and study their respective attitude towards chocolate confectionery preference. Besides, methods of statistical analysis are as well used to analyze the data collected from the sample. An in-depth overview of research background, including employed research methodology, sampling and the process of data collection and analysis is described in detail in the second chapter of the given paper (see ch. 2).

Current bachelor's consist of three primary chapters, each focused on respective part of the study. In the first chapter, the author conducts the literature review based on collected body of literature, which includes scholarly peer reviewed articles on consumer behavior and brand recognition, statistical reports of geographical chocolate production, and consumption and available marketing studies in chocolate confectionery brand recognition. To collect relevant studies the author uses the following academic tools: *Google Scholar*, *EBSCOHost* databases and the digital library of Tallinn University of Technology (*TTÜ DigiLib*), as well as other sources for academic research. Statistical data is provided via media reports, statistical database of *Statistics Estonia*, *Euromonitor International*, *Eurostat* and the studies associated with or conducted by acknowledged survey groups (see ch. 1). In the second chapter, the author describes background of research and gives an overview of employed research methods, processes of sampling and data analysis. Besides, description of products of popular chocolate confectionery trademarks, brand recognition and preference of which constitutes the survey, is provided in the second chapter (see ch. 2). In the

final, third chapter, collected consumer' feedback from the surveyed students is analyzed and the results data is summarized in the tables and figures. In the end of the paper, the author concludes on the study and proposes further research (see ch. 3).

1. LITERATURE REVIEW CONSUMER BEHAVIOR AND BRAND RECOGNITION

Given chapter presents the literature review conducted by the author of the current bachelor's thesis, in order to study the concepts of consumer behavior and brand recognition as broader topics, as well as more specifically consumer behavior in purchasing chocolate confectionery. At first, relevant definitions for the topic are studied. In the next subchapter, the author studies the concept of brand recognition in consumer behavior, including primary factors of recognition and customer preference in marketing. In the last part of the theoretical background, the author gives an overview of available studies of chocolate confectionery in consumer behavior and brand recognition.

1.1. Relevant definitions

Before the primary collected literature is studied and the literature review is written, the author studies general definitions of key terminology, related to consumer behavior and brand recognition. Study of definitions in the process of literature review may be important, due to the fact that it allows the author highlight and understand the core concepts, which constitute the basis for the current study, as well as inform the reader of the meanings behind the key terms. Defining key terminology also plays an important role in the literature review, as some authors point out, since understanding of basic research terminology allows the author to base the study on specific rather than abstract research category (Wacker 1998, 363-364; , Levy & Ellis 2006, 194). The following overview of definitions is therefore included in the course of the literature review:

Brand recognition – according to Hamid *et al* (2012), brand recognition is "*the amount to which a brand is recognized for acknowledged brand attributes or communications among consumer*" (Hamid *et al* 2012, 75). Brand, in turn, can be defined as a summary of content or identity or a set of distinguished features of a content of the product or service. Others define brand as a positive reputation formed around a concrete trademark (Antila 2016, 10).

Chocolate confectionery – according to the internationally recognized *Standard for chocolate and chocolate products* by *Codex Alimentarius*, chocolate is a product, which, according to the

standard "*shall contain, on a dry matter basis, not less than 35% total cocoa solids, of which not less than 18% shall be cocoa butter and not less than 14% fat-free cocoa solids*" (Standard for … 2003). Confectionery preparation trade is believed to go back to the eighteenth century, according to Ivan Day's historical overview of confectionery (Day 2007, 1). Besides being a popular consumer commodity (European Confectionery … 2014, 27), consumption of chocolate and its impact on cognitive health is also extensively researched in the scholarly literature (e.g. Sokolov *et al* 2013, 2445). Given bachelor's thesis is not focused on specific type of chocolate confectionery, such as sugar chocolate or milk chocolate. Rather, it is the author's purpose to study brands and brand recognition, which are the products of popular trademarks available for consumers in Estonian shopping shelves.

Consumer – according to the study of consumer behavior, there are two distinctive modern marketing theories available, which differentiate between an individual customer and organizational consumer as two different consumer units (Wilson 2000, 780-782). In the context of the current bachelor's thesis, which pursues the study of students' consumer behavior, consumer is regarded as an individual customer, who seeks his/her needs and demands. Chaudhury (2017) defines a consumer as an individual, who acquires goods or services for direct use or ownership rather than for re-sale or use in production and marketing (Chaudhury 2017, 224). Solomon *et al* (2006) provide a more specific definition of a consumer in marketing, which is a unit, which in the market is categorized by a number of distinctive features, that influence his/her consumer behavior, such as age, gender, income, occupation and other (Solomon *et al* 2006, 4). Thus, a consumer as a market unit consists of distinctive features, which categorize him/her as a specific customer, who seeks specific goods and services to satisfy his/her specific needs and demands, rather than an abstract customer.

Consumer behavior – subfield of marketing, as defined by the marketing author Philip Kotler, which is aimed at the study of consumers, customer segments and consumer decisions they make, as well as consumer preferences (Kotler *et al* 2012, 133-135). Other authors recognize consumer behavior as consumer activities in or during the search of a specific product or service, the aim of which is satisfying one's customer needs, as well as an act of judgment, receiving, utilizing and dispensation of goods and services, as an addition to the process of making consumer decisions. The latter definition is especially relevant for products that require special utilizing and recycling, such as technology (Khaled 2008, 44-45).

Consumer behavior may be recognized as a part of organizational marketing theory, besides inherently belonging to consumer marketing theory. Given "dualistic" view is possibly attained from the standpoint that customers consume as willful individuals, who are driven by the will of satisfying their consumer needs, whereas organizations purchase as a rational group. Some marketing authors thus assume these two seemingly distinctive aspects of consumer behavior belong to separate theories. A customer is a consumer unit, who consumes products or services for his/her satisfaction and based on his/her personal consumer decisions and willingness to do so. An organization consumer is a type of a consumer unit, which purchases goods or services based on organizational/entrepreneurial needs, in order to satisfy material needs of an enterprise (Wilson 2000, 780-782). Since these two distinct types of consumer behavior are influenced by different motivations, it is nonetheless important to note that the above distinctions were studied purposely for academic addition, whereas the current bachelor's thesis focuses solely on chocolate confectionery brand recognition among Estonian students.

Preference in consumer behavior – while it was previously studied that consumer preference is studied within a subfield of consumer behavior (Kotler *et al* 2012, 133-135), it could be nonetheless beneficial to understand the term from a more specific angle, given the scope of the current paper. According to Anojan *et al* (2015), consumer's preference refers to the market success of a particular brand, which "*match best to the current environment "imperative" which can be delivered what are the people needs and they are ready to buy at the right time without any delay*". Solomon *et al* (2006) define consumer preference as consumer decision based on brand loyalty, whereas brand loyalty is a form of repeat purchasing behavior, which reflects a conscious decision to continue buying the same brand (Solomon *et al* 2006, 289). Thus, preference in consumer behavior is ability of a brand to form long-term loyalty of its customers, by both, adjusting to environmental "imperative" and demands of a market and provide suitable service to satisfy their customers' needs and demands. It is also noteworthy to point out a distinction between *inferences* as opposed to *preferences*. Despite *inferences* being a potential predictor of preference towards a particular trademark, such as when a consumer acknowledges that certain brand is of higher quality than another brand, he/she may nonetheless *prefer* a brand of lower quality due to the other set of criteria (Simonyan & Goldstein 2013, 3).

Student (segment) – it is complex to study a student as a separate consumer segment, as most available studies focus on student' consumer behavior in pursuing higher education (Shen 2004, 53, Al-Fattal 2010, Eftimie *et al* 2011, 736, 5-8, Tan 2015, 1). According to Muniady *et al* (2014), students represent a complex consumer segment, due to the fact that students are constantly

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challenged by and faced with many life decisions, which make given segment attractive to many businesses (Muniady *et al* 2014, 19). Horáková (2015) points out the growth objective set in the Strategy Europe 2020, which encompasses the concept of economic growth and a higher employment rate. The students thus play a crucial role in development of economic growth, well-being and employment rate and therefore are important segment on a macroeconomic level (Horáková 2015, 69).

After key definitions are studied, the author employs understanding of respective terminology as written above throughout the course of given bachelor's thesis.

1.2. Brand recognition in consumer behavior theory

Generating and maintaining brand recognition is one of the major goals of marketing, which may be considered as particularly important in low-involvement consumer cases, where customers may engage in little active search for information to help them make a choice. Repetition of advertisement is among the oft-employed management tools to keep the brand recognition in the consumer consideration set, that is a set of brands to which a customer pays attention when making his/her consumer choices (Macdonald & Sharp 2000, 5). There are, however, multiple behavioral factors involved in brand recognition within the customer decision-making process, which are hence studied in the literature review. It is therefore important to study scholarly works on brand recognition and its primary influencing factors, which may vary among the customers.

1.2.1. Consumer behavior and brand recognition in marketing

According to Macdonald & Sharp (2000) in many purchasing cases a consumer is but a passive observer, who spends minimal time and cognitive effort choosing brands. Situations, which involve common and repeat purchase products consumers may choose the brand on the basis of simple decision-making aspects, such as brand awareness, price and package. A habitual consumer behavior is based on the cognitive decision-making models of consumer choice. However, psychology consumer behavior associated with frequently bought products is not without contradiction. For instance, if a brand choice is so frequent then it may be justified to say that the choice itself is absent in a sense of conscious cognitive processing or a choice is simply substituted with a simple habitual decision (Macdonald & Sharp 2000, 5-6). It is thus cruel to see a bigger picture of consumer choices, such as rules by which the customers prefer certain brands and their products to the other available choices.

According to Solomon *et al* (2006), complexity of consumer' decisions are subject to certain set of rules, which are dependent on product attributes. Consumer' decisions vary from simple to complex. In the most generic case scenarios, consumers might only seek a short cut in the process of choosing goods or services, whereas in other cases more effort and thought is put into the decision-making process. One way to differentiate among consumer' decisions rules is to use a division criteria of *compensatory* versus *non-compensatory* decision rules. Consumers who adhere to non-compensatory decision-making rules usually make short cuts in their choices, by only choosing products, which meet some basic standards, and eliminating other options, if they fail to meet them. If non-compensatory consumer strategy is employed, it usually means that a single product attribute of low standing may not compensate other attributes, even if latter are relatively better than the same attributes of another product. An example of non-compensatory decision is buying products of well-known brands only, ignoring the rest of the offers even if the latter may be equal or have advantageous attributes compared to the product of a well-known trademark. The *lexicographic rule* here is to choose a product based on its most successive attribute. In case two or more products equally meet given criteria then second most important product attribute is used in comparison and so on. In the *elimination-by-aspect rule* while brands continue being chosen based on their attributes, a short cut is used, such as choosing products of well-known trademarks only. Finally, the *conjunctive rule* processes products by brands instead of attributes. That is, a product is chosen by a customer in case the brand meets all of the cut-offs, i.e. cut-offs are established for each attribute. Since each customer decision is dependent in some way on the price range, a customer may as well alter initial cut-off rules in case it becomes too complicated to choose a product or even delay decision-making. (Solomon *et al* 2006, 290-291)

Compensatory decision rules, unlike non-compensatory, allow a product compensate its shortcomings in the decision-making process. Customers executing compensatory decision-making rules are typically more involved in the purchasing process and are ready to invest more effort and time choosing a product before making a final decision. Solomon *et al* (2006) outline two common compensatory decision rules, *simple additive rule* and a more complex *weighted additive rule*. In case of a simple additive rule, the client usually chooses a product with the largest number of positive attributes. A possible drawback of this rule is the fact that a long list of seemingly positive attributes on the advertisement of a product, while being persuasive, may in fact include a basic list of attributes, which are already present in a specific type of product and thus lack many if any of determinant/deal-breaking attributes whatsoever. If the weighted additive rule is used in the customer decision-making process, the consumer also takes into account the

relative importance of positively rated attributes, essentially multiplying brand ratings by importance weights. This rule by its definition demands that a customer both has all the needed information to rate the attributes and is willing to invest effort in such division (Solomon *et al* 2006, 291-292). While the study of the current bachelor's thesis excludes qualitative analysis of rules used by consumer decision-makers, theoretical study nonetheless is beneficial in understanding the primary mechanisms behind consumer behavior in brand recognition.

1.2.2. Primary factors of recognition and preference in consumer behavior

According to Kotler & Kellis (2007), the ever increasing competition among brands has led marketers to utilize various means to maintain consumer brand loyalty (Kotler & Kellis 2007). Brand loyalty has often been used interchangeably with such concepts as repeat purchase, preference, commitment and allegiance (Azize *et al* 2011). What matters in brand' competition are numerous factors, any or some of it, as is noted in the previous sub-chapter (see ch. 1.2.1.), may play a conclusive role in making customers prefer certain brands over other. According to Chinomona *et al* (2013), the quality of brand service may heavily impact customer's satisfaction and trust (Chinomona *et al* 2013, 181-182).

