

ERASMUS UNIVERSITY ROTTERDAM
Erasmus School of Economics

Bachelor Thesis for International Bachelor Economics and Business Economics

Title: *How a brand's reaction to societal and political events influences brand reputation, using the example of the Russian invasion of Ukraine*

Name student: Sofiia Davydova

Student ID number: 558049

Supervisor: Agapi Thaleia Fytraki

Second assessor: Fleur Prins

Date final submission: 01.08.2023

The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

Abstract

The paper fills in the research gap of quantitative analysis of the effects of the war in Ukraine on consumer behavior, brand activism, and brand reputation. The purpose of the following research is to study whether the brand response to the Russian invasion of Ukraine (brand activism) has an impact on the brand reputation, as well as the possible moderating effect of the consumer country of origin on this relationship. The design of the study included the conduction of an online experiment with three different levels of brand activism, which was randomly assigned to the survey participants. Survey respondents were asked to evaluate the brand by using Likert-type questions after the allocation to the brand activism group. Results of the study demonstrated the significant difference of brand reputation score between levels of brand activism (no, low, high). All the findings are interpreted not taking into consideration the possible effects of the ANOVA and ANCOVA assumption violations. The recommendation for the further research would be to adjust the research methods and techniques in order to avoid possible limitations of this study. The findings can be used by brand management, marketing, and board members of the companies in order to improve or sustain brand reputation by using brand activism.

Table of contents

1. Introduction.....	4
2. Literature review.....	7
2.1 Brand activism.....	7
2.2 Brand reputation.....	9
2.3 Research framework.....	13
3. Methodology.....	14
3.1 Research design.....	14
3.2 Sampling method.....	15
3.3 Procedures.....	15
4. Results.....	19
4.1 Data description and transformation.....	19
4.2 Descriptive statistics.....	20
4.3 Reliability.....	22
4.4 Validity (Factor analysis).....	22
4.5 Hypothesis testing.....	23
5. Discussion.....	28
6. Conclusion.....	30
6.1 Summary.....	30
6.2 Research implications.....	31
6.3 Limitations and further research.....	32
7. Bibliography.....	34
8. Appendix.....	36
8.1 Survey questions.....	36
8.2 SPSS Output.....	39
8.3 Raw data.....	44

1. Introduction

The relationship between brands, societal or political events, and consumer behavior has grown very complex in the modern time. Brands are under pressure to maintain high levels of profitability for investors and at the same time consumers expect brands to make a stand regarding important events happening in the world. An example of such an event can be the Russian invasion of Ukraine at the beginning of 2022. It was and still is the biggest armed event in Europe since World War II, implying a possible impact on our lives and businesses. The responses of brands differed between donating funds to Ukraine, leaving the Russian market, or not responding at all. For example, McDonald's in the first days of the invasion announced that they are leaving the Russian market and closing all their restaurants there, which is around 850 locations (McDonald's, 2022). Whereas Leroy Merlin continued to operate normally in Russia and managed to even have a sales increase there during 2022 (Novelli, 2022). The impact of such a response can vary and influence the brand reputation both positively and negatively. The following study will research the link between brands, societal and political events, such as war, and consumer behavior, particularly how the brand response to the Russo-Ukrainian war (also called brand activism) influenced brand reputation.

Regarding the previous research in the field, Aaker (1997) in his study 'Dimensions of brand personality' states and discusses five different elements of brand personality, such as excitement, sincerity, competence, sophistication, and ruggedness. The topic in the paper covers how the brand might use these dimensions to stand out from the competition and enhance customer brand identification. The model proposed by Aaker (1997) was later on used by several researchers in order to measure brand personality and brand reputation. Additionally, Pappu, Quester & Cooksey (2005) research how the country can influence the image of the brand, consumer vision and recognition of the brand, brand prestige, and loyalty. From the specific topic of wartime, the research by Yurdagel & Baycur (2023) suggests that consumer behavior can be different in times of war, with a possible shift to patriotic goods, and desire to support their country's production during wartime. The authors suggest that brands need to adapt their strategies and show a strong position during such challenging times. For example, Andersson & Nylund (2022) makes a qualitative study a few months after the Russian invasion of Ukraine, in order to see how representatives of generation Z perceive Arla's decision to stop selling one of its products because of the packaging that illustrated the capital of Russia. The interview results

demonstrated quite controversial opinions, with some people saying that they now respect the brand more, while others didn't see the point behind this decision as it wouldn't make a real impact on the situation. Therefore, current research addresses brand reputation as a concept, along with suggested models for measuring it, and the effect of brand reactions to the Russian invasion of Ukraine. Research is currently lacking on how a company's reaction to the war in Ukraine (also known as brand activism) might affect reputation of this brand. In order to take the research by Andersson & Nylund (2022) a little bit further, this study will investigate a much bigger sample of respondents by using quantitative data. Additionally, since the full-scale war started more than a year ago, enough time has passed for companies to make a statement. Therefore, the main research question will be as follows: *'How does the brand's reaction to the Russian invasion of Ukraine influence brand reputation?'* In order to answer the question more in detail, the following sub-questions will be researched:

- 1) *Does leaving Russian market positively affect brand reputation?*
- 2) *Is ignoring the problem and continuing operations in Russia affects the brand reputation?*
- 3) *Does the perception of brand reputation differ based on the consumer country of origin?*

This thesis aims to investigate the compound relationship between branding, the Russian invasion of Ukraine, and consumer behavior. It will fill the gap about how brands' response to this event affects their reputation in the eyes of consumers. Regarding practical relevance, this research can help brands improve their brand image, positioning, and response during critical times. Additionally, it can help firms to differentiate themselves from their competitors and improve brand consistency in order to build loyalty and trust in their relationship with the customer. From the social perspective, the following research will study the effects of an important global event in Europe on the business market and consumer behavior. The following research will shed light on a topic that was not previously linked to consumer behavior with a quantitative method. It additionally will demonstrate how much the consumer values the position of the brand regarding such a socially sensitive topic as war, and whether supporting the country of aggressor can negatively impact our brand perception.

2. Literature review

The main goal of the following review is to cover the existing research on the topics of brand activism, brand reputation, measurement of brand reputation, and consumer behavior. Additionally, it is important to find the gap that currently exists in the previous research in the similar field. The following thesis studies how people as consumers perceive the reaction of brands on important societal or political events, and whether it has an impact on brand reputation. The focus of this paper will be on the Russian invasion of Ukraine as a main political event. In this literature review, the articles that corresponded to the topics of political events and their effects on consumerism, viral marketing, corporate sociopolitical activism as well as the effect of brand reputation, and brand boycotting were included and discussed.

First, articles that cover the main theories regarding corporate sociopolitical activism (CSA) are reviewed. Later on, studies regarding the definition of brand activism are discussed. The articles cover how many people take their personal beliefs into account when making a buying choice and how the society reacts to different announcements made by companies (with the example of Starbucks). Additionally, theory behind brand reputation, its measurement and the factors that can influence it are explained. The topic of profitability as an effect of brand reputation is briefly mentioned with the study done by Anagnostopoulou et al (2019). Lastly, studies on the effects of the war in Ukraine, and similar research regarding other political conflicts are presented. They are used to determine whether the country of origin has a moderating effect on the relationship between brand activism and brand reputation.

2.1 Brand activism

The term brand activism can successfully represent what we are trying to get from the companies as a response to social or political global events. Christine Moorman (2020) draws her definition of ‘‘brand political activism’’ as a public response on behalf of a certain company to an affair. She also highlights how the position of the company can influence other stakeholders connected to the company name, such as clients, consumers, and employees. Therefore, taking a certain side on a controversial topic can also bring a certain amount of risk to the company as the customers who do not agree with this position can churn. According to Moorman (2020), the results of the CMO survey (2020) show that only 23.6% of researched marketers think it’s

appropriate to “Select partners on the basis of political stance”, which can be considered as still not a substantial percentage.

Korschun (2021) explores the modern usage of the term brand activism, discussing the importance of this phenomenon in the future. The study includes the discussion about how brand activism is different from other forms of addressing socio-political issues. For example, when comparing it to Corporate Social Responsibility (CSR) and public relations, brand activism is a more public response than CSR, and demonstrates more advocacy compared to what public relations can usually offer, as implied by Korschun (2021). The conclusion that was drawn by the author includes the fact that brand activism gives an opportunity for the firm to prove and demonstrate the values they stand for. Later, it can allow consumers to align their own personal values with the values of the brand in order to make a decision regarding the purchase. Edelman (2018) finds that in 2018 (the year of study), there was an increase of 13% from the year 2017 in the number of consumers who buy based on the beliefs of the brand regarding political or societal cases that are important for them. In 2018, these types of consumers were 64% out of all respondents participating in the study.