It is assumed that consumer's buying decisions are idiosyncratic, individual and to the extent irrational compared to organizations' consumer behavior. According to Wilson (2000), while such notion is especially evident in consumers, whose choices might seem swiftly decided or even spontaneous, it usually ignores the potential 'richness' of information available to consumers as well as consumer intuition. While marketing scholars universally conclude that organizational purchases are somewhat prolonged and weighted, it is nonetheless safe to assume that contemporary customer, who may as well be influenced by internalization in consumer behavior and thus own significant amount of information on available brands and their properties, may be far from irrational (Wilson 2000, 785). Although it is more complex to establish the nature of consumer brand preference, which can be influenced by a vast amount of behavioral factors and be unique to specific products and services, it is beneficial to see how consumer behavioral factors for brand preference may influence decision-making process in purchasing.

Factors of brand recognition vary across the marketing studies, with different authors executing various views on the brand, yet all authors consider a brand an important decision-making factor. According to Hamid *et al* (2012), brand name itself is an important feature and a standalone decision-making factor, to which the customers adhere when making their conclusive decisions to purchase (Hamid *et al* 2012, 75). Osler (2007) argues that brand has a due importance related to

brand portfolio (Osler 2007, 430). According to Angelmar *et al* (2007), branding helps in marketing the product (Angelmar *et al* 2007, 347). San (2000) argues that most consumers observe a brand that he/she knows, while most of the product-associated information is thus closely linked to that particular brand and the consumers therefore automatically retrieve product information (San 2000, 439).

Brand preference is a part of a broader brand loyalty concept. According to Karam & Saydam (2015), brand loyalty is accomplished in case the customers show repeated buying behavior towards particular brand. Loyalty comes as a consequence fulfilling customer demands. As such, in case customers are satisfied by the brand functions then they may demonstrate loyalty towards the brand of their preference to the point that price factor may be diminished in decision-process and the customers may indicate strong interest to purchase the product regardless of comparative price. (Karam & Saydam 2015, 67)

Akhtar *et al* (2015), study the following nine factors of consumer behavior that may affect product preference: basic needs, former experience, friend and family recommendations, recommended by celebrities, product design, product quality, product price, product brand and discount on price. The study of given authors found that the boarding students, whose sample was investigated, are affected by all these factors. (Akhtar *et al* 2015, 71)

In the study of Anojan *et al* (2015), which was aimed to evaluate the consumer's preference and buying behavior of soft drinks among the sample of 300 respondents from Sri Lanka, the authors studied four variables for consumer preference in soft drinks, including perceived product, perceived price, perceived place and perceived promotion. Among consumer behavior factors the authors studied culture, social factors, personal factors and psychological factors. The authors believe that consumers prefer certain brands in case a brand is able to deliver products of consumers' needs without making consumers' delay their purchases. Other important factors for choosing food products are availability of good quality products and excellent taste and services, which further attract and add an excellent opportunity for huge sales. In the vastly competitive soft drinks market, it is thus critical for trademarks to adhere to these demands to satisfy their customers and thus keep their loyalty. (Anojan *et al* 2015, 11-13)

Brand reputation is another important factor for consumer behavior. According to Simonyan & Goldstein (2013), consumers highly estimate reputation. However, product features, which brand offers puts a heavy weight on brand recognition. It may as well be true that brands associated with predominantly negative information may in fact be perceived as of higher quality than

unrecognized brands. In addition, when consumer inferences are predicted based on different memory cues, the frequency of encountering a brand dominates what people profess to know about it. (Simonyan & Goldstein 2013, 28-31)

1.2.3. Chocolate in student's consumer behavior

According to Kozelová *et al* (2014), chocolate is a very popular food product among confectionery consumers, due to chocolate's unique organoleptic properties such as sweet taste and pleasant characteristic aroma. In their study, the authors conducted a survey analysis of consumer behavior at chocolate purchase involving 277 respondents. It was found that factors affecting purchase decision among the respondents were recommendations of friends, acquaintances (32%), brand of chocolate (24%), price (16%), personal experience (12%), health restrictions and allergies (11%). Less important factors when choosing chocolates are flavor (4%), nutritional quality (3%), country of origin (2%) and chocolate packaging (1%) (Kozelová *et al* 2014, 62). When studying consumer behavior and brand recognition and preference in chocolate confectionery it is thus important to evaluate difference consumer behavior factors, not only seemingly 'positive' one's, such as recommendations from friends and family, but also possible health restrictions. When analyzing nutrient products, especially products associated with chocolate consumptions, these factors may possibly shed broader light on how students choose their favorite chocolate products, and if factors like health restrictions or personal experience are critical in their consume behavior, which is also included among the factors in the online-questionnaire for the given thesis (see chapter 3 for results' overview).

Many studies indicate stress as a common life aspect of students' lives (Yumba 2008, Sahk 2013, Devi & Mohan 2015, 449, Khan *et al* 2015, 166, Essel & Owusu 2017). Chocolate consumption is associated with stress: a survey on eating during stress shows that less than half admitted to eating more, and yet the vast majority would admit that they usually ate more chocolate when stressed (Gibson 2011, 601, Kozelová *et al* 2014, 62).

2. METHODOLOGY: TTÜ STUDENTS' RECOGNITION OF CHOCOLATE BRANDS

In the given part of the bachelor's thesis, the methodological overview of conducted online-questionnaire for the study of students' brand recognition and preference in Estonian chocolate confectionery market is described. At first, the author studies definition and features of online-questionnaire and describes the nature of conducted qualitative research, functions of questionnaire design, and the process of analysis of results of collected survey responses. The methodology is further proceeded with description of research background, which includes description of selected products of popular chocolate confectionery brands available in Estonian shop shelves, the titles of which are included with the online-survey to study background of students' brand recognition and preference in choosing chocolate confectionery products. Research background also provides description of sampling process. Finally, in the last part of the current chapter the author describes research' ethical background, including management of anonymity and confidentiality during the survey.

The **aim** of the bachelor's thesis is to study consumer behavior of students of Tallinn University of Technology in brand recognition and consumer preference of chocolate confectionery products of popular brands, including Estonian national "Kalev" and foreign alternatives.

2.1. Methodology of online-questionnaire, quantitative research and data analysis

Description of quantitative approach and the questionnaire design

The research method of online-questionnaire belongs to the family of quantitative research methodology. Quantitative approach essentially concerned with numerical measurement and data, which is especially helpful in experimental research with a bigger sample size. Quantitative often deals with issues of generalization of results in a wider population, unlike qualitative approach, which deals with human experience, where experience is held more valuable than numerical calculation (Mathers *et al* 2007, 46). Paper by Teodorescu *et al* (2007) describes two opposing

approaches in marketing research. Quantitative research was developed before qualitative approaches took place in marketing, and quantitative methodology still presents valuable options for decisions makers in marketing areas. Quantitative approach is still regarded as the most popular one, however, it also demands to consider certain crucial aspects for research in order to be successful, which includes sample size and design of questionnaire for quantitative research. Sample size is crucial in consideration as this issue lies between the cost of research and objective of study. To find the balance between the two the authors of the paper suggest address the amount of information for that the sample is representative and error rate used to guarantee the results. If for example the objective of research demands a subjective amount of sample, there is no need for a researcher to increase the sample and the time/monetary costs associated with sampling if the information acquired is sufficient. However, with the rise of the size of sample the error rate increases, where the error rate is calculated by comparing an estimate to an exact value, an estimate of which depends on the sample size. For the quantitative questionnaire to be an efficient marketing survey instrument, according to the authors, the questionnaire has to accomplish the following functions (Teodorescu *et al* 2007, 4):

- Assure respondents' cooperation and involvement;
- Communicate to respondents what is desired from them;
- Help the respondents to express their responses at questions;
- Avoid the possible responses distortions;
- Facilitate tasks accomplishment by the survey operators;
- Assure the necessary base for processing the collected data.

Qualitative research, on the other hand, is not based on exact mathematical calculations of surveyed responses, but demands analysis of results by applying interpretation and elaboration of research results. Since qualitative methodology in non-numerical in nature, analysis performed in qualitative types of researches require special, often laborious approach. Qualitative research, unlike collection of numerical data in consumer behavior is often concluded with recommendations, therefore such an approach is especially useful in specific number of case studies. While qualitative research is especially useful in understanding complex issues, such as psychology behind consumer behavior, qualitative studies are not without limitations, including subjective character of qualitative studies and low possibilities to extend results at larger samples of consumers (Teodorescu *et al* 2007, 1-2).

The survey conducted within the current bachelor's thesis is quantitative, since the author favors this approach the most, due to its simplicity of execution invested costs and time-wise, but also its inclination towards finding exact values out of acquired research report. For this reason, the statistical analysis of surveyed responses collected during the period of online-questionnaire will be used in the bachelor's thesis. The primary functions of a quantitative research described above (Teodorescu *et al* 2007, 3-4) are addressed in the current study in the following way:

- **Sample size** – an estimate number of surveyed students was 150-200 people. This number was estimated in accordance with several factors, including:

  (1) the survey is completely unconstrained and its success depends on willingness of students to respond and their free time, as well as frequency of their use of social networks, which was the primary instrument to spread the questionnaire;

  (2) the sample is limited to the students of Tallinn University of Technology and the sampling includes different faculties of the university, five faculties in total, which may provide misbalance in a number of collected responses between the faculties given reasons outlined in the first point;

  (3) to acquire as much of a sample size as possible several Tallinn University of Technology online groups in the social media (described below) were addressed in order to spread the questionnaire. Given modern multicultural and multi-academic environment of Tallinn University of Technology, it was expected to receive diverse responses. For this reason, before the students were able to fill in the questionnaire forms the questionnaire included several sampling aspects, including type of a student, study degree, faculty, level of income, gender and age group.

- **Error rate** – due to the small and diverse amount of student sample it was decided not to estimate an error rate in the given study, although further research may include narrowed sampling for more precise estimation;

- **Cost and objective management** – on the primary features of online-questionnaire is its lower cost demands, compared to conservative types of questionnaire-based surveys, which may demand paper printing, postal operations, physical presence of a survey operator, or a combination of all. Thus, the research method employed in the bachelor's thesis allowed the author to fulfil the raised goal of the bachelor's thesis and simultaneously minimize the associated costs.

The author of the current study addresses the above studied functions of the questionnaire (Teodorescu *et al* 2007, 4), designed for the study of brand recognition and preference in students of Tallinn University of Technology, in the following way:

- **Assure respondents' cooperation and involvement** – a function was addressed by asking the fellow student-colleagues and potential respondents to *share* (note: social-network term for distribution and copying the initial message in their respective profiles to attract more viewers) the questionnaire invitation, as well as providing some questions that require personal answers, outside of a multiple-choice;

- **Communicate to respondents what is desired from them** – due to a nature of anonymity of survey, wide sample diversity and a web-based approach to collect survey responses, given questionnaire function was addressed by allowing students' send their feedback in a form of personal messages in the social network and taking into account students' activities and shortage of personal time. For this reason, the author conducted a the preliminary test by adding his own response in order to estimate the amount of time needed to fill in the survey form. Potential survey respondents were informed on the test and an estimated amount of time they would have to invest to fill in the questionnaire forms, so as to help the students accommodate and fit in with their personal time;

- **Help the respondents to express their responses at questions** – this function was addressed by including some questions, where this was possible and in accordance with questionnaire objective and design, where respondents were offered a possibility to include their own responses in case the multiple choice answers did not suffice them (e.g. question under #11);

- **Avoid the possible responses distortions** – since the online-questionnaire took place in a web-based environment (described under the description of the online-questionnaire methodology), the questions were designed to fulfil the following functions:

  (1) fulfil the objective of the bachelor's thesis;

  (2) be precise enough for respondents to understand them and unambiguous as much as possible;

  (3) be designed in such a way, which would allow to apply the questionnaire form in the web-based environment, taking into accounts specifics of a web-based environment. Thus both the questions were design to minimize possible distortion as well as the settings of the online-questionnaire in a chosen web-based survey environment were set to maximally decrease the possibility of distortion. These settings include: (1)

setting mandatory questions as mandatory for response; (2) limiting answers with multiple choices to a specific number of marks, where it was needed; (3) shuffling multiple choices of trademark products to avoid preference bias and other settings.

- **Facilitate tasks accomplishment by the survey operators** – to accomplish this function, a web-based survey environment was used, functions of which not only allow to collect responses but also to easily generate sum of responses in a form of tables for further analysis;
- **Assure the necessary base for processing the collected data** – this function is intact with the previous objectives to ensure that the task of the survey author will be accomplished. To do so, the questionnaire was conducted in a way that would allow surveying the students, collecting responses, generating and calculating data and analyzing the results.