Next, the example from Andersson & Nylund (2022) can additionally be used to see the findings of the research already done in the field similar to this paper. As briefly mentioned earlier, the qualitative research conducted by Andersson & Nylund (2022) used an example of a dairy brand Arla that decided to stop selling one of their products because of the packaging that illustrated the Russian capital right after the Russian invasion of Ukraine at the beginning of 2022. Their communication manager pointed out that it was a temporary decision due to the fact that their brand did not want to be associated with the country of aggressor (Maelkeritidende, 2022). The interview results from Andersson & Nylund (2022) showed controversial opinions, where some people said that they now respect the brand more, while others didn't see the point as it wouldn't make a real impact on the situation.

2.2 Brand reputation

Regarding the theoretical basis of brand reputation, Chun (2005) argues that there are differences between brand image and reputation in terms of perception and potential influence on future brand success. While brand reputation is more complicated and involves a business's history with both positive and bad features, the brand image may be swiftly developed depending on external circumstances. Negative events may have a deeper and longer-lasting influence on a business's reputation than positive ones, whereas brand image may be quickly fixed by marketing methods like advertising. The article offers information on comprehending and evaluating brand reputation.

In order for the theory to be closer to the real life cases, it is important to additionally include more modern research, studying social media as it can be considered a huge base for the exploration of brand reputation by the possible consumers. Lekhanya (2014) studied the impact of viral marketing on brand reputation. The author motivated the research by increased popularity of social media in both business and social sectors of everyday life, implying that news can quickly spread around the globe. The study was conducted based on a sample of 75 companies. The survey consisted of both open and closed-ended questions that were sent to the managers of the companies from the selected sample. The results demonstrated that the majority of companies did not see any impact of viral marketing on relationships with their customers as well as brand reputation. It was also mentioned that company managers from the sample do not believe that it is easy to control information that was spread by viral marketing. According to Fiske (1980), negative information can be considered more catchy and more memorable rather than positive information. It can be applied to good versus bad publicity in terms of the corporate world.

Additionally, Anagnostopoulou et al (2019) studied how the online reputation of hotel businesses impacts business profitability. The hypothesis is whether a positive online reputation obtained through customer reviews on the booking.com website has a positive impact on their financial performance. The sample consisted of more than 3,000 hotels across the biggest 13 cities in the UK. The results of the study indicated that there is an association between a higher number of positive reviews on profitability, implying that the costs of investing in better customer relationships and service can be compensated through higher profitability. Therefore, we can assume from these findings that maintaining a good reputation can be considered

important for the business. Also, Jung & Seock (2016) studied the relationship between corporate reputation, brand attitude, and purchase intentions of consumers, and whether consumer attitude/perception of the brand has an impact on the purchase intention. The results support the argument of positive influence of brand awareness on purchase intentions. A study done by Dean (2004) studied whether there is an interaction between a corporate's response to a crisis and the reputation of the company. The main focus of the study was to determine if firms will be perceived in high or low regard based on their response to a crisis. The study was done with a sample of students from one university who were not business majors. Corporate reputation, the company's response to an event, as well as possible responsibility for a certain crisis, were all presented to participants separately. They were divided into a few written scenarios with separate sets of questionnaires per each scenario. The variable that was used as reputation was focused entirely on the corporate social responsibility of the firm, not taking into consideration measurements of other aspects (e.g. product quality). The significant results demonstrated that companies that responded clearly (e.g. accepted publicly their mistake, transparent communication) were perceived and regarded more highly compared to the companies who responded differently (ignoring or denying the problem). Therefore, work done by Dean (2004) can be used to help develop the first hypothesis. In this case, the so-called 'bad' response includes the company's refusal to leave Russia (therefore, a continuation of tax payment that finances the war), leading to the first hypothesis:

***H1:** Brand's decision to continue operating in Russia after the Russian invasion of Ukraine (low brand activism) has a negative effect on the brand reputation.*

Similarly to this research, a study done by Rio et al (2001) explored whether brand associations have an impact on consumer response. They focused on six brands in the market of non-specialized sport shoes, to avoid overcomplicated products. The methods of collecting data involved in-depth interviews, surveys, and brand evaluations, totaling with the set of 1,000 fully filled surveys and 1,726 brand assessments. Four different dimensions that form brand image were researched, such as guarantee function, social identification function, personal identification, and status function. The social identification factor was built upon the work of Aaker (1997) who indicated that consumers perceive brand extensions better if the brand has a

good reputation and is publicly acclaimed. Whereas, personal identification was described mainly in the work of Westbrook (1987) who suggested that consumers who associate a brand with some positive emotional experience can be more likely to recommend this brand further in their social group. The results showed that social identification had a positive impact on price premium and brand extension acceptance, whereas personal identification showed to have an effect on the possibility of the customer recommending the brand to family and friends. Therefore, it is not unreasonable to assume that the negative emotions associated with the brand name or brand experience might negatively affect the company. At the beginning of the war, there were many controversial opinions regarding different brands and their response to the Russian invasion of Ukraine. Consumers negatively responded to the companies who reacted inappropriately in their opinion. The examples of companies that were criticized by the media include Mondelez and Cargill, who didn't stop operating in Russia after the invasion (BusinessInsider, 2022). Some social media users expressed their intentions to boycott companies that support Russia and its economy, such as Decathlon (Morton, 2022). On the other hand, companies like McDonald's and Apple, that immediately suspended all their restaurants and shops both offline and online in Russia, are associated with positive responses in the media. According to many social media posts, this type of support for Ukraine was positively met by consumers and users, leading to the second hypothesis:

***H2:** Brand's public support to Ukraine after the Russian invasion (high brand activism) has a positive impact on the brand reputation.*

It is important to additionally add the hypothesis that will test whether the absence of information regarding firm's positioning towards the war show any significant results. This way it will be possible to compare the brand reputation score across the neutral group (no brand activism):

***H3:** Absence of information regarding brand position towards the war (no brand activism) does not have any impact on the brand reputation.*

Cambefort and Pecot (2020) take an example of Starbucks' reaction to different social cases and the reaction of consumers they faced afterward. An example can be the negative reaction of Christians to Starbucks' support of same-sex marriages (CNN Business, 2013). Also, a petition was published against the company for its use of eggs from battery farming (Change.org, 2018), etc. Therefore, the reasoning behind boycotting brands by consumers can be very varied and differ according to multiple variables. Al Serhan and Boukrami (2015) stated that the reasons for consumer boycotts differ between developed and developing countries. During the explanation, it was stated that usually political and/or religious cases is the reason for developing countries, and economic factors is often the reason for the developed countries. This article can be relevant to mention, as this study will gain respondents from both developed and developing countries. Regarding the specific case of the Russian invasion of Ukraine and its impact, the article by Jawaid, Gomolka & Timmer (2022) explains in detail the neuroscience of trauma on the example of the war in Ukraine. They include the effects of the war on psychological and physical health of people who were directly affected by the fear of the war, forced immigration, and feeling of helplessness. The last one is associated with the heightened levels of depression among Ukrainians as well as people who experience sympathetic pain, for example people from Poland and other neighbouring countries. Therefore, it is necessary to analyze whether consumer country of origin can have a moderating effect on the impact of brand activism on brand reputation, leading to the last hypothesis:

***H4:** The effect of brand response to the war (brand activism) on the brand reputation is moderated by consumer's country of origin.*

2.3 Research framework

The visualized framework for this research can be seen in **Figure 1**. Each level of brand activism leads to its effect on the brand reputation, which is symbolized by hypotheses 1, 2, and 3, respectively. Additionally, moderating effect of country of origin is presented under the fourth hypothesis.

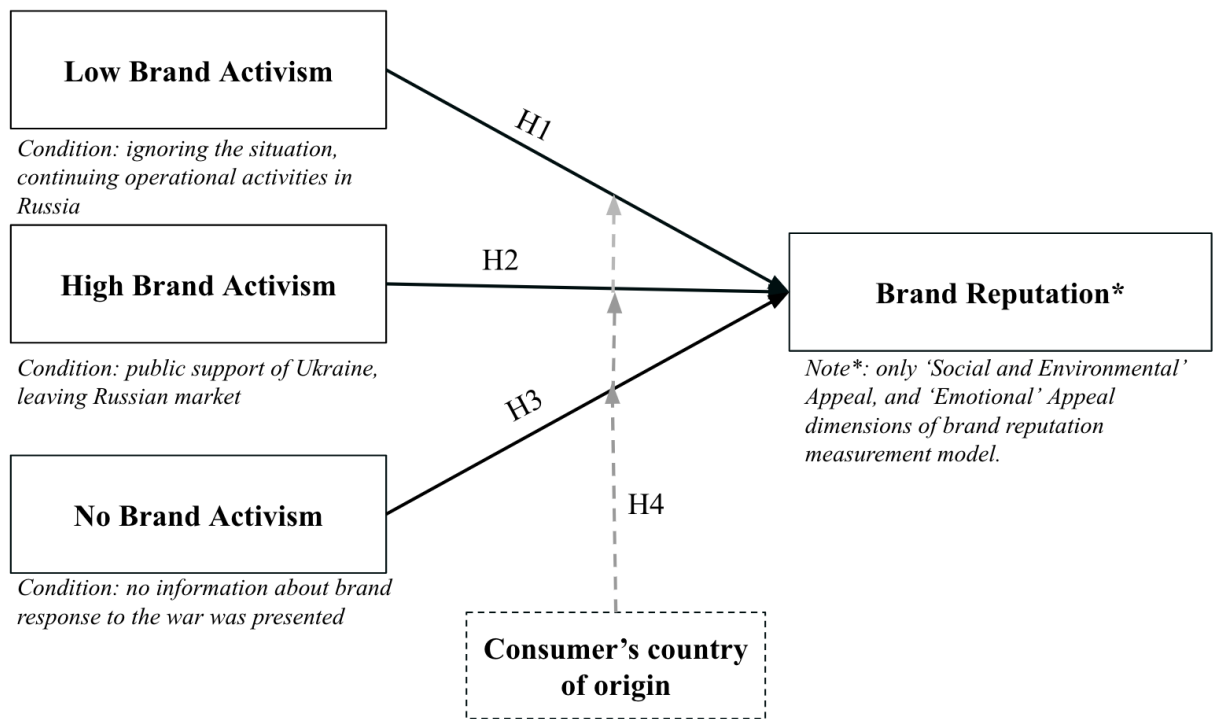


Figure 1. Research framework

Note. H stands for the hypothesis.

3. Methodology

3.1 Research design

The main methodology technique for this study was conducting an experiment to gain data. The choice of methodology was based on the research questions that are focusing on the brand reputation and how it can change after a certain event (e.g. after the respondent was exposed to new information regarding the brand response to the Russian invasion of Ukraine). Therefore, in this study brand activism (brand response to the war) will be represented as a manipulated variable. There will be three levels of manipulated variables, each representing a clear public response to the brand, focusing on time (immediate/quick response and delayed response), and decision framing (positive and negative reaction).

Level 1: positive quick reaction of the brand to the invasion of Ukraine. The brand provided a clear public response, supporting the position of Ukraine and leaving the Russian market. This response has a positive impact on the emotional and social aspects of brand reputation.

Level 2: no reaction from the brand. The brand did not react anyhow and continued their business activities in Russia. Such a response of the brand has a negative impact on the emotional and social aspects of brand reputation.

Level 3: no information regarding company's position towards the war. Only general information about the brand is presented to the respondents, in order to see how highly the respondents perceive the brand by itself.

The survey was conducted and shared online by using different channels (group chats, social media, and personal acquaintances of the author). The goal was to collect a minimum number of 200 responses. Efforts were made to provide a diverse and representative sample with various backgrounds, ages, incomes, gender, and level of education. The survey was designed to randomly assign all the respondents into three different groups, with different information presented in order to match each level of the experiment. All groups were presented with a brief description of the company, in this case, it was Lindt. For the first level of the experiment, representing high brand activism, the respondents were additionally given a short summary of

Lindt's response to the war. It was mentioned that the company publicly announced shortly after the invasion that they close all stores in Russia and leave their market. For the second level (low brand activism), the information was presented describing that the company didn't make any public statements about the case, and continued to operate and make profit in Russia. The text for the last group contained only general information about the company, with nothing about their response to the war, in order to see how the brand is perceived by the consumers and to compare the results of this group to the first two. This type of experiment will help to collect all the necessary data in a limited period of time with the highest possible accuracy, as the respondents of the survey are randomly assigned to each scenario. Only one scenario contains truthful information about the company's response. Participants of the study were informed about it at the end of the survey in a thank you note, in order to avoid any bias and to not mislead the respondents.

3.2 Sampling method

The sampling method for this study is mainly convenience sampling. The target population contains people who are genuinely familiar with the basic facts of the Russo-Ukrainian war. The survey was sent to classmates and personal acquaintances, as well as posted in the university group chat. Some people who participated in the survey shared it with their own friends and acquaintances generating a more diverse sample. When the participants number peaked at 110 respondents, it was decided to include an additional distribution method. A new method implied collecting responses on the campus of Erasmus University from students and university staff in order to reach 200 participants. Due to the time limitations of this research, the mentioned sampling methods may not give the ideal random sample, however, it was considered as the best possible option available at the time of the research.

3.3 Procedures

The collection of data was done through the distribution of the online Qualtrics survey. At first, respondents answered general questions, such as age, gender, level of education, country of origin, and employment status. Afterward, a small general description of the brand was presented with additional information about the response of the brand to the Russo-Ukrainian war (3 different scenarios).

Due to the fact that there is substantial previous research regarding brand reputation, metrics from Fombrun et al (2000) were used to measure brand reputation as a variable. Therefore, for reasons of reliability and validity, Reputation Quotient (RQ) model proposed by Fombrun et al (2000) was used to measure brand reputation. The author developed a model to measure brand reputation by using six different dimensions: (1) emotional appeal, (2) products and services, (3) vision and leadership, (4) workplace environment, (5) social and environmental responsibility, and (6) financial performance. The RQ model is represented in **Table 1** (Fombrun et al, 2000). In order to gain only information that is relevant for this research, it was decided to use only dimensions 1 and 5, namely emotional appeal, as well as social and environmental responsibility.

Respondents were asked to evaluate each of the dimensions by using statements from **Table 1** and Likert scaling. Possible answers varied from “strongly disagree” to “strongly agree”.

Table 1

The Reputation Quotient

1) Emotional Appeal
I have a good feeling about the company.
I admire and respect the company.
I trust this company.

2) Products and Service
Stands behind its products and services.
Develops innovative products and services.
Offers high quality products and services.
Offers products and services that are a good value for the money.

3) Vision and Leadership
Has excellent leadership.
Has a clear vision for its future.
Recognizes and takes advantage of market opportunities.

4) Workplace Environment
Is well-managed.
Looks like a good company to work for.

Looks like a company that would have good employees.

5) Social and Environmental Responsibility

Supports good causes.

Is an environmentally responsible company.

Maintains high standards in the way it treats people.

6) Financial Performance

Has a strong record of profitability.

Looks like a low-risk investment.

Tends to outperform its competitors.

Looks like a company with strong prospects for future growth.

Source: Fombrum et al (2000)

For the selection of the company used in this study, research done by Novelli (2022) was consulted. Novelli (2022) explored in detail how massive brands and corporations responded to the Russian invasion of Ukraine and what was the reaction to these decisions in the social media. The information about the company's response to the war was based on the main website of the selected company as well as from the CELI list of companies that left or stayed in Russia researched by a team from Yale University (2023). The information about a selected company along with their management decision after the invasion was used in the survey in order to gain data that can answer previously stated research questions of this paper. Respondents were randomly assigned to the brand response by using a randomized function in the Qualtrics survey. It is a between-subjects research design, therefore different people test each scenario of brand response, implying that each participant is exposed only to a single condition. Not all scenarios represented truthful information, therefore it was important to select a brand that was not in a direct spotlight among consumers during the last couple of years. This way it was possible to reduce the risk that the participant knew beforehand how the brand responded to the war. At the end of the survey, participants were informed that only a part of the respondents were exposed to truthful information.