Description of the online-questionnaire research method

The research method of online-questionnaire or web-based questionnaire is a quantitative research method, which is used to conduct surveys using web-based environment. A survey, in turn, can be defined as a research method used in conducting polls, questionnaires, feedbacks (such as medical research or consumer feedback studies) and other events of information fathering, in order to fulfil research objective or study particular research problem from the perspective of a specific sample size (Fox *et al* 2003, 167, Leeuw *et al* 2008, 2).

What makes a questionnaire in the given bachelor's thesis *online* is a web-based environment used to collect students' feedback. To conduct the online-questionnaire and collect the results, *Google Forms*, which is a web-based survey platform, was used. Online-questionnaire was chosen as the method of research for its reliability, simplicity and other associated benefits. Primary benefits of online-questionnaire include reduced cost, ease and speed of management (Fox *et al* 2003, 167, Evans & Mathur 2005, 195). Online-questionnaire also allows to collect information without being limited geographically, as most procedures are conducted remotely, using a computer and the Internet (Fricker & Schonlau 2002, 347-348). Its reliability is also outlined in how the data is processed and collected. Although there are different types of online-questionnaire, including e-mail questionnaire (McPeake *et al* 2013, 24), *Google Forms* is a web-based platform, which allows to collect, process responses and generate results, as well as guarantee privacy of data (7 Things … 2012). This makes a service reliable and provides a tool for an easy use, collection and management of responses as well as creates a safe environment for storing data.

The process of preparation of the online-questionnaire undertook two stages: design of the questionnaire and integrating the questionnaire in the *Google Forms* online-platform. Quantitative aspects and criteria of the questionnaire design were described earlier in the given chapter. While *Google Forms* is used to collect, manage and generate response' results, some of the innate survey settings in the web-platform were used, so as to make respondents' experience more convenient and minimize risk of biases during the survey. The following settings were applied during the integration of the questionnaire in *Google Forms*:

- shuffle option to mix the answers during a multiple choice scenario, for instance, when a number of brands or products is presented, so as to minimize a risk of creation of a possible artificial brand preference among the respondents (e.g. questions #6 and #7);
- marking questions as mandatory, so as to avoid skipped answers;
- where a multiple choice required a limited number of response, a respective option was set (e.g. questions #3 and #7).

After the online-questionnaire was prepared and integrated into the *Google Forms* web-platform, the author undertook a preliminary test, which pursued two aims. First, to know an estimate amount of time respondents will have to spend during filling in the answers. The respondents were informed about the preliminary test and time estimate in the message, which is available in appendices above the list of questions in the questionnaire forms (see Appendices 2, 3). Secondly, a preliminary test was conducted to ensure no possible errors or biases were made during the questionnaire design and *Google Forms* survey works effectively. After the rest was conducted, the author fixed several errors and started inviting potential respondents (see ch. 2.2.2. for sampling procedure).

Analysis of collected survey responses

Analysis of survey results is conducted by using *MS Excel* software for processing of numerical data. While *Google Forms* environment allows generating the pre-made tables of collected responses, some of the formulas are nonetheless employed for result statistical analysis. To calculate a total value of responses the author uses **=ISNUMBER(SEARCH(substring,cellnum))** function. Where response value recollection or ordering is needed (such as to differentiate results between age groups or other aspects) the author uses an **A-Z sorting** function. An overview of the online-questionnaire results is available in the next chapter (see ch. 3).

A copy of the survey form for online-questionnaire together with an invitation letter for potential respondents is available in appendices. Appendix 2 provides a copy of the questionnaire form in English (see Appendix 2) and appendix 3 contains a copy translated in Estonian (see Appendix 3). The questionnaire copies are available for preview, however, the respondents used an English version of the questionnaire during the survey. At the same time, when a letter was sent in the social network to attract potential respondents the author used two versions of a letter (see ch. 2.2.2. for more information on the sampling procedure).

2.2.   Research background, sampling procedure and response collection

After the online-quiz was prepared and tested in the *Google Forms* environment, the author started inviting potential respondents, the students of Tallinn University of Technology, to participate in the brand recognition and prefernece survey. For this reason, the *Facebook* social network was used. More information on the sampling procedure is provided further in the chapter (see chapter 2.2.3).

Invitation message for potential respondents is provided in the copies of the questionnaire form (see Appendices 2 and 3). Respondents were informed about the objective of the survey, its estimated length based on preliminary testing and confidentiality management. For additional grouping of survey responses, the author asked the students to mark the following information:

- Gender;
- Age groups;
- Gross income;
- Faculty in the Tallinn University of Technology;
- Student type;
- Degree of study.

For information on research ethics refer to respective chapter (see ch. 2.3.). To potentially raise number of respondents the author used instruments of attractiveness, including a slogan in the beginning of the message and image content to make the social-network messages potentially more notable and attractive. Several authors in communication marketing describe the positive effects of using image content and slogans to attract consumers' attention to advertisements (Abu Bakar *et al* 2015, 310, Häkkinen 2016). A slogan (*Chocolate!*) was written in in the first line of the social media message, in capital letters. The image was chosen among the popular *Google Search Engine*

request, by using the following search keywords: *chocolate, confectionery, chocolate confectionery, fazer confectionery, kalev chocolate*. In the end, the author made decision to use a neutral yet subjectively attractive image associated with chocolate confectionery, which was used as a thumbnail image in the message, created automatically by the Facebook message-attachment system. For more information on the Facebook user groups chosen during the sampling process, refer to respective part of the current chapter (see ch. 2.2.2.).

2.2.1. Selected products of chocolate confectionery brands

Besides other issues addressed within the online-questionnaire, the author asked the students to select their favorite products of popular chocolate confectionery trademarks, as well as select two products of their choice, which they perceive as equally favorable (e.g. questions #6 and #7). To do so, the author had to analyze available chocolate confectionery market in Estonia. Due to the private nature of chocolate sales reports, information on trademarks and their products and sales statistics is unfortunately complicated to collect and relies on the willingness of agenesis to collaborate. During the process of preparation and collection of material the author contacted several managers of research agencies and confectionery companies in order to acquire statistics on the chocolate confectionery trademarks and their products. The following entities were contacted with respective dates:

- *Kantar Emor* – a research agency. Contacted on 27.04.2018, positive response received on 01.05.2018;
- *Fazer Confectionery* – a confectionery company. Contacted on 30.04.2018, positive response received on 02.05.2018;
- *Kalev* – a confectionery company. Contacted on 02.05.2018, no response received.

An example of previously cited statistics is the *Kantar Emor* research agency's data on popular brands in Estonia. The author requested *Kantar Emor's* statistics, but could only acquire limited amount of information. (Toidubrändide … 2017, see Appendix 1). Another partially helpful information was received by the management of Estonian branch of *Fazer Confectionery*, who were kind enough to provide a list of top 20 chocolate tables by sales value, as of March 2018. However, the management was not allowed to provide any specific statistical data on the tablets. Information provided was collected by Nielsen research agency. Table 1 gives an overview of a list of top 20 chocolate tablets ranked by sales value as of March 2018 (see Table 1).

Table 1. TOP 20 chocolate tablets ranked by sales value in Estonia, data as of March 2018

TOP 20 chocolate tablets (March 2018, total rolling 12 months, ranking by sales value)	VALUE RANK
KARL FAZER WHOLE HAZELNUTS YELLOW IBP200	1
KALEV KALEV DARK HAZELNUT IBP 300G	2
KALEV AHNEKE MILK BP 300G	3
KALEV BITTER 70% EXTRA DARK BL100G	4
KALEV KALEV MAIUSPALA DARK LBL 100G	5
KALEV KALEV MILK WHOLE HAZELNUTS IBL200G	6
FAZER GEISHA LBL 100G	7
KALEV LINDA MILK HAZELNUT IBP 300G	8
KALEV KALEVIPOE6 MILK ALMONDS IBP 300G	9
KALEV AHNEKE MILK BL 100G	10
KALEV MESIKAPP IBP 300G	11
KARL FAZER MILK BLUE BP 200G	12
KALEV KALEV TULJAK DARKw.FILLIH6 LBC105G	13
KALEV SUUR TOLL DARK WHOL.HAZELN.IBP300G	14
KALEV KALEV WHITE RICE CR&BLUEBER.IBL200	15
KALEV PIRET MILKw.WHOLE HAZELNUTS IBP300	16
KALEV KALEV DARK CHERRY IBL 200G	17
MILKA&OREO BISCUITS PIEC.MILK LBL100G	18
KALEV KALEV WHITE RICE CR&BLUEBERR.IBL95	19
KALEV BITTER BL 100G	20
FERRERO KINDER CHOC.LBC 100G	21
MILKA OREO ALPINE MILK LBL300G	22

Source: prepared by the author based on the data collected by Nielsen research agency, provided by Fazer Confectionery

The next step the author of the given bachelor's thesis undertook was a study of available e-shops and online-advertising boards of Estonian biggest super-market chains, namely the web-sites of *Selver AS*, *Maxima Eesti OÜ* and *Prisma OÜ* retail enterprises. In the end, the following products of popular chocolate confectionery brands available in Estonia were chosen for the study and included in the online-questionnaire:

- **Fazer products** – Finland – Geisha, Karl Fazer Coconut Milk Choc, Karl Fazer Milk Chocolate and Honey Roasted Almonds.
- **Kalev** – Estonia – Bitter (Kalev 70% dark chocolate), *Anneke piimašokolad* (Eng. *Anneke milk chocolate*), *Kalevipoeg mandlitega* (Eng. *Kalev's son with almonds*);
- **Mars, Inc.** – United Kingdom – Snickers, Mars, Milky Way, Twix;
- **Milka** – Switzerland – Alpine Milk, Broken Nuts, Milka & Oreo;
- **Tupla** – Finland – Tupla;

Together the author selected three popular products by Kalev, three products of Milka, four products by Mars, Inc. three products by Fazer and finally a single chocolate product by Tupla. Given list of chocolate confectionery products is hence used in the online-questionnaire, as a part of the process to fulfil the objective of the given study.

2.2.2. Description of sampling procedure

According Õunapuu (2014), a sample is a smaller part of the object of study, which is selected out of a whole population. In order for research results to be plausible, a researcher has to accept the results and not artificially select a sample out of a whole surveyed population, or, in other words, divide the needed responses from the whole. During the sampling procedure, a researcher has to be prepared for different types of potential respondents, including those who refuse to give their consent for taking part in the study. (Õunapuu 2014: 139-146).

The author used non-probability sampling to survey students of Tallinn University of Technology, who are later divided into several groups, such as gross income, age or study degree groups (see Table 2). The following number of respondents took a part in the online-questionnaire (see Table 2).

Table 2. A final (total) number of respondents, who took a part in the online-questionnaire, divided by gender, age groups, gross income, student types and study degrees

Faculty (by gender)					Age group (by gender)				Gross income (eur) (by gender)				Type of student (by gender)			Study degree (by gender)		
Male																		
													ID	LD	Exc.	BA	MA	PhD
SBG	SE	SIT	SS	EMA	18-20	21-23	24-26	27-29	470-500 or less	600-800	900-1221	1221+						
					22	26	8	7	35	16	6	6	17	42	4	47	16	0
17	25	20	1	0	Total: 63													
Female																		
													ID	LD	Exc.	BA	MA	PhD
SBG	SE	SIT	SS	EMA	18-20	21-23	24-26	27-29	470-500 or less	600-800	900-1221	1221+						
					16	28	12	4	33	13	3	11	13	44	3	44	16	0
19	15	17	9	0	Total: 60													
Total number of respondents: 123																		

Source and Abbreviations: prepared by the author based on collected survey data, abbreviations described below

Due to table size and page margin concern, some of the terms for sample selection criteria were abbreviated in the table. Abbreviations include (see Table 2):

- SBG – School of Business and Governance;
- SE – School of Engineering;
- SIT – School of Information Technologies;
- SS – School of Science;
- EMA – Estonian Maritime Academy;

- ID – International degree student;
- LD – Local degree student;
- Exch. – Exchange (ERASMUS or similar);
- BA – Bachelor's or equal;
- MA – Master's or equal;
- PhD – Doctorate.

In order to reach the sample and attract students of Tallinn University of Technology to participate in the online-questionnaire the author addressed Facebook member groups dedicated to various student affairs of students. The following sampling criteria was taken into account:

- Selected member groups had to be dedicated to different areas of student affairs, including study/semester, student union, accommodation and department topics;
- Studying aspects of brand recognition and preference of students of particular ethnical background was not a part of a given study, thus the groups had to respond to various student issues and accommodate members of various international backgrounds.

Before writing a survey invitation letter, the author contacted administration of each respective member group to request their permission for survey invitation. The following is Table 3, which contains the list of Facebook member groups where author received positive answer from group administration to invite students to participate in the online-questionnaire.