In order to answer the research questions, knowledge of basic applied statistics is necessary. The topics that were used include descriptive statistics, factor analysis, reliability test, ANOVA, as well as ANCOVA testing. ANOVA testing was used in order to see whether there is

a difference in brand reputation score across three groups of different levels of brand activism. In this study, the dependent variable is brand reputation, whereas the independent variable is brand activism. Additionally, the use of moderating variables here is necessary in order to see whether consumer characteristics, such as country of origin had an impact on the effect of brand activism on brand reputation. ANCOVA test was used to inspect the possible moderating effect. Later on, the results from the statistical software were analyzed and represented by using various tables and figures to see the visual representation of the findings.

4. Results

4.1 Data description and transformation

The statistical tests implemented in this study were factor analysis, Cronbach's Alpha, one-way ANOVA with Tukey post-hoc test, and one-way ANCOVA. These statistical analyses were considered the most appropriate based on the variables that were collected and the number of groups included in the analysis (three groups). A total of 202 survey responses were collected through Qualtrics. During the process of data preparation and cleaning, a few of the entries had to be removed, due to the extremely short time duration of the survey for these respondents. Therefore, for the data analyzing part, 198 total responses were used. In this study, there is one independent variable, one dependent variable, and a possible moderator. The Independent variable (brand activism, named as 'group' in SPSS) was manipulated during the experiment, coming up with three different groups that were randomly assigned to the participants (no brand activism, low brand activism, and high brand activism). For each of the brand activism groups, 66 respondents were assigned, creating three equal groups. For the analysis, codes were assigned to each group, with 1 for no brand activism, 2 for low brand activism, and 3 for high brand activism.

The dependent variable for this research is brand reputation, which was measured by using the model from **Table 1**. Brand reputation data was collected by using Likert-type questions. Survey respondents were asked to measure their agreement to six statements (three for emotional appeal and three for social and environmental responsibility) on a scale from "strongly disagree" to "strongly agree". The codes were assigned to each response, from 1 - strongly disagree to 5 - strongly agree. Whether it is appropriate to use Likert-type data in quantitative analysis, such as ANOVA, is still a topic of great debate due to the ordinal nature of the variable. However, the statements used to assess brand reputation are all positively framed, and the most positive answer to each statement ('strongly agree') was coded with the highest number 5. According to Boone (2012), a combination of 4 and more different Likert-type question scores, can be interpreted as a Likert scale and thus used in ANOVA analysis as interval data. Therefore, the further transformation of the variables is done, assuming that the transformed sum of all 6 question scores represents an interval data measuring brand reputation. The variable was conducted by taking the average of respondent's answer to 6 statements. A one-way ANOVA

was conducted to compare the effects of the level of brand activism on brand reputation among the three groups.

One-way ANCOVA was later used to test the covariance effect. ANCOVA testing has the same basic characteristics as ANOVA testing (measures the differences in variances of two groups and more), the only difference is that ANCOVA is used when there are additional covariates used that represent personal characteristics of the individuals from the sample (in this case - individual's country of origin). For ANCOVA analysis of covariance, the usage of the country variable as a categorical variable can be not appropriate and lead to false results. Therefore, it was decided to transform this variable into a binary variable, where Ukraine chosen as a country of origin was given a value of 1, and other countries - 0. The decision was based on the nature of the Russo-Ukrainian war, implying that the Russian aggression towards Ukraine can induce a stronger response to brands working with Russia from people of Ukrainian origin. In order to correctly interpret the new binary variable, it was necessary to build a custom interaction term in statistical software during the analysis. The interaction was chosen between group placement and country of origin variables.

4.2 Descriptive statistics

A total sample of 198 respondents was collected for this research. The descriptive statistics of the sample are presented in **Table 2**, containing the main data regarding respondents' gender, age, level of education, and employment status. The age of the sample varied from 15 to 86 years old, with a mean of 26.5 years. Employment status showed that more than half of the respondents are still students (52%), mainly due to the sampling methods of the survey. Additionally, 31.8% of the sample is employed full-time. The division among the genders is close to equal, with 48.5% of males and 49% of females. In total, people from 54 different countries participated in the experiment.

Table 2

Descriptive statistics

	Percentage	Standard deviation	Mean	Minimum	Maximum
Age		11.5	26.5	15	86
Total observations (N=198)					
Gender					
Male	48.5%				
Female	49.0%				
Other	1.5%				
Prefer not to say	1.0%				
Total observations (N=198)					
Employment status					
Employed full time	31.8%				
Employed part time	10.1%				
Unemployed looking for work	3.0%				
Unemployed not looking for work	1.5%				
Retired	1.5%				
Student	52%				
Disabled	0.5%				
Total observations (N=198)					
Education					
Less than High School	4.5%				
High School Diploma	8.1%				
Bachelor's Degree	24.7%				
Bachelor's Degree (in process)	42.9%				
Master's Degree	18.2%				
Doctoral Degree	1.5%				
Total observations (N=198)					
Country of origin					
Total (N=54)					

4.3 Reliability

Reliability analysis was performed, in order to see whether the survey questions and scales are reliable to perform any statistical analysis and come up with a conclusion. In order to measure internal consistency, Cronbach's alpha reliability analysis was performed in SPSS. Due to the fact that there are three different scenarios in the experiment, it is necessary to perform three separate reliability analyses, for each scenario (no brand activism, high brand activism, and low brand activism) to see the internal consistency. All statements that were used in the survey were positively formed, which is important to gain acceptable Cronbach's alpha result and have consistency across the answers.

In **Table 3** it is visible that the coefficients are all greater than 0.7, demonstrating the internal consistency among the collected data. Statistical output from SPSS for the reliability tests can be found in Appendix (Tables 8 and 9). Based on the results, we can conclude that there is high internal consistency for both items: emotional and social aspects of the brand reputation model. Therefore, for the further analysis, it is reasonable to combine them in one variable, named brand reputation.

Table 3

Results of the reliability analysis with the use of Cronbach's Alpha

	Cronbach's Alpha	N
Emotional	0.915	198
Social	0.893	198

Note. N represented the number of participants allocated to each group. Emotional represents 'emotional appeal' dimension from the Fombrum et al (2000) and social represents 'social and environmental responsibility'.

4.4 Validity (Factor analysis)

The next step was to perform factor analysis in order to see whether the variable used in the research is multidimensional and can be separated into a few separate factors. Bartlett's test showed a significant result with $p < 0.001$, indicating that the null hypothesis of no correlation can be rejected, thus the variables are significantly correlated and are appropriate for conduction of the factor analysis. KMO test showed a result of 0.898, which is greater than 0.5. Therefore, according to the results of KMO and Bartlett's test, it can be concluded that selected factor

analysis is appropriate for given dataset. SPSS output can be found in Appendix under Table 10. Communalities result demonstrated score higher than 0.4 for all 6 variables, indicating that the variables are still represented appropriately when combined into factors (or components), and there is no need to remove any of the items. Component matrix demonstrated high levels of correlation between the component and the items, with the lowest score (0.799) for statement ‘*is an environmentally responsible company*’ and the highest (0.921) for ‘*I admire and respect the company*’, (Appendix, Table 11). During the Principal Component Analysis (PCA), only one component was indicated with cumulative of 76%, (Appendix, Table 12). Further, there was only one factor with the Eigenvalues score above one. On the scree plot, one factor is significantly higher (4.570), whereas the rest five are located below one, (Appendix, Figure 3). We can conclude that only 1 factor explains the variances of 6 measured items, in this case - 6 questions measuring brand reputation. Due to the number of factors, which is only one in this case, it was not possible to use varimax rotation to rotate the variable, which could lead to easier interpretation. Therefore, all items belong to one dimension, and the one dependent variable that will be used for the further analysis is the brand reputation, that will contain the results of all 6 items.

4.5 Hypothesis testing

One-way ANOVA was conducted to measure whether there is a significant difference between means of three groups (no brand activism, low brand activism, and high brand activism), and to see whether the variable was indeed manipulated during the experiment. The hypotheses for this test include brand reputation as the dependent variable, and brand activism as the independent variable:

Ha1: The brand reputation from ‘high brand activism’ group > the brand reputation from ‘no brand activism group’

Ha2: The brand reputation from ‘low brand activism’ group < the brand reputation from ‘no brand activism’ group

The results of the one-way ANOVA testing showed significant effect of brand activism (independent variable) on brand reputation (dependent variable) with $F(2,195)=43.354, p<0.001$,

where 2 and 195 are the degrees of freedom. F-value demonstrates here the ratio of between group variability to within group variability, (Appendix, Table 13). The p-value being less than 5% indicates that the null hypothesis should be rejected. There is a significant difference between the means of 3 groups. The analysis showed that there was a significant effect of the group on brand reputation score. Relatively high F-value showed that there is a substantial difference among the three groups. Partial eta-squared for group placement is 0.308, indicating that 30.8% of the variability and brand reputation score can be accounted for by the independent variable, which is brand activism group in this case, (Appendix, Table 14). Therefore, it can be concluded that the variable was successfully manipulated for the experiment, and the brand activism group (independent variable) is a significant predictor of brand reputation (dependent variable).

With the significant result of difference between three groups, the next step would be to conduct post-hoc test in order to compare the groups and see more in detail the differences between the groups. The test that was selected for this was the Tukey post-hoc test. The general descriptive statistics along with this test indicated different means of brand reputation score among three brand activism groups, not taking the possible effect of moderator into account yet. The results of the post-hoc Tukey test with $p < 0.001$ demonstrated the statistical significance of comparing three groups to each other, (Appendix, Table 15). The results of the Tukey post-hoc test with mean differences between all three groups are presented in **Table 4**. Test results indicate the significant differences between all three groups with low brand activism ($M=2.67$, $SD=0.93$), high brand activism ($M=3.81$, $SD=0.65$), and no brand activism ($M=3.45$, $SD=0.52$), (Appendix, Table 16). From **Table 4**, it can be concluded that the biggest difference of brand reputation was observed between low brand activism and high brand activism groups (mean difference between the groups was 1.143). Whereas, the closest two groups according to the brand reputation mean were no brand activism and high brand activism (difference in means was 0.356). According to the statistical output received, we reject the null hypothesis of no difference between the groups. At the same time, we cannot reject the alternative hypothesis, which stated that the mean of brand reputation score is higher for high brand activism group compared to no brand activism. Additionally, it can be concluded that no brand activism group was perceived better by respondents, indicating higher mean of brand reputation score for no brand activism compared to low brand activism group.

Table 4*Results of Tukey post-hoc test*

Group placement (I)	Group placement (J)	Mean difference (I-J)	Std. Error	Sig.
no brand activism	low brand activism	0.78742*	0.12571	<0.001
	high brand activism	-0.35636*	0.12571	0.014
low brand activism	no brand activism	-0.78742*	0.12571	<0.001
	high brand activism	-1.14379*	0.12571	<0.001
high brand activism	no brand activism	0.35636*	0.12571	0.014
	low brand activism	1.14379*	0.12571	<0.001

Note. * - statistically significant difference: $p \leq 0.05$

The next analysis will test H4, which focuses on the possible moderating effect of country of origin on the relationship between independent and dependent variable, where independent variable is brand activism group (no brand activism, low brand activism or high brand activism), and dependent - brand reputation average score. In this case, country of origin is the binary variable where Ukraine is represented as 1 and other countries as 0, due to the reasons mentioned in data transformation sub-chapter. One-way ANCOVA investigated the effect of covariance (country of origin) on relationship between independent variable (brand activism group) and dependent variable (brand reputation). The interaction term was customized in SPSS between dependent variable (brand activism group) and covariate (country of origin). The results of test of between-subject effects demonstrated that there is still significant effect of brand activism on the brand reputation when controlling for the covariate (country of origin), $F(2,192)=17.683$, $p < 0.001$. Partial eta-squared decreased compared to previous test to 0.156, indicating that now only 15.6% of the variance in dependent variable can be explained by the independent variable. Next, it is important to analyze both the main effect of the covariate as well as the interaction effect. The main effect of covariate on dependent variable showed insignificant result - $F(1,192)=0.916$, $p=0.340$, (Appendix, Table 17). Therefore, the fact that the respondent selected Ukraine as a country of origin by itself does not have a direct significant effect on the dependent variable - brand reputation. On the other hand, the interaction effect between the covariate (country of origin - Ukraine) and the independent variable (brand activism group) showed a significant result, $F(2,192)=6.580$, $p=0.002$, rejecting the null hypothesis of no effect. Therefore,

it can be concluded that the country of origin has an interaction with the independent variable, meaning that the country has an impact on how independent variable affects dependent. The brand reputation perception differs among participants between people from Ukraine and other countries. Thus, there is evidence that supports the moderating effect on the association between brand activism and brand reputation. Eventhough, the results of the test were significant, the estimated means that were adjusted for the effect of the covariate differ only slightly. The estimated means which were adjusted with the country of origin are represented in **Table 5**. Comparison of estimated marginal means demonstrated a small increase in the mean of high brand activism group (adjusted mean = 3.813, mean = 3.8109), and a small decrease in the mean of the low brand activism group (adjusted mean = 2.662, mean = 2.6671), (Appendix, Table 18).

Table 5

Estimated Marginal Means from one-way ANCOVA

Group placement	Mean	Standard Error
No brand activism	3.458 ^a	0.89
Low brand activism	2.662 ^a	0.89
High brand activism	3.813 ^a	0.89

Note. a - covariates appearing in the model are evaluated at the country of origin value (0.3535)

In order to better demonstrate the difference between the brand activism groups, a line plot was additionally created (**Figure 2**) to see the interaction between group allocation and brand reputation mean score. The means that are presented on the figure were adjusted for the effect of the covariate based on the results of the one-way ANCOVA analysis (binary variable *Ukraine* = 0.3535). It can be seen that the interaction between the groups continue to be consistent, with the low brand activism group demonstrating the lowest brand reputation mean, and high brand activism group - the highest, (Appendix, Figure 4).

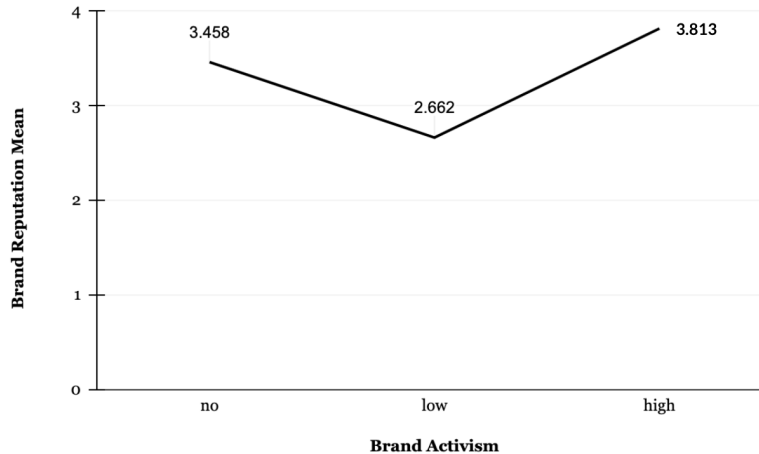


Figure 2. *Estimated marginal means of brand reputation score adjusted for the covariate - country of origin*

Note. Brand activism on the x-axis represents the brand activism group (no, low, high). Brand reputation on the y-axis is the computed average brand reputation score between all statements engaged in the survey. Each data point represents the average brand reputation for its brand activism group. The brand reputation was conducted by allocating each response to a number from 1 - strongly disagree to 5- strongly agree and then computing the average for each group.

Additionally, to see whether other personal characteristics have an impact on brand reputation perception by participants, additional analysis is necessary. For further analysis, participants characteristics were included, such as age, education, and employment status. For easier interpretation, education and employment status were transformed to binary variables. For education, 1 represented respondents who has received higher education or were in process of receiving it, and 0 represented those who did not attend higher education institutions. Whereas, for employment status, 1 was assigned to those who were employed part-time or full-time, and 0 was assigned to students, disabled, retired, and unemployed. Both main and interaction effects were individually customized and analyzed through ANCOVA testing. Absence of higher education as a variable demonstrated insignificant interaction effect with $p=0.113$. Age as a covariate provided significant main effect and interaction effects with $p<0.001$, and $p=0.049$, respectively. Lastly, unemployed status as a last used covariate in this analysis demonstrated insignificant results with $p=0.703$ for main effect and $p=0.538$ for the interaction effect. Therefore, it can be concluded that from all socio-demographic factors that were recorded but not included in the hypotheses, only the effect of age can be significant and meaningful on the impact of brand activism on the brand reputation. Output from the statistical software for these variables can be found in the Appendix (Tables 19, 20, and 21).