Table 3. List of contacted Facebook member groups by group titles, subjects, number of members and date of invitation

Name of a group	Subject	Number of members	Date of survey invitation
RUS TTÜ	Russian-speaking students of TUT	2247 members (as of 05.05.2018)	04.05.2018
TUT International Students 2017/2018	International students of TUT for semester '17/18	855 members (as of 05.05.2018)	04.05.2018
Ask TUT Student Ambassadors	Group for various students and student ambassadors, mainly international but also mixed	929 members (as of 05.05.2018)	04.05.2018
ESN TTUIC Spring 2018	Various study related affairs for Spring semester 2018	290 members (as of 05.05.2018)	04.05.2018
TTÜ Ühikad	Group for dormitory and student accommodation affairs	2209 members (as of 05.05.2018)	04.05.2018
TTÜ Majandusteaduskonna Üliõpilaskogu	Group for dormitory and student accommodation affairs	177 members (as of 05.05.2018)	04.05.2018
TTÜ IT-teaduskond	Group dedicated to Institute of Information Technologies of TUT	1, 192 members (as of 05.05.2018)	04.05.2018
Tudengimaja	Group for dormitory and student accommodation affairs	2,767 members (as of 05.05.2018)	04.05.2018

Source: prepared by the author

The *Google Forms* online-survey was launched on 04.05.2018, and the online-questionnaire was closed on 11.05.2018 at 23:59, after which available students' responses are then analyzed by the author. The logic behind surveying the students of Tallinn University of Technology in May 2018, instead of December 2017 (end of autumn semesters 17/18) or January 2018 (beginning of spring semester 17/18) is the fact that Tallinn University of Technology is an international student environment. With that in mind, the author believes that the most favorable period for studying students' consumer behavior in brand recognition and preference is May 2018. Since many potential respondents, who belong to a number of exchange students could start their studies in Tallinn University of Technology early in 2018, in order to acquire mixed results, the author chose May 2018 as the most suitable date to invite students to participate in the survey. Exchange students are included as a separate student type and segment in the online-questionnaire (see Table 2).

2.3.   Ethical background: anonymity and confidentiality

The online-questionnaire conducted to study student respondents' consumer behavior in brand recognition and preference in chocolate confectionery was based on **confidentiality** and **anonymity**. Common definition states that confidentiality refers to "*ensuring that information is accessible only to those authorized to have access*". Hammer & Schneider (2007) broaden this definition by adding that confidentiality consists of the process of authorization, entitlement, and permission. *Authorization* refers to possibility to do what is authorized or the power to have access to a certain ability granted from higher authority, such as a privileged person or an institution. Entitled (*accessibility*) is understood under complying with certain policies, mandatory information flow or access to specific information. *Permission* is the right to of an individual (institution or a group of individuals) to perform certain tasks or use certain information. Therefore, the term of confidentiality may be defined as ensuring that certain information is only accessible to the individual who is entitled to it, and that it is only accessible to use the given information to the extent permitted (Hammer & Schneider 2007, 1-2).

According to Whelan (2007), research studies often distinguish between the concepts of anonymity and confidentiality (Whelan 2007, 1). The first is defined as the lack of social evaluation due to the absence of identification that would be required for an evaluation to occur (Whelan 2007, 4), while the second concept is based around the identified data (of respondents) without disclosure of private information (Whelan 2007, 1). It is assumed that anonymity and confidentiality play a positive role in the willingness of the respondents to take a part in the survey and positively influences the reliability of provided information.

The author of the current study does not have access to students' personal information, including personal student codes, names and other sensible information. Besides limited information on the sample, which respondents were asked to provide, such as relative age group or gross income (see Table 2), the author has no access to additional information on the sample, which makes the survey pursue aspect of respondent's anonymity. At the same time, the author does not disclose a number of reposting (note: social-network term for distribution and copying the initial message in their respective profiles to attract more viewers) made in the member groups nor initiators of reposting, which is an aspect of research confidentiality.

3. STUDY RESULTS: TTÜ STUDENTS' RECOGNITION OF CHOCOLATE BRANDS

Below is the analysis of results of student-respondents' responses during their online-questionnaire. Total number of students by their respective groups is provided in Table 2 (see Table 2). Different questions require different ways to calculate the results. Based on the logic of the question, some responses are summarized by the total amount of received responses, while others demand comparison either between a gender, a study type, age group or both. Due to a vast difference in student groups and because amount of respondents created marginal results, the author chose not to compare survey results by faculty/institute groups and degree of study, leaving the rest (gender, age groups, gross income and types of students) as possible options for comparison, based on the logic of the question.

3.1. Overview of results of online-questionnaire for students' consumer behavior in recognition and preference of chocolate brands

In total, 123 students took a part in the survey. The survey analysis is provided in three parts, each available in respective subchapter. The author analyzes aspects of brand recognition of students in chocolate confectionery as well as students' preference towards chocolate products (see chapters 3.1.1. – 3.1.2.).

3.1.1. Brand recognition of chocolate confectionery among the students

The first survey question was focused on students' knowledge of well-known chocolate confectionery brands, in accordance with proposed list of trademarks (see Appendix 2 #1). Figure 1 shows a total number of respondents, who marked each brand, which they were aware of (see Figure 1).
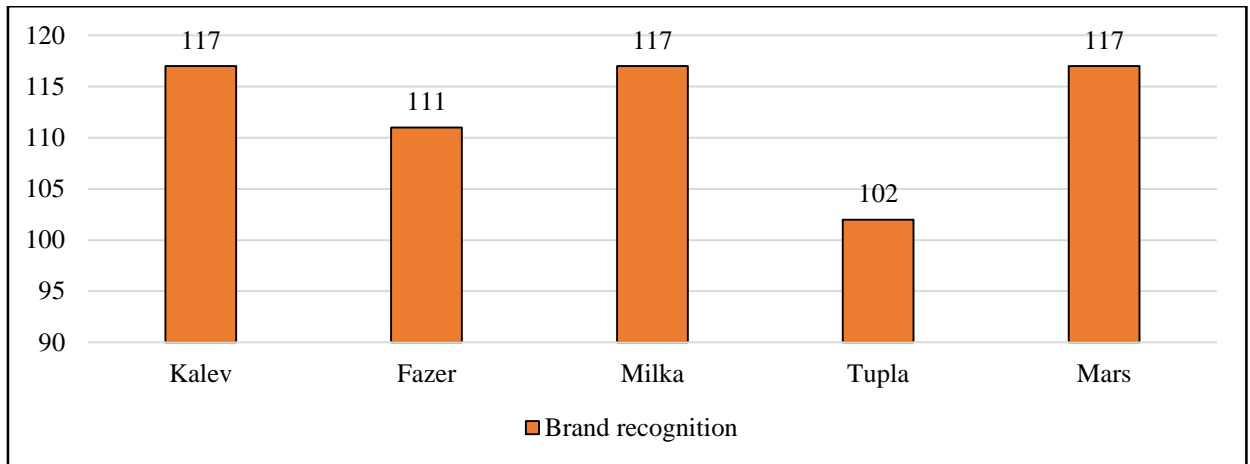
Figure 1. A total number of recognized chocolate confectionery brands, according to respondents

The results of the Figure 1 are almost identical throughout the brands with little differences across the titles. It is noteworthy, however, that none of the proposed popular chocolate confectionery trademarks received the maximum amount of marks from all respondents (i.e. 123 in total). *Tupla* trademark is the least recognized, with 102 student-respondents marking it as recognized, whereas *Kalev*, *Milka* and *Mars* share the same number of marks, 117 each. *Fazer*, *Kalev's* primary "opponent" in the chocolate confectionery market, surprisingly received less attention in respondents, with 111 marks as opposite to *Kalev's* recognition, while yet remaining a popular choice among the surveyed students. Due to a high variety of responses, it was not possible to note any evident differentiation between student groups, such as differences between male and female students in their recognition of proposed trademarks. However, a single *international degree student* with 1221 or more of monthly gross income also marked *Milka* and *Mars* as *her* only option, although most other respondents marked various brands with most choosing all five from the list (see Figure 1).

Question 2 was aimed at to see if for the surveyed sample some of the above listed in question 1 chocolate confectionery brands are more recognizable than the other (see Appendix 2, #2). Figure 2 shows the result of this poll (see Figure 2).
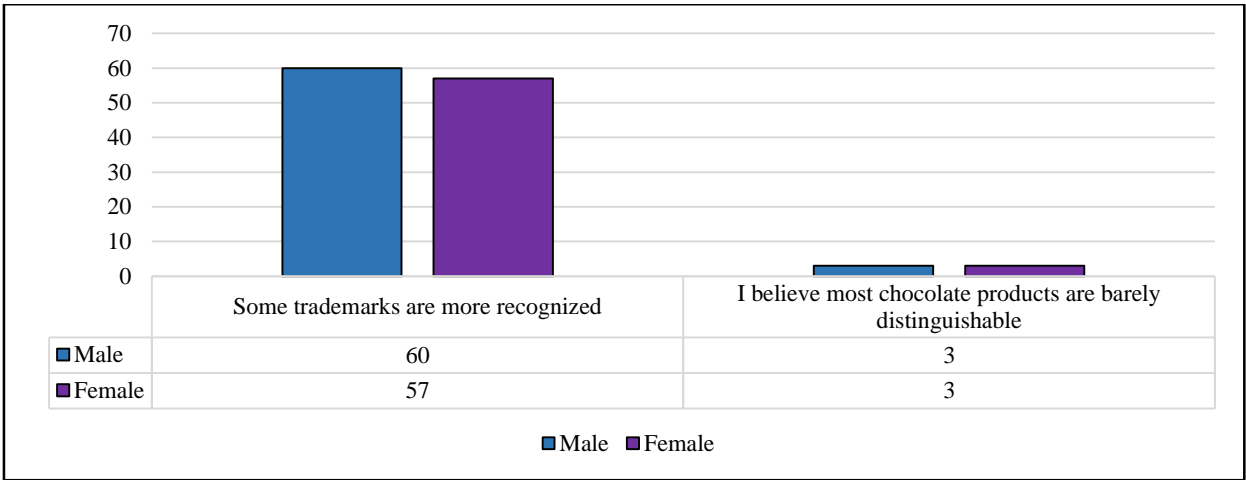
Figure 2. Respondents' opinion on recognition of specific chocolate confectionery brands compared to others, by gender

As is depicted on Figure 2, an absolute majority of student-respondents adhere to the belief that some chocolate confectionery brands are more recognized than the other, whereas only six (6) respondents in total, three female and three male students, believe that most chocolate confectionery products cannot be easily distinguished (see Figure 2).

Next question of the first part of the survey was aimed towards studying of the most recognized chocolate confectionery brand from the list of five earlier proposed trademarks (see Appendix 2, #3). Figure 3 shows the results for this question (see Figure 3).

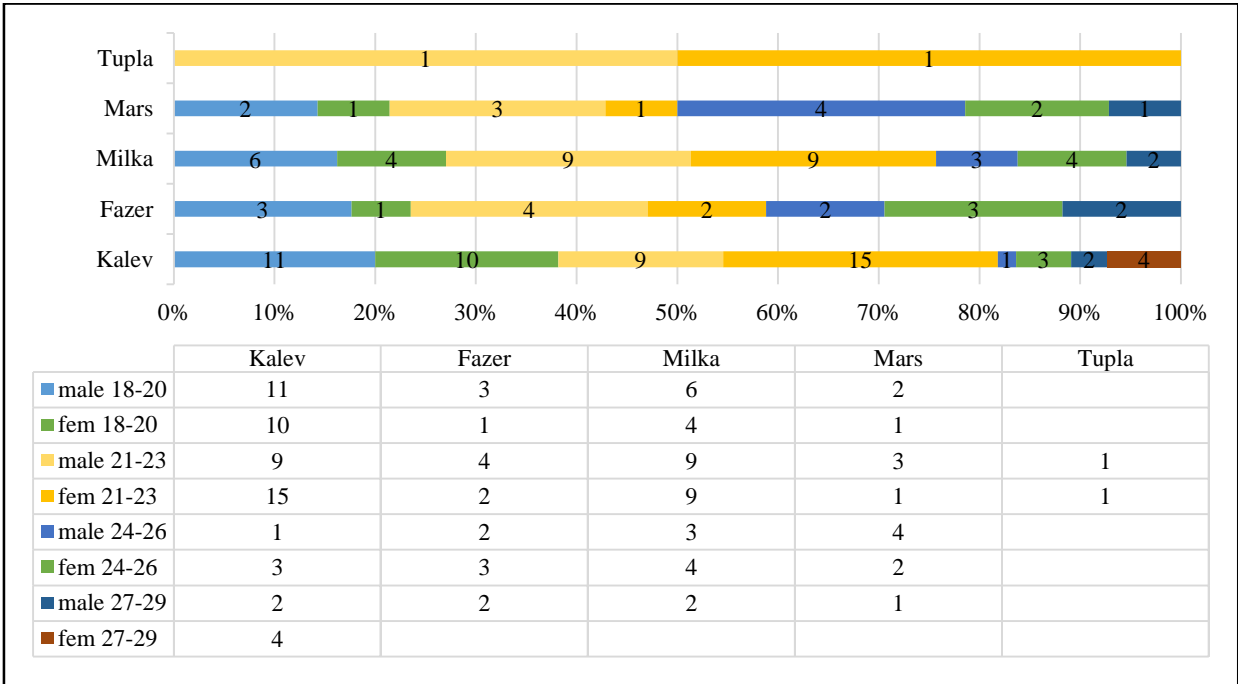|	Kalev	Fazer	Milka	Mars	Tupla
■ male 18-20	11	3	6	2	
■ fem 18-20	10	1	4	1	
■ male 21-23	9	4	9	3	1
■ fem 21-23	15	2	9	1	1
■ male 24-26	1	2	3	4	
■ fem 24-26	3	3	4	2	
■ male 27-29	2	2	2	1	
■ fem 27-29	4				

Figure 3. Most recognized chocolate confectionery trademark among the students, by gender and age groups. Source: in accordance with the data in Appendix 4

Figure 3 contains a summary of choices made by student-respondents during the online-questionnaire in regards to the most recognized chocolate confectionery brand of their choice. Above are the summarized figure of those respondents, divided by gender and age groups respectively. To avoid possible confusion, also because of printed version of the thesis the color palette of the diagram may be diminished in case black and white printing material is used, appendix 4 provides a table of values (see Appendix 4). According to the defined numbers *Kalev* continues being a leader among the brands in both female and male genders as well as in age groups 18-20 and 21-23, which contain the biggest number of respondents compared to other groups (see Table 2). Together, *Kalev* brand received highest recognition with 55 votes, whereas *Fazer* received 17 votes. Another popular brand was *Milka* with 33 votes total. *Mars* received 11 votes total for the current question and the least marked brand was *Tupla*, with just two votes marking it as most recognized brand among the list (see Figure 3).