5. Discussion

The findings that were obtained from the analyses gives us a more deep understanding of the consumer reactions to brand activism, specifically, whether high or low brand activism towards the Russian invasion of Ukraine has an impact on brand reputation. The findings of this research demonstrated that there is a significant effect of brand activism on brand reputation. High brand activism, which is implied by the brand's quick reaction to the war in Ukraine, and suspending all its operations in Russia is associated with a better brand reputation perceived by consumers. At the same time, low brand activism (brand did not make any statements regarding their position on the war and stayed operating in Russia) received worse reactions from the consumers, with the lowest average brand reputation across all three groups of brand activism.

Research done by Dean (2004) resulted in similar findings, such as the significant effect of a brand's response to a crisis on the reputation of the company. This study and study done by Dean (2004) both found that a clear and open response to a certain crisis by the company can be better perceived by consumers in terms of brand reputation. Clear response in this case is defined by the company's acknowledgement of the problem and publicly addressing its solution. Such response was associated with better acceptance from the potential consumers compared to other types of responses, such as ignoring or denying the problem. Therefore, the shared conclusion from these two studies indicate that there is a significant effect of brand response to an event (in the conducted research analyzed as brand activism) on the brand reputation as perceived by consumers.

Due to the fact that the rapid escalation of the war in Ukraine is a relatively fresh event, previous research in this particular topic is not very extensive and mostly includes only qualitative data. Such an example, can be a study done by Novelli (2022), who analyzed brand activism regarding the Russian invasion of Ukraine and consumers' reaction to it through various social media posts and comments by using sentiment analysis. The conclusions demonstrated that companies which showed support to Ukraine were met with only a small part of negative comments, whereas the majority responded positively. It intersects with the findings of this research, which also demonstrated that the company that supported Ukraine has a higher brand reputation based on the consumer perception, compared to the company which stayed silent.

Additionally, it was studied whether there is a moderating effect of the consumer country of origin on their perception of brand activism, due to the possibility that people originating from countries that were directly affected by the war may have a stronger reaction. In this case, people from Ukraine (geographical location of the war) can be more opposed to companies which did not make any statements and continued operations in Russia. During this research, significant result of the interaction effect was obtained, indicating that the country of origin (in this case, it was a binary variable indicating Ukraine versus other countries) impacted the effect of brand activism on brand reputation. Al Serhan and Boukrami (2015) stated that the reasons behind consumers boycotting can vary depending on the countries (between developing and developed countries). It was stated that the majority of contradictions between opinions in developing countries originate from the religious or ethical topics, whereas for developed countries it is usually based on economical cases. The findings can support the theory regarding brand reputation, and the factors that can influence it, namely brand activism, as well as the consumer behavior of people from different countries may differ based on their country. The difference in the research can be found in the fact that in this study, the division between the countries was not according to their economical development, but according to the level of direct inclusion in the studied event. Additional contradictions between this and previous research can possibly arise due to the nature of the war, as it is more extreme than other possible crises or events studied by Serhan & Boukrami (2015).

Key lesson that can be exerted from the previous research and this study is that the reaction of the brand to a certain event (brand activism) is overall an important factor for the consumers as it can positively or negatively impact the perception of the brand and its reputation. The new lesson specifically this research can add is the importance of details of a chosen event and its background. It is important to understand the nature of the war in this case before collecting information, as some consumer characteristics can create a valuable effect on the main variables, possible bias or skewness of the data. In this case, it is the participants country of origin that created a moderating effect on the impact of brand activism on brand reputation. It can be explained by cultural and social differences, as well as difference in mentality between participants. Our country of origin can possibly have an effect on the details that are taken into consideration during the purchasing decision-making process. It can add additional form to consumer behavior, brand activism and brand reputation as regarded in the theory explained by

Aaker (1997) and Pappu, Quester & Cooksey (2005). Therefore, it is important to address this demographic factor in research, in order to explore a more detailed and deep understanding of the consumer behavior and brand reputation.

6. Conclusion

6.1 Summary

The study was conducted in order to find whether the brand response to the war in Ukraine (also called brand activism) has an impact on the reputation of this brand. The main research question was ‘*How brand's reaction to the Russian invasion of Ukraine influences brand reputation?*’ Additionally, the possible moderating effect of the country of origin was examined on the relationship between the level of brand activism and brand reputation. In order to answer the main research question, online experiment was conducted. It included three different levels based on brand activism. Each respondent was randomly assigned to one of the three scenarios, where each scenario contained a description of the Lindt’s (brand chosen for this study) response to the war in Ukraine. Three scenarios included no brand activism, low brand activism, and high brand activism. Respondents had to evaluate the brand reputation after exposure to one of the scenarios on the Likert scale. The research findings indicated a significant differences between three groups of brand activism, implying that the response of the company to the war has an impact on the brand reputation. Further post-hoc test demonstrated that the group with high brand activism had the highest average brand reputation across all three groups, followed by no brand activism, and then low brand activism (from the highest to the lowest brand reputation average). Therefore, it is now possible to reflect on the hypotheses that were stated at the beginning of this research. Low brand activism, when the company ignored the problem and continued operations in Russia demonstrated the lowest brand reputation average across all three groups, implying the positive reflection of the first hypothesis (***H1: Brand’s decision to continue operating in Russia after the Russian invasion of Ukraine (low brand activism) has a negative effect on the brand reputation***).

Whereas, high brand activism, such as quick public statement supporting Ukraine and leaving the Russian market is associated with a better perception of the brand reputation, and the highest average brand reputation score across all the groups. Thus, it can support the second

hypothesis stated in Chapter 2: *Brand's public support to Ukraine after the Russian invasion (high brand activism) has a positive impact on the brand reputation.*

The country of origin of the participants was also taken into consideration. A binary variable indicated whether the participant was from Ukraine or another country. The results demonstrated a significant interaction effect between the moderator (country of origin of the respondent) and the effect of brand activism on brand reputation. It gives a possible answer to the last hypothesis of this research (**H4**: *The effect of brand activism on the brand reputation is moderated by consumer's country of origin*), implying that the perception of the brand reputation can be different based on the country of origin of the consumer. Additionally, sociodemographic characteristics that are not a part of the main hypotheses were later included in the analysis. Characteristics included age, employment status and level of education. The results demonstrated insignificant interaction of the gender, employment and educational level with the main variables. On the other hand, age showed a significant interaction term, implying that it could possibly have a moderating effect on the perception of brand activism by the participants.

6.2 Research implications

Since the beginning of the war in Ukraine, all companies had a chance to demonstrate their position, whether it was continuing operations in Russia or supporting Ukraine. Every position was met with a massive response in a digital world, both positive and negative. This study informs the research area on brand reputation, particularly the effect of brand activism on the brand reputation. It fills the gap that currently exists in quantitative research about the effects of the war in Ukraine on consumer behavior and brand reputation. It demonstrates that there is indeed a significant effect of the level of brand activism on the brand reputation. The practical implication of this study can be directed to management of various organizations and companies. The findings indicate that being open with the consumers can be considered important for the companies to sustain or improve their brand reputation in the future. Therefore, this study can motivate companies to approach crises with a better attention as it can have an influence on the further reputation of the brand. It can be concluded that it is also important for marketing communication to address various societal and political events publicly and in time.

Additionally, there may be a complex relationship between brand activism, customer country of origin, and their perception of brand reputation that goes beyond the immediate

reaction. Brands that compete in a globalised market must take into account the variety of consumer viewpoints based on consumers personal characteristics. Due to this, marketing communication must take a well-grounded strategy, customising messaging and actions to effectively resonate across multiple geographical and sociocultural groups.

Regarding the implication for the market, this study explores the importance of adding brand activism to the modern market landscape. It can be said that with a complex marketing campaigns that address socially important topics, companies can not only impact their reputation but also demonstrate an advantage compared to their competitors. Healthy competition can possibly broaden the market and bring it to the next level, benefitting both businesses and consumers.

6.3 Limitations and further research

It is also necessary to mention the possible research limitations. The limitations are possible for this research, such as common-method bias, self-selection bias, and sample representativeness because of the available ways of survey distribution. The limitations due to the sampling method, which gave a sample where half of all the respondents were students, implying that the results can be limited to the perception of a younger age group. Additional limitation can be the violation of ANOVA and ANCOVA assumptions. Assumptions of ANOVA include normal distribution, homogeneity of variances, and independence of observations. Normal distribution was tested by using the Kolmogorow-Smirnow test, the significant effect showed that this assumption was violated, therefore collected data does not fall under normal distribution. The homogeneity of variances was additionally tested by using Levene's test. Levene's test showed significance close to zero, also implying that the assumption of homogeneity is violated, (Appendix, Table 6). On the other hand, the independence of observations assumption can be considered as satisfied due to the randomization technique employed in the experiment, and the nature of survey distribution. For the ANCOVA test, there are two additional assumptions, which include the independence of the covariate and factor, and the homogeneity of a slope. The independence assumption was satisfied, according to insignificant results of the correlation tests in SPSS, whereas the significant result of statistical analysis for the homogeneity of slope assumption indicated the violation of homogeneity, (Appendix, Table 7). The violation of the aforementioned assumptions can have an impact on the

potential results. Diving more deeply, the violation of assumptions can compromise the validity of this research, meaning that the results that were found may not represent the truth among similar respondents outside the study. The possible effect of assumption violations can also be on the reliability of the study, therefore the results can be not consistent or stable in case similar research would be conducted. There is also a potential negative impact on the accuracy of the significance level and confidence interval provided by the statistical output. Lastly, the generalizability of the results to broader populations may not be fully accurate. However, despite the violations, the output provided by SPSS statistical software demonstrated sufficient results, leading to the acceptance of the main hypotheses of this research, and answering the main research question. Therefore, it is important to remember that all the interpretation of the results is done not taking the possible effects of the assumption violations into account.

Therefore, in order to provide more practical and statistically reliable information, further research is necessary. The main suggestions for further research would be based on the limitations of this study. It is advised to create a more broad and diverse sample for the analysis in order to correct for the possible skewness, to improve reliability of this research, and to avoid assumption violation (e.g. normal distribution). Due to the violations of the ANOVA and ANCOVA assumptions, the findings of this study can be not entirely accurate, therefore it is advised to transform the data, as categorical variables can be inappropriate in some cases of result interpretation. It is advised to use continuous variables for the covariate and the dependent variable for easier and more accurate analysis. Additionally, future research can dive deeper in the chosen topic by studying the effect of brand activism regarding this war on other factors. Such factors can include consumer willingness to pay for products on various markets, as well as whether brand activism has an impact on the company profitability in the long run.

7. Bibliography

- Aaker, D. A. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347-356.
- Al Serhan, O., & Boukrami, E. (2015). *Mapping studies on consumer boycotting in international marketing*. *Transnational Marketing Journal*, 3(2), 130-151.
- Anagnostopoulou, S. C., Buhalis, D., Kountouri, I. L., Manousakis, E. G., & Tsekrekos, A. E. (2019). *The impact of online reputation on hotel profitability*. *International Journal of Contemporary Hospitality Management*, 32(1), 20-39.
- Andersson, E., & Nylund, A. (2022). How does Generation Z take a stand on brands that take a stand?.
- Business Insider. *Here are the major companies that have not pulled out of Russia following its invasion of Ukraine*. Retrieved May 8, 2023, from <https://www.businessinsider.com/russia-ukraine-invasion-war-sanctions-corporate-response-companies-not-leaving-2022-3?international=true&r=US&IR=T#18-greif-18>
- Boone Jr, H. N., & Boone, D. A. (2012). *Analyzing likert data*. *The Journal of extension*, 50(2), 48.
- Cambefort, M., & Pecot, F. (2020). *Theorizing rightist anti-consumption*. *Marketing Theory*, 20(3), 385-407.
- Change.org (2018) 'Starbucks: Stop Supporting Chicken Abuse!', URL: <https://www.change.org/p/starbucks-stop-supporting-chicken-abuse>.
- Chun, R. (2001). The strategic management of corporate reputation: aligning image and identity. Unpublished Ph.D. thesis, University of Manchester, Manchester, UK
- Chun, R. (2005). Corporate reputation: Meaning and measurement. *International journal of management reviews*, 7(2), 91-109.
- CNN Business (2013) 'Starbucks CEO Holds His Ground on Gay Marriage', URL: <https://money.cnn.com/2013/03/26/news/companies/starbucks-gay-marriage/index.html>.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research, and evaluation*, 10(1), 7.
- Dean, D. H. (2004). Consumer reaction to negative publicity: Effects of corporate reputation, response, and responsibility for a crisis event. *The Journal of Business Communication* (1973), 41(2), 192-211.
- Del Rio, A. B., Vazquez, R., & Iglesias, V. (2001). The effects of brand associations on consumer response. *Journal of consumer marketing*, 18(5), 410-425.
- Edelman (2018), "Brands Take a Stand," Edelman Earned Brand Report (October), <https://www.edelman.com/news-awards/twothirds-consumers-worldwide-now-buy-beliefs>
- Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of personality and Social Psychology*, 38(6), 889.

- Fombrun, C.J., Gardberg, N.A. and Sever, J.M.(2000). The reputation quotient: a multiple stake-holder measure of corporate reputation. *Journal of Brand Management*, 7(4), 241–255.
- Jawaid, A., Gomolka, M., & Timmer, A. (2022). *Neuroscience of trauma and the Russian invasion of Ukraine. Nature Human Behaviour*, 6(6), 748-749.
- Jung, N. Y., & Seock, Y. K. (2016). *The impact of corporate reputation on brand attitude and purchase intention. Fashion and Textiles*, 3, 1-15.
- Korschun, D. (2021). *Brand activism is here to stay: here's why. NIM Marketing Intelligence Review*, 13(2), 10-17.
- Lekhanya, L. M. (2014). *The impact of viral marketing on corporate brand reputation. The international business & economic research journal (Online)*.
- Lindt & Sprüngli. Lindt Chocolate. (n.d.). <https://www.lindt-spruengli.com/>
- McDonald's (2022). McDonald's To Temporarily Close Restaurants & Pause Operations in Russia. <https://corporate.mcdonalds.com/corpmcd/en-us/our-stories/article/ourstories.Russia-update.html>
- Moorman, C. (2020). Commentary: Brand activism in a political world. *Journal of public policy & marketing*, 39(4), 388-392.
- Morton, B. (2022, March 29). *Decathlon backtracks on Russia after Boycott calls. BBC News.* <https://www.bbc.com/news/business-60912746>
- Novelli, R. (2022). *Should I stay or should I go?" Brands against the war: a study on the reactions of global brands and online users in the russia-Ukraine crisis.*
- Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). *Consumer-based brand equity: improving the measurement—empirical evidence. Journal of product & brand management*, 14(3), 143-154.
- Russian package labelling means stop for kefir in Sweden. Mælkeritidende. (n.d.). Retrieved April 14, 2023,* from <https://maelkeritidende.dk/dairynordic/news/russian-package-labelling-means-stop-kefir-sweden>
- Westbrook, R. A. (1987). *Product/consumption-based affective responses and postpurchase processes. Journal of marketing research*, 24(3), 258-270.
- Yale Celi list of companies. Yale Companies List that Left or Stayed in Russia. (n.d).* <https://www.yalerussianbusinessretreat.com/>
- Yurdagel, M., & Baycur, G. (2023). *Consumer Reactions and Brand Strategies in Wartime. In Handbook of Research on War Policies, Strategies, and Cyber Wars (pp. 64-84). IGI Global.*

8. Appendix

8.1 Survey questions

What is your gender?

- Male
- Female
- Other
- Prefer not to say

Please enter your age

What best describes your employment status?

- Employed full time
- Employed part time
- Unemployed looking for work
- Unemployed not looking for work
- Retired
- Student
- Disabled

What is your level of education?

- Less than High School
- High School Diploma
- Bachelor's Degree
- Bachelor's Degree (In Process)
- Master's Degree
- Doctoral Degree

What is your country of origin? (If you have a mixed background that includes multiple countries equally, please indicate which one matches you personally or has had the biggest impact on your identity and cultural experiences.)

Allocation to ‘low brand activism’ group:

***Lindt & Sprüngli*, also known as *Lindt* is a renowned Swiss chocolatier known for its high-quality chocolates. Established in 1845, is presented in over 120 countries worldwide.**

After the Russian invasion of Ukraine at the beginning of 2022, Lindt did not make any public statements regarding the war. The company continues operating and paying taxes in Russia.



Allocation to ‘high brand activism’ group:

***Lindt & Sprüngli*, also known as *Lindt* is a renowned Swiss chocolatier known for its high-quality chocolates. Established in 1845, Lindt is presented in over 120 countries worldwide.**

The company announced on March 9, 2022, that it has decided to withdraw from the Russian market (closed all shops and suspended all deliveries) because of the Russian invasion of Ukraine.