The last question for the first part of online-questionnaire was directed towards learning if surveyed students regard *Kalev* brand as distinguishably different from other proposed chocolate confectionery trademarks (see Appendix 2, #4). The results are summarized below (see Figure 4).

	Exchange student	International degree	Local degree
■ I cannot underline Kalev specifically	3	12	29
■ Yes, Kalev is the most distinguished	4	18	57
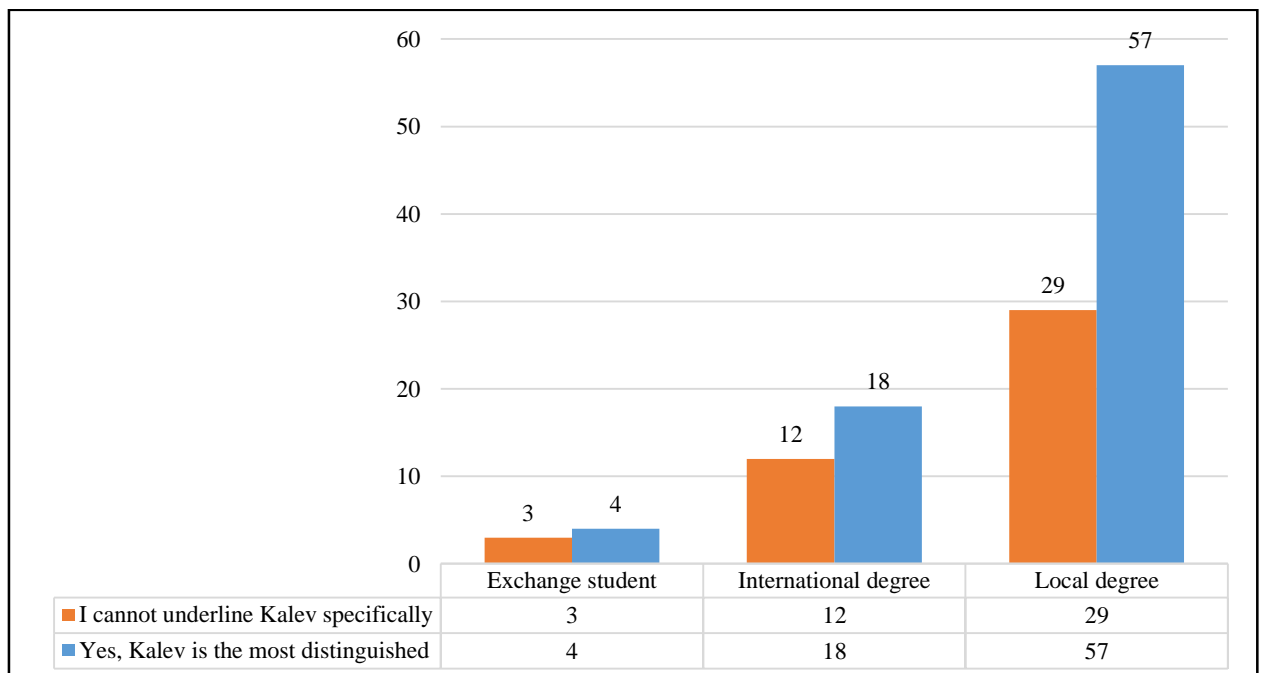
Figure 4. Respondents' feedback on whether they consider Estonian biggest chocolate confectionery brand to be exceptionally distinguished from other popular brands

Results show that most students, both local and international degree students (i.e. students who learn in Tallinn University of Technology in full-time yet are not native to Estonia) as well as exchange students, albeit to a different extent, consider *Kalev* to be the most distinguished

chocolate brand in Estonia (see Figure 4). While responses cannot be considered equally affirmative due to a vast difference in total number of respondents in different study types, it is noteworthy to see that compred to 29 local degree students who could not exceptionally underline *Kalev* among other brands, 18 out of 30 international degree students believed that *Kalev* is the most popular brand in Estonia.

This is the end of the first part of online-questionnaire regarding brand recognition of chocolate confectionery among the surveyed students. Preliminary results for this part demonstrate strong recognition of *Kalev* brand among the students of every gender and age group, as well as among different student types (see Figures 1, 3, 4). *Milka* and *Mars* trademarks also show a large number of recognition in previous figures, whereas *Tupla* remains the least recognized (see Figures 1, 3). Only few students believe that chocolate products are barely distinguishable, while most believe that products of different chocolate brands have differences and thus are distinguishable (see Figure 2).

3.1.2. Students' preference towards products of chocolate confectionery trademarks

Next question used a modified 1-5 point *Liket's scale* to determine student-respondents' attitude towards their buying behavior. The author asked the students to mark on the scale 1-5 (*where 1 – lowest importance, and 5 – highest importance*) how important are the consumer behavior factors of price, brand reputation and personal experience in choosing chocolate confectionery products (see Appendix 2, #5). Figures 5.1. – 5.3. provide the overview of results (see Figures 5.1. – 5.3.).

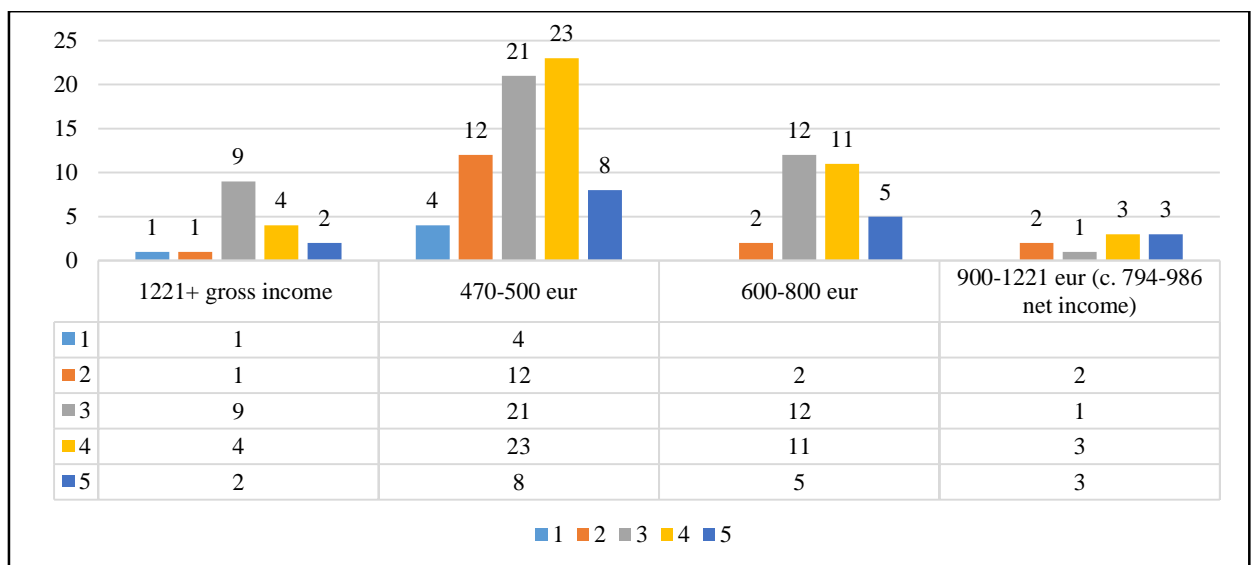|	1221+ gross income	470-500 eur	600-800 eur	900-1221 eur (c. 794-986 net income)
■ 1	1	4		
■ 2	1	12	2	2
■ 3	9	21	12	1
■ 4	4	23	11	3
■ 5	2	8	5	3

Figure 5.1. Respondents' attitude towards importance of price according to 1-5 point scale rating, by gross income

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According to Figure 5.1. the most important attitude (marked as points 5 and 4 respectively) towards price of chocolate confectionery was marked by respondents with gross income of 470-500 eur (8 and 23 points respectively). At the same time, respondents with given amount of gross income also demonstrated lesser values towards importance of price, with 21 points allocated in mark 3, and 12 points in mark 2. Moderate price sensitivity is seen in respondents with monthly income of 600-800 euro, where respondents allocated 11 points in mark 4 yet 12 points in mark 3 (see Figure 5.1.).
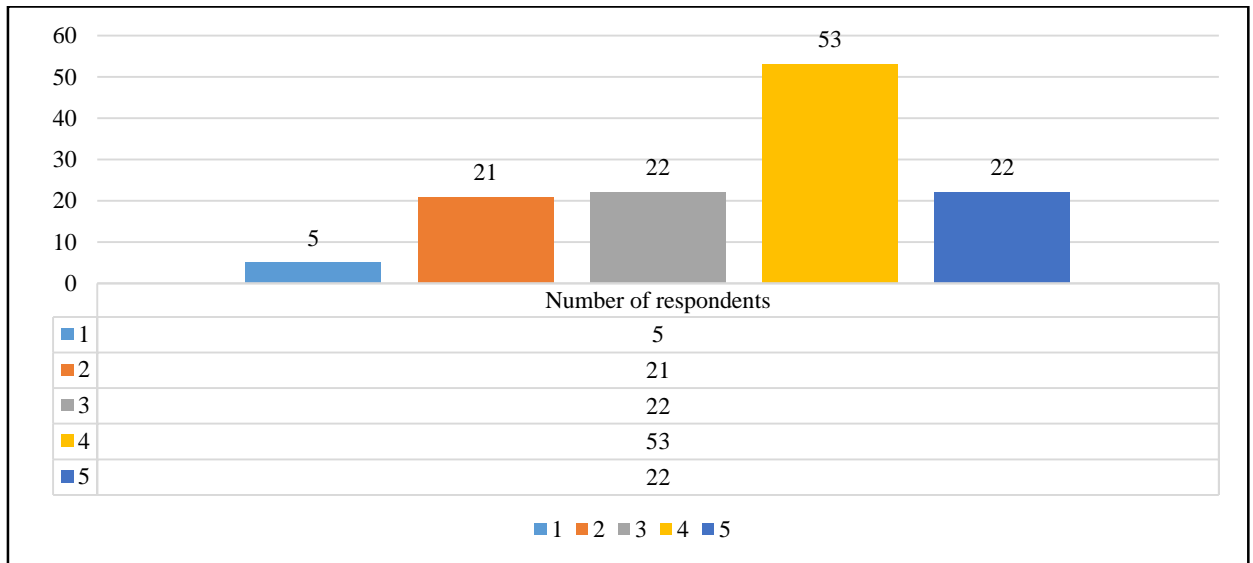
Figure 5.2. Respondents' attitude towards importance of trademark and brand reputation according to 1-5 point scale rating, by total

Majority respondents regard reputation of brand of chocolate confectionery as moderately important with 53 students marking '4' in the survey. Highest point of importance of brand reputation was marked by 5 respondents only, whereas other points received almost equal number of mark (see Figure 5.2.).
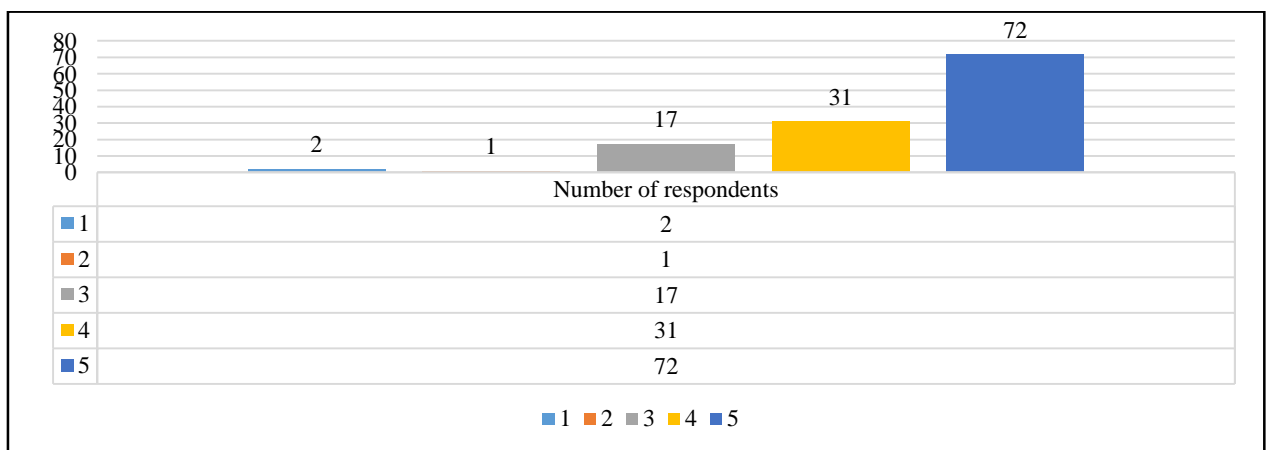

35

Figure 5.3. Respondents' attitude towards personal experience with specific chocolate brand according to 1-5 point scale rating, by total

Majority of respondents regarded personal experience as high importance, with 72 respondents marking '5' during this part of a question (see Figure 5.3.).

With the following question (see Appendix 2, #6), respondents were asked to choose their favorite product of popular chocolate confectionery brands, the list of which is included in the methodological chapter (see chapter 2.2.1.). Figure 6 shows the pie-chart with results of students' preference in particular chocolate confectionery products (see Figure 6).

Figure 6. Most preferred product of chocolate confectionery according to student-respondents' preference, by total amount

Contrary to previously recognized opinion (see Figures 1, 3), product *Geisha* by *Fazer* was chosen as the most preferred among the students, with total of 19 votes, in comparison with *Kalev's Anneke milk chocolate*, which received 15 votes total. Other popular products include *Milka's*

Milka & Oreo (12 votes), *Twix* by *Mars, Inc.* (11 votes), and *Fazer's Karl Fazer Chocolate and Honey* (11 votes). (see Figure 6).

With the last question for the preference section (see Appendix 2, #7), respondents were asked two mark two products of well-known chocolate brands, which they regard as equally preferable. Figure 7 contains total number of all marked products from the list (see Figure 7).

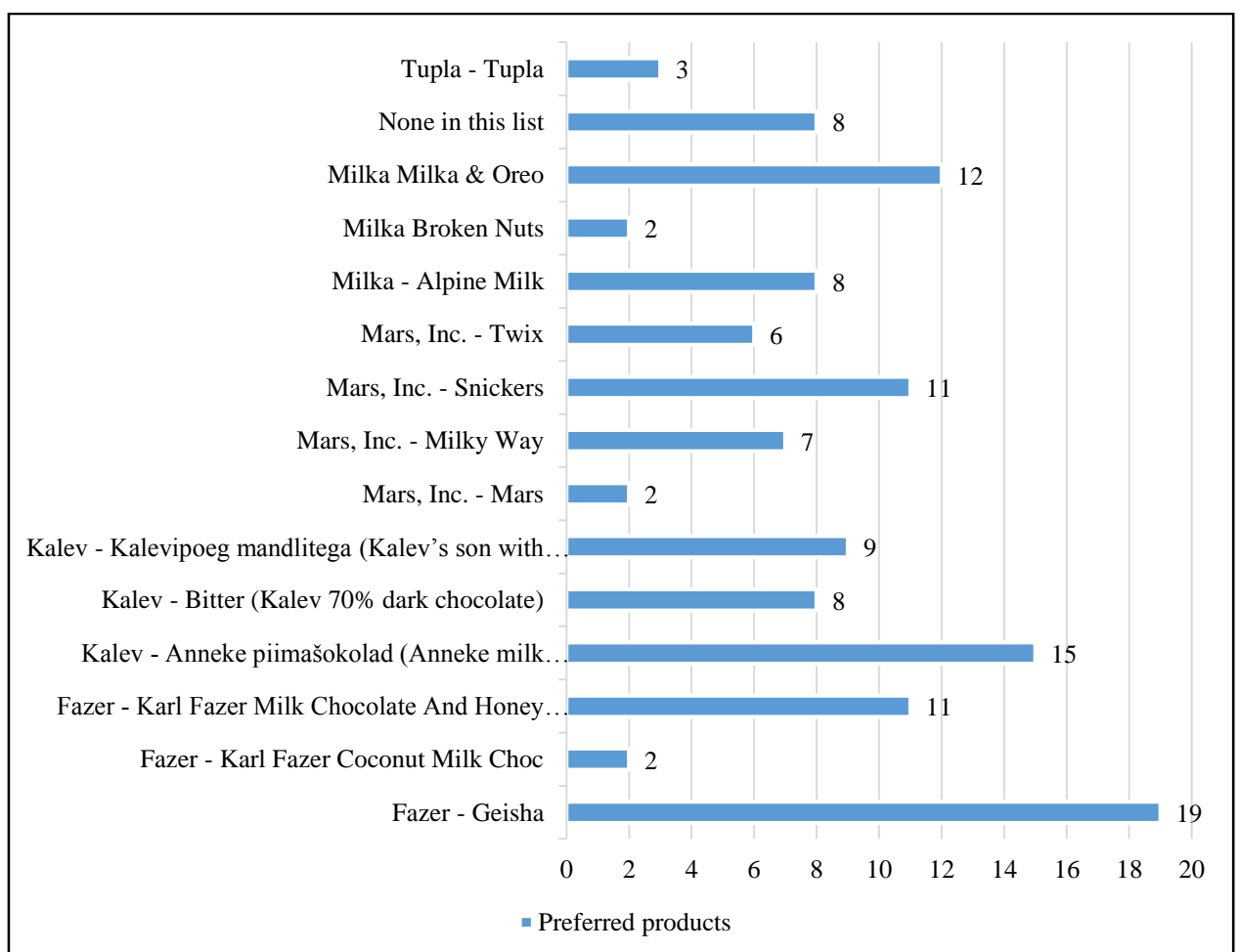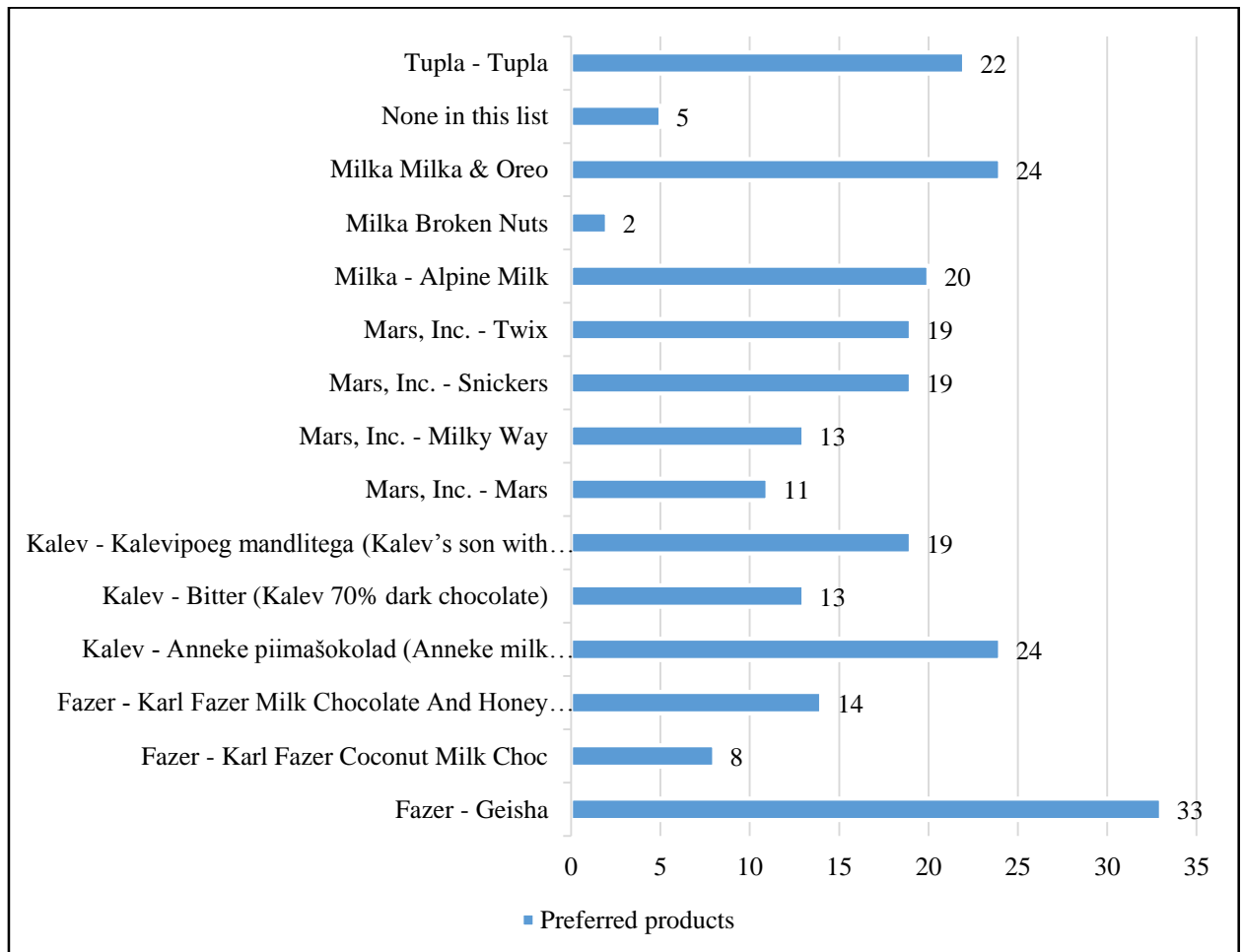

Figure 7. Most preferred product of chocolate confectionery according to student-respondents' preference, by total amount

Contrary to results in the previous figure (see Figure 6), this time respondents paid more attention to previously least popular chocolate brand *Tupla*, which received 22 votes. *Fazer's Geisha* continues to be among the favorite chocolate product, with 33 respondents marking it, whereas among *Kalev's* product, *Anneke milk chocolate* received 24 votes, which is equal to *Milka's Milka & Oreo* product (24 votes). *Twix* and *Snickers* of *Mars, Inc.* as well as "*Kalev's Son*" *with almonds* are regarded as equally preferable with 19 votes respectively. Such distinction with previous Figure 6 may symbolize the fact that this time student-consumers had to select two of the products

which they regard as equally preferable, contrary to the most preferred product, where several consumer behavioral factors could play a role in decision-making, such as price range or taste quality (see Figure 7).

This is the end of the consumer preference section of the online-questionnaire. Contrary to the brand recognition section (see Figures 1. 3), majority of respondents chose *Fazer's* products, when they were asked to select specific products instead of recognize the brand names only. However, products of *Kalev* brand remain among the top leaders in consumer preference of surveyed students, whose biggest preference also include several *Milka's* and *Mar's Inc.* products'.

3.2. Survey results, addressing aim of the study and proposals for further research

After analyzing results of students' online-questionnaire, the author outlines the following conclusive aspects of students' brand recognition and preference in chocolate confectionery.

Results – Brand recognition of chocolate confectionery among the surveyed students

Kalev, *Milka* and *Fazer* are equally recognized chocolate trademarks as marked by respondents, where each brand generated majority of recognition responses. *Fazer, Kalev's* biggest competitor and second largest chocolate confectionery brand in Estonia, was marked as second most recognized among the students, whereas *Tupla* brand received least recognition (see Figure 1). Simultaneously, an absolute majority of students believe that brand recognition in chocolate confectionery is important as some brands are more recognized than the other, according to responses (see Figure 2). Further, the author analyzed respondents' answers in regards to the most recognized chocolate brand of their choice, by age groups. Only two students selected *Tupla* as the most recognized, whereas, *Kalev* brand received highest recognition with 55 votes in total, against *Fazer* and *Mars, Inc.* both receiving 17 votes and *Milka* 33 votes (see Figure 3). Finally, the author differentiated between responses of students of various study types, including exchange, international degree and local degree, in their attitude towards regarding *Kalev* brand as distinguishably different from other proposed chocolate confectionery trademarks. Most respondents, including students outside of Estonian background, maked *Kalev* as distinguishably different from other proposed chocolate confectionery trademarks, while the minority of respondents failing to see *Kalev* as distinguishably different (see Figure 4).

To conclude on brand recognition, surveyed students believe *Kalev* brand to be the most recognized among other competitive chocolate trademarks.

Results – Students' preference products of proposed chocolate confectionery brands

The second part of the survey was aimed towards learning, which products of popular chocolate confectionery brands do student-respondents prefer the most. A modified 5-point *Likert's scale* was employed to see how three consumer behavior factors of price, brand popularity and personal experience are considered important for students-respondents. Figure 5.1. show that pricing factor was most sensible in the group of students earning in the range of 470-500 eur or less in gross income. However, pricing range is also somewhat ambiguous, since many respondents' allocated marks 3 and lesser in price as well (see Figure 5.1.). Brand reputation was considered of moderate importance in majority of respondents (see Figure 5.2.). Majority of surveyed students marked personal experience as highest importance (see Figure 5.3.). Among the proposed products of popular chocolate confectionery trademarks, *Fazer's Geisha*, despite the brand receiving less recognition in the previous section, being the most preferred among the respondents. Interestingly, combined votes for a total number of *Kalev* and *Fazer* products' preference give a total number of 32 for each brand, making the brands as equally preferable in total products yet differently preferable in specific products (see Figure 6). At the same time, respondents were asked to select two products from the proposed list, which they regard as equally preferable. This time, *Fazer's Geisha* remained the favorite chocolate product among the respondents, while *Kalev's Anneke milk chocolate* equaled *Milka's Milka & Oreo product* with 24 number of votes each. Contrary to results in the previous figure (see Figure 6), when *Tupla* received 3 votes, this time respondents marked *Tupla* with 22 votes, which makes it equally preferable response-wise with other popular choices, including *Milka*, *Kalev* and *Fazer* brands (see Figure 7).

To conclude on the second part of the survey, the results show that price range does not seem as the equally important t factor in students buying behavior compared with personal experience and brand popularity. While *Kalev* was the most recognized brand as marked in previous section, results for preference in students' consumer behavior shows that students equally pursue different popular choices. While respondents provided mixed results between Figures 6 and 7, it is, as author argues, not a fact of contraction. Rather, it a) portrays a nature of student' consumer behavior as highly individual and complex to measure, due to the fact that his consumer decisions rely heavily on personal experience; and b) students may have different amount of information regarding each product, which makes ti complex to cognitively measure two products as equally preferable.

Regardless of this, products of *Kalev* and *Fazer* remain most pursued among chocolate confectionery offers in Estonia as per Figure 6.

Recommendations for chocolate confectionery companies

According to the survey results, *Fazer* and *Kalev* remain most popular chocolate confectionery brands in Estonia, whose products are oft-purchased by the surveyed students. Products of *Milka* and *Mars, Inc*., while receiving slightly lesser attention, remain nonetheless favorite among many students. Companies, whose products have received lesser votes may potentially raise their sales by conducting student-oriented marking campaigns. The author recommends following strategies for the brands, whose products received less attention compared to their competitors, as per Figures 6 and 7:

- organize presentations with free chocolate samples in universities;
- launch chocolate versions with renewed student-friendly/attractive for students packages;
- conduct similar surveys to study their student-consumer segment more thoroughly.

Future research

Current study is limited to the sample of 123 students of Tallinn University of Technology, who were willing to participate in the online-questionnaire. A bigger sample in the future survey, including students from other Estonian major universities, may be beneficial to expand the scope. Aspects of consumer behavior may be further addressed more broadly. Given paper focused specifically on students' recognition of *Kalev* compared to other popular trademarks in Estonian chocolate confectionery market, as well as students' preference towards particular chocolate products. As such, the rules and factors to which students adhere when choosing certain products may constitute the following research. Particularly, *compensatory* versus *non-compensatory* decision rules can be analyzed in students' cognitive choices in purchasing chocolate confectionery. Other factors of consumer behavior may be beneficial to include in the future research to learn more about students' buying behavior in chocolate confectionery, such as weekly spending on chocolate confectionery, lifestyle factors' influences of students, which alter chocolate buying behavior and factors of choosing specific brands.

CONCLUSION

To fulfil the aim of the current bachelor's thesis, the author surveyed 123 students of Tallinn University of Technology to study brand recognition and product preference in student's purchase behavior of popular chocolate confectionery product available in Estonian market. Given aim was set in order to fill the lack of studies of students' consumer behavior in brand recognition and preference of chocolate confectionery products. Since most studies of foods purchase behavior are limited to private (e.g. *Kantar Emor*), it is difficult to estimate preference in chocolate confectionery among the students without conducting respective studies. To fulfil the aim of the study the author has raised the following tasks, results are further provided.

1. The author has studied the aspects of consumer behavior in brand recognition and preference.

This was accomplished by reviewing the literature in consumer behavior marketing. Difference types of consumers are differentiated in the literature, consumer as individuals and consumers as private organizations, who are typically regarded as more rational compared to the former, who are regarded as more intuitive in their choices. When rationalizing on their purchases consumers have to make choices based on a number of rules and factors, such as price range or product reputation. The strategy employed by the consumers often depends on the amount of information consumers possess and their willingness to invest time and energy into complex decisions. While the survey within the bachelor's thesis excluded study of specific factors of consumer behavior, the author has nonetheless studied, on the scale of 1-5 points modified *Likert's scale*, how important do student-respondents view price range of chocolate products, personal experience and brand reputation of chocolate products. Results portray that students gave inconsistent ratings towards price range, which makes it an ambiguous criteria, yet personal experience and brand reputation were esteemed as highly important.

2. The author studied the market share of popular chocolate confectionery trademarks operating in Estonia.

Since most available studies of chocolate confectionery consumption are privately-ordered by the companies, it was complicated to find relevant data. The author, however, did have several informational sources to help him understand, which brands and chocolate confectionery products are most popular in Estonia. In the European Union, chocolate confectionery products are among the most popular among produced and consumed foods, according to *Caobisco Statistical Bulletin*. Estonia's biggest national confectionery brand *Kalev* remains the most popular chocolate confectionery brands, based on the media information as well as its success in winning brand contests, whereas *Fazer* brand is the second biggest competitor of *Kalev*. Products of *Kalev* and *Fazer* are highly popular among the population, which also became evident throughout the survey. *Kantar Emor* is a private research agency, brand statistics of which were requested by the author. The author also received non-numerical information on top 20 chocolate confectionery products of *Fazer* representative. Besides, some understanding was based on randomized search for chocolate confectionery on websites of Estonian hypermarket. The author has thus selected the following five popular chocolate confectionery brands: *Kalev*, *Fazer*, *Milka*, *Mars*, *Inc*., *Tupla*. Fourteen popular products of chocolate confectionery were also selected and included in the survey to analyze students' preferences in their purchase behavior when choosing products of chocolate confectionery.

3. The author conducted the online-questionnaire among the students of Tallinn University of Technology to collect their perspective on brand recognition and preference in biggest chocolate confectionery trademarks.

The non-probability sampling of 123 students of Tallinn University of Technology was surveyed to study their brand recognition and preference in choosing popular chocolate confectionery products from the proposed list. Students were asked to mark their faculty, study type, gross income, gender and study degree, and the question responses were analyzed in accordance with the logic of the question. Due to marginal results, comparison of study degrees and faculties were omitted.

4. The author analyzed survey results and outline possible consumer trends in preference of popular chocolate products among the students of Tallinn University of Technology based on acquired survey data.

In the given final thesis, the qualitative research conducted among the students to study their brand recognition and preference in chocolate confectionery was focused on preference towards choosing products of popular chocolate confectionery brands available in Estonian market. In the

final paper, the author did not include the study of decision-making rules to which the students adhere when choosing specific chocolate brand, for the reason of focusing rather on the consumer factors, which play a crucial role in students' buying decisions when choosing their favorite chocolate confectionery products. Due to a relatively small student sample, it was considered not to include the study of decision-making rules in a further study with a larger number of respondents. Further research may thus be needed to establish and overview of specific decision-making rules in students' consumer behavior and brand recognition in the process of choosing chocolate confectionery.

Survey results portray strong recognition of *Kalev* brand, which received equal recognition with *Milka* and *Mars, Inc*, while most students also marked that they believe that a particular chocolate confectionery brand is easily distinguishable from other. Compared to *Fazer*, *Kalev's* highest market competitor, *Kalev* received highest recognition in with majority of votes, compared to *Fazer*. At the same time, Fazer's products were proved to be more popular among the respondents in the occasion when students were asked to choose their most favorite product among the list of fourteen. However, combined number of votes of preference for *Kalev* and *Fazer* products received an equal amount of preference points in total in one case. In conclusion, one can say that among the students of Tallinn University of Technology, both international and local, *Kalev* remains the most recognized among the brands compared to the popular alternatives. At the same time, specific range of products shows fierce competition between these brands, which makes it somewhat complicated to conclude which product is the most favorite among the students and the bigger sample might shed more light into this.

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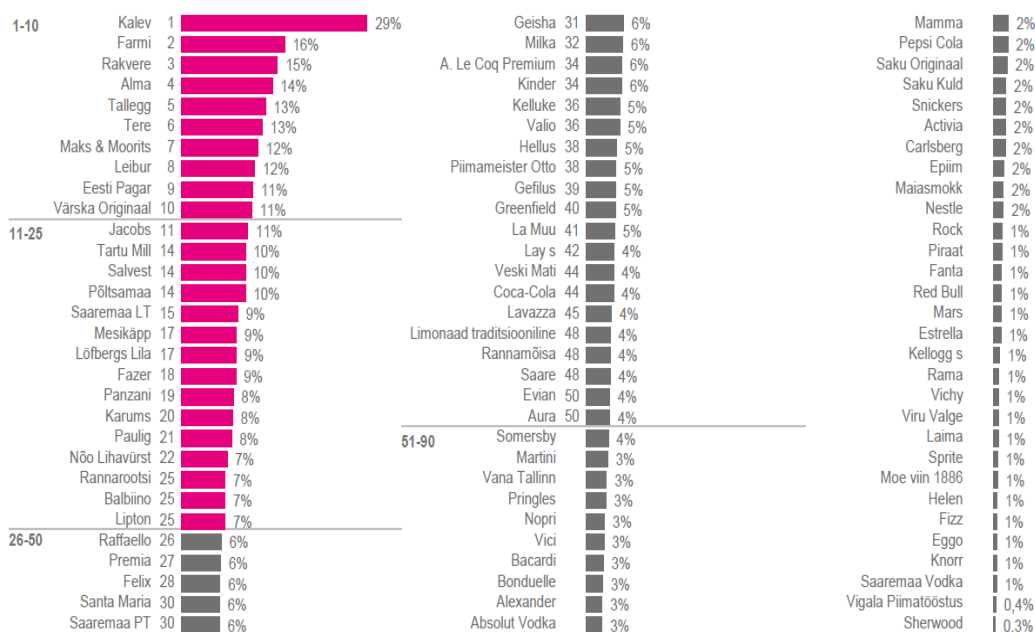Toidubrändide edetabel: 90 meeldivamat brändi. KANTAR Emor. Emor AS. Allikas: antud autori taotluse korral.

APPENDICES

Appendix 1. 90 most favorite food brands in Estonia (2017 Kantar Emor's data)

Toidubrändide edetabel: 90 meeldivamat brändi

Küsimus: Palun valige sellest nimekirjast kuni viis kaubamärki, mis Teile kõige enam meeldivad.
% kõigist vastajatest, n=1009

NB! Võrdse valinute osakaalu (%) ning ka vastanute arvu puhul jagavad brändid edetabelikohta

Rank	Brand	#	%		Brand	#	%		Brand	%
1-10	Kalev	1	29%		Geisha	31	6%		Mamma	2%
	Farmi	2	16%		Milka	32	6%		Pepsi Cola	2%
	Rakvere	3	15%		A. Le Coq Premium	34	6%		Saku Originaal	2%
	Alma	4	14%		Kinder	34	6%		Saku Kuld	2%
	Tallegg	5	13%		Kelluke	36	5%		Snickers	2%
	Tere	6	13%		Valio	36	5%		Activia	2%
	Maks & Moorits	7	12%		Hellus	38	5%		Carlsberg	2%
	Leibur	8	12%		Piimameister Otto	38	5%		Epiim	2%
	Eesti Pagar	9	11%		Gefilus	39	5%		Maiasmokk	2%
	Värska Originaal	10	11%		Greenfield	40	5%		Nestle	2%
11-25	Jacobs	11	11%		La Muu	41	5%		Rock	1%
	Tartu Mill	14	10%		Lay s	42	4%		Piraat	1%
	Salvest	14	10%		Veski Mati	44	4%		Fanta	1%
	Põltsamaa	14	10%		Coca-Cola	44	4%		Red Bull	1%
	Saaremaa LT	15	9%		Lavazza	45	4%		Mars	1%
	Mesikäpp	17	9%		Limonaad traditsiooniline	48	4%		Estrella	1%
	Löfbergs Lila	17	9%		Rannamõisa	48	4%		Kellogg s	1%
	Fazer	18	9%		Saare	48	4%		Rama	1%
	Panzani	19	8%		Evian	50	4%		Vichy	1%
	Karums	20	8%		Aura	50	4%		Viru Valge	1%
	Paulig	21	8%	51-90	Somersby		4%		Laima	1%
	Nõo Lihavürst	22	7%		Martini		3%		Sprite	1%
	Rannarootsi	25	7%		Vana Tallinn		3%		Moe viin 1886	1%
	Balbiino	25	7%		Pringles		3%		Helen	1%
	Lipton	25	7%		Nopri		3%		Fizz	1%
26-50	Raffaello	26	6%		Vici		3%		Eggo	1%
	Premia	27	6%		Bacardi		3%		Knorr	1%
	Felix	28	6%		Bonduelle		3%		Saaremaa Vodka	1%
	Santa Maria	30	6%		Alexander		3%		Vigala Piimatööstus	0,4%
	Saaremaa PT	30	6%		Absolut Vodka		3%		Sherwood	0,3%

Allikas: 2017 study portion acquired by the author's request to Kantar Emor

CHOCOLATE!

Dear colleague,

My name is Aleksandrs Moldenhauers and I am an undergraduate student of Tallinn University of Technology, School of Business and Governance, currently working on my Bachelor's thesis titled "*TTÜ students' consumer behavior: Recognition of Kalev compared to foreign alternatives*". My paper is focused on the study of students' consumer behavior, in particular the aspects of their brand recognition and preference towards chocolate confectionery, emphasizing most popular brands that are available in Estonian market: products of Estonian national *Kalev*, and its closest foreign alternatives, such as *Fazer* and other products of attractive chocolate trademarks.

I kindly ask you to fill the following questionnaire, with the purpose of collection of the aspects of consumer behavior among the student of Tallinn University of Technology in brand recognition of popular chocolate confectionery in Estonia.

The survey contains 8 questions in English. According to the preliminary test, the survey will not take more than 3-5 minutes of your time.

Given questionnaire is **anonymous**. You will not be asked to provide personal data, including name, date of birth, student code or personal identity code, or other sensitive information. However, for benefit of study and segmentation, I collect some information on the surveyed students in order to expand the data analysis on consumer behavior. After the data is summarized and the thesis is defended you will be able to get know the results by downloading the copy in the digital library of

Tallinn University of Technology (*TTÜ DigiLib*) or by contacting the staff of a respective institute.

Before you proceed with the survey, please fill in the following data:

Gender: Select

Study degree: Select

Faculty/Institute: Select

Type of student: Select

Age group: Select

Monthly income (gross profit): Select

I. Brand recognition of surveyed students

1. Do you recognize any of the below listed chocolate confectionery trademarks? *Please mark **one or more** trademarks you recognize*

1) *Kalev* ☐

2) *Fazer* ☐

3) *Milka* ☐

4) *Tupla* ☐

5) *Mars* ☐

2. Do you believe that some of the above listed chocolate trademarks are more recognizable than the other? *Please make **one choice***

1) *Yes, some trademarks are more recognizable from my experience* ☐

2) *To me, most chocolate products are barely distinguishable* ☐

3. Which of the provided trademarks are the most recognizable in the list? *Please mark **one** trademark, which is the most recognizable to you*

1) *Kalev* ☐

2) *Fazer* ☐

3) *Milka* ☐

4) *Tupla* ☐

5) *Mars* ☐

4. Do you perceive *Kalev* trademark as distinguishably different from other trademarks? *Please make **one choice***

1) *Yes, to me Kalev is a the most distinguished brand in Estonian chocolate market* ☐

2) *I cannot underline Kalev specifically among all other popular available trademarks (other trademarks seem to be as popular or more popular)* ☐

II. Consumer preference of students towards chocolate trademarks

5. Please grade, on the scale of 1-5, how important are the following consumer behavior factors for you **as a student** while making your consumer decisions in purchasing products of chocolate confectionery in Estonia.

    1) Price of a chocolate product Rate

    2) Trademark and brand reputation (*preference*) Rate

    3) Personal experience with a specific chocolate confectionery brand (*inference*) Rate

6. Among the following products of popular chocolate confectionery brands, which do you personally prefer **the most**? *Please select one*

Kalev (Estonia)	Bitter (Kalev 70% dark chocolate) ☐	Anneke piimašokolad (Anneke milk chocolate) ☐		Kalevipoeg mandlitega (Kalev's son with almonds) ☐
Fazer (Finland)	Geisha ☐	Karl Fazer Coconut Milk Choc ☐		Karl Fazer Milk Chocolate And Honey Roasted Almonds ☐
Milka (Switzerland)	Alpine Milk ☐	Broken Nuts ☐		Milka & Oreo ☐
Tupla (Finland)				Tupla ☐
Mars (United Kingdom)	Snickers ☐	Mars ☐	Milky Way ☐	Twix ☐

7. Please choose **two products** among the following list of popular trademarks, which you personally regard as **equally preferable**. *Please select two but of different trademarks*

Kalev (Estonia)	Bitter (Kalev 70% dark chocolate) ☐	Anneke piimašokolad (Anneke milk chocolate) ☐		Kalevipoeg mandlitega (Kalev's son with almonds) ☐
Fazer (Finland)	Geisha ☐	Karl Fazer Coconut Milk Choc ☐		Karl Fazer Milk Chocolate And Honey Roasted Almonds ☐
Milka (Switzerland)	Alpine Milk ☐	Broken Nuts ☐		Milka & Oreo ☐
Tupla (Finland)				Tupla ☐
Mars (United Kingdom)	Snickers ☐	Mars ☐	Milky Way ☐	Twix ☐

This is the end of the survey. Thank you for your time!

Appendix 3. Copy of the students' survey form (Estonian questionnaire copy)

ŠOKOLAAD!

Hea kolleeg,

Minu nimi on Aleksandrs Moldenhauers ja ma olen Tallinna Tehnikaülikooli Majandusteaduskonna üliõpilane. Hetkel kirjutan ma oma bakalaureusetööd teemal *"TTÜ üliõpilaste tarbijakäitumine: Kalevi brändi tunnustamine võrreldes välismaiste alternatiividega.*"

Minu töö keskendub üliõpilaste tarbimisharjumuste uurimisele, täpsemalt šokolaadibrändide tuntusele ja eelistamisele võrreldes omavahel Eesti turul konkureerivaid eri firmade šokolaaditooteid, milleks on Eesti oma magusatootja *Kalev* ning sellega võistlevad välismaised alternatiivid nagu *Fazer* ja teised kondiitritööstusettevõtted.

Palun täida alljärgnev küsimustik, mille eesmärgiks on koguda Tallinna Tehnikaülikooli õpilaste tarbijakäitumisega seotud andmeid seoses populaarsete šokolaaditoodete kaubamärkide tunnustamisega Eestis.

Küsitlus koosneb 8 küsimusest. Nendele vastamiseks kulub umbes 3-5 minutit.

Tegemist on anonüümse küsimustikuga. Teilt ei nõuta isiklikke andmeid, sealhulgas nime, sünnikuupäeva, üliõpilaskoodi või isikukoodi või muud tundliku sisuga teavet. Sellele vaatamata kogun ma uuringu jaoks üliõpilaste kohta mõningat teavet selleks, et oleks võimalik laiem tarbijakäitumisega seotud andmete analüüs.

Pärast andmete analüüsimist ja töö kaitsmist on võimalik tulemuste kohta lugeda allalaadides koopia Tallinna Tehnikaülikooli digitaalraamatukogust (*TTÜ DigiLib*) või võttes ühendust vastava instituudi töötajaga.

Enne uuringu jätkamist palun täitke järgmised andmed:

Sugu: Select

Kraad: Select

Teaduskond/kõrgkool: Select

Üliõpilase liik: Select

Vanuserühm: Select

Kuusissetulek (bruto): Select

I.   Küsitletud üliõpilastel kaubamärgi äratundmine

1. Kas tunnete ära mõne järgnevalt loetletust šokolaadimaiustuste kaubamärkidest?
   *Märkige palun **üks või mitu** kaubamärki, mille tunnete ära*

      1) *Kalev* ☐

      2) *Fazer* ☐

      3) *Milka* ☐

      4) *Tupla* ☐

      5) *Mars* ☐

2. Kas usute, et mõni eespool loetletud šokolaadi kaubamärkidest on teistest
   paremini äratuntav? *Palun tehke **üks valik***

      1) *Jah, mõni kaubamärk on minu kogemuse põhjal teistest äratuntavam* ☐

      2) *Minu jaoks on enamik šokolaaditooteid vaevu eristatavad* ☐

3. Millised esitatud kaubamärgid on loendis kõige äratuntavamad? *Märkige palun*
   ***üks** kaubamärk, mis on teile kõige äratuntavam*

      1) *Kalev* ☐

      2) *Fazer* ☐

      3) *Milka* ☐

      4) *Tupla* ☐

      5) *Mars* ☐

4. Kas te tunnetate *Kalev*i kaubamärki teistest kaubamärkidest eristuvana? *Palun*
   *tehke **üks valik***

      1) *Jah, minu jaoks on Kalev Eesti šokolaaditurul kõige eristuvam kaubamärk*
         ☐

      2) *Ma ei saa Kalevit esile tuua kõigi teiste populaarsete kaubamärkide hulgast*
         (teised kaubamärgid tunduvad olevat sama populaarsed või
         populaarsemad) ☐

II.   Üliõpilaste eelistused seoses šokolaadi kaubamärkidega

5. Palun hinnake skaalal 1-5, kui olulised on järgmised tarbijakäitumise teile **kui üliõpilasele**, kui teete oma tarbijaotsuseid Eestis šokolaadimaiustuste ostmisel.

1) Šokolaaditoote hind Rate
2) Kaubamärgi ja tootemargi maine (*eelistus*) Rate
3) Isiklik kogemus šokolaadimaiustuse konkreetse tootemargiga (*järeldus*) Rate

6. Järgmistest populaarsetest šokolaadimaiustuste kaubamärgitoodetest, mida ise eelistate **kõige rohkem**? *Valige palun **üks***

Kalev (Eesti)	Bitter (Kalevi 70% tume šokolaad) ☐	Anneke piimašokolaad ☐		Kalevipoeg mandlitega ☐
Fazer (Soome)	Geisha ☐	Karl Fazer Coconut Milk Choc ☐		Karl Fazer Milk Chocolate And Honey Roasted Almonds ☐
Milka (Šveits)	Alpine Milk ☐	Broken Nuts ☐		Milka & Oreo☐
Tupla (Soome)				Tupla ☐
Mars (Suurbritannia)	Snickers ☐	Mars ☐	Milky Way ☐	Twix ☐

7. Palun valige **kaks toodet** järgmisest populaarsete kaubamärkide loendist, mida ise peate **võrdselt eelistatavaks**. *Palun valige **kaks, kuid eri kaubamärkidest***

Kalev (Eesti)	Bitter (Kalevi 70% tume šokolaad) ☐	Anneke piimašokolaad ☐		Kalevipoeg mandlitega ☐
Fazer (Soome)	Geisha ☐	Karl Fazer Coconut Milk Choc ☐		Karl Fazer Milk Chocolate And Honey Roasted Almonds ☐
Milka (Šveits)	Alpine Milk ☐	Broken Nuts ☐		Milka & Oreo ☐
Tupla (Soome)				Tupla ☐
Mars (Suurbritannia)	Snickers ☐	Mars ☐	Milky Way ☐	Twix ☐

See on uuringu lõpp. Täname, et leidsite aega!

Appendix 4. Survey results for figure 3

Female, 18-20 – total 16
Kalev 10
Mars 1
Fazer 1
Milka 4
Male, 18-20 – total 22
Kalev 11
Mars 2
Fazer 3
Milka 6
Female, 21-23 – total 28
Kalev 15
Mars 1
Fazer 2
Milka 9
Tupla 1
Male, 21-23 – total 26
Kalev 9
Mars 3
Fazer 4
Milka 9
Tupla 1
Female, 24-26 – total 12
Kalev 3
Mars 2
Fazer 3
Milka 4
Male, 24-26 – total 8
Kalev 1
Mars 2
Fazer 2
Milka 3
Feale, 27-29 - total 4
Kalev 4
Mars 0
Fazer 0
Milka 0
Male, 27-29 – total 7
Kalev 2
Mars 1
Fazer 2
Milka 2

Source: author's calculations, based on *Google Forms* survey results