Allocation to ‘no brand activism’ group:

Lindt & Sprüngli, also known as Lindt is a renowned Swiss chocolatier known for its high-quality chocolates. Established in 1845, is presented in over 120 countries worldwide.



Emotional aspect (from Table 1):

Please indicate your opinion regarding emotional appeal of the Lindt brand:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have a good feeling about the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I admire and respect the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust this company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Social and environmental responsibility aspect (from Table 1):

Please indicate your opinion regarding social and environmental responsibility of the Lindt brand:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Supports good causes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is an environmentally responsible company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintains high standards in the way it treats people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8.2 SPSS Output

Table 6: Levene's Test as a part of ANOVA assumptions testing

Levene's Test of Equality of Error Variances^a

Dependent Variable: averageFinal

F	df1	df2	Sig.
15.000	2	195	<.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table 7: Homogeneity test of variance for ANCOVA assumptions

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
averageFinal	Based on Mean	15.123	2	195	<.001
	Based on Median	14.574	2	195	<.001
	Based on Median and with adjusted df	14.574	2	185.276	<.001
	Based on trimmed mean	15.190	2	195	<.001

Table 8: Reliability analysis between three questions for the emotional appeal

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.915	3

Table 9: Reliability analysis between three questions for the social aspect of brand reputation

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.893	.895	3

Table 10: KMO and Bartlett's Test significant results

KMO and Bartlett's Test		
Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		.898
Bartlett's Test of Sphericity	Approx. Chi-Square	1025.225
	df	15
	Sig.	<.001

Table 11: Communalities result as a part of factor analysis in SPSS

Communalities		
	Initial	Extraction
emotional1	1.000	.741
emotional2	1.000	.848
emotional3	1.000	.743
social1	1.000	.796
social2	1.000	.639
social3	1.000	.802

Extraction Method: Principal Component Analysis.

Figure 3. Scree plot (as a part of Factor Analysis)

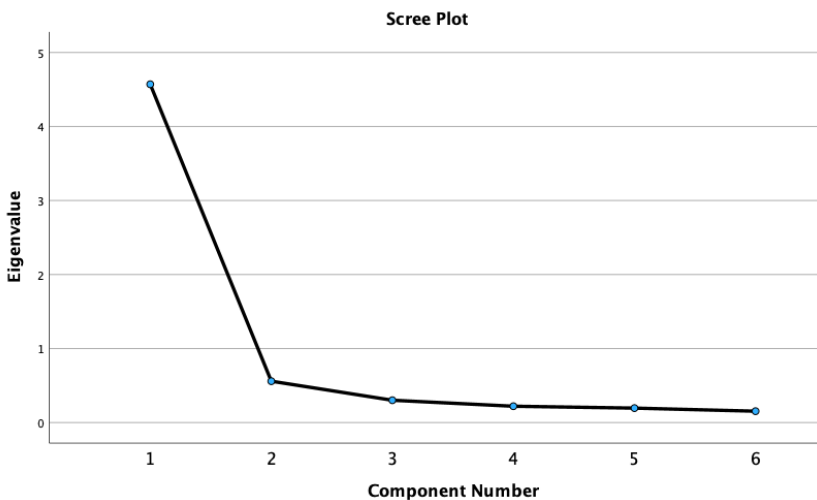


Table 12: Principal Component Analysis (PCA)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.570	76.172	76.172	4.570	76.172	76.172
2	.559	9.311	85.484			
3	.302	5.027	90.511			
4	.221	3.678	94.189			
5	.195	3.253	97.442			
6	.154	2.558	100.000			

Extraction Method: Principal Component Analysis.

Table 13: Results of one-way ANOVA, where averageFinal is the computed average score, representing the brand reputation dependent variable

ANOVA					
averageFinal					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45.216	2	22.608	43.354	<.001
Within Groups	101.688	195	.521		
Total	146.905	197			

Table 14: Eta-squared from the ANOVA analysis

ANOVA Effect Sizes ^a				
		Point Estimate	95% Confidence Interval	
			Lower	Upper
averageFinal	Eta-squared	.308	.202	.397
	Epsilon-squared	.301	.193	.391
	Omega-squared Fixed-effect	.300	.193	.390
	Omega-squared Random-effect	.176	.107	.242

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Table 15: Tukey post-hoc test

Multiple Comparisons								
Dependent Variable: averageFinal								
		(I) Group placement	(J) Group placement	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Tukey HSD	no brand activism	low brand activism	high brand activism	.78742*	.12571	<.001	.4905	1.0843
		low brand activism	high brand activism	-.35636*	.12571	.014	-.6533	-.0595
	low brand activism	no brand activism	high brand activism	-.78742*	.12571	<.001	-1.0843	-.4905
		no brand activism	high brand activism	-1.14379*	.12571	<.001	-1.4407	-.8469
	high brand activism	no brand activism	low brand activism	.35636*	.12571	.014	.0595	.6533
		no brand activism	low brand activism	1.14379*	.12571	<.001	.8469	1.4407

*. The mean difference is significant at the 0.05 level.

Table 16: Descriptive statistics of three groups (no brand activism, low brand activism, high brand activism) within one-way ANOVA

Descriptives								
averageFinal								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
no brand activism	66	3.4545	.52160	.06420	3.3263	3.5828	1.00	5.00
low brand activism	66	2.6671	.93359	.11492	2.4376	2.8966	1.00	4.67
high brand activism	66	3.8109	.64867	.07985	3.6514	3.9704	2.17	5.00
Total	198	3.3109	.86354	.06137	3.1898	3.4319	1.00	5.00

Table 17: One-way ANCOVA results, with the interception model between group allocation (no brand activism, low brand activism, high brand activism) and binary variable of Ukraine as a country of origin

Tests of Between-Subjects Effects

Dependent Variable: averageFinal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	52.007 ^a	5	10.401	21.045	<.001	.354
Intercept	1414.311	1	1414.311	2861.486	<.001	.937
Group	17.480	2	8.740	17.683	<.001	.156
ukrainian	.453	1	.453	.916	.340	.005
Group * ukrainian	6.504	2	3.252	6.580	.002	.064
Error	94.897	192	.494			
Total	2317.338	198				
Corrected Total	146.905	197				

a. R Squared = .354 (Adjusted R Squared = .337)

Table 18: Results of one-way ANCOVA, adjusted for the country of origin variable means

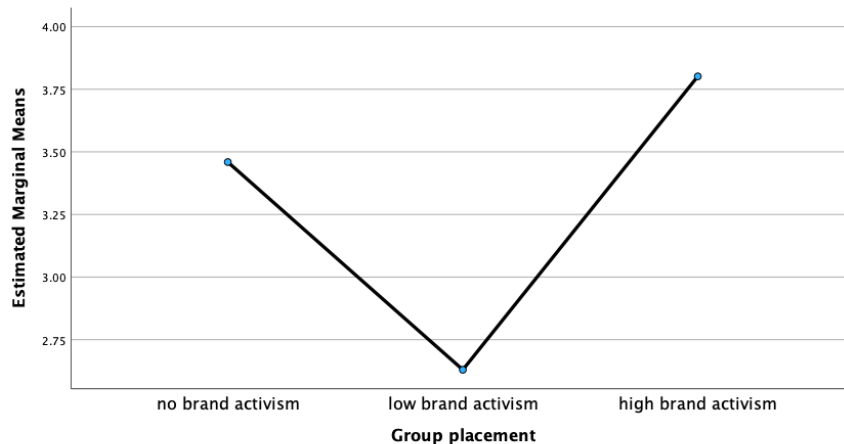
Estimates

Dependent Variable: averageFinal

Group placement	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
no brand activism	3.458 ^a	.089	3.282	3.634
low brand activism	2.662 ^a	.089	2.486	2.838
high brand activism	3.813 ^a	.089	3.637	3.989

a. Covariates appearing in the model are evaluated at the following values: ukrainian = .3535.

Figure 4. Estimated marginal Means of brand reputation score adjusted for the covariate - country of origin



Covariates appearing in the model are evaluated at the following values: ukrainian = .3535

Table 19: Results of including age as a covariate for additional ANCOVA

Tests of Between-Subjects Effects

Dependent Variable: averageFinal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	54.461 ^a	5	10.892	22.623	<.001	.371
Intercept	258.250	1	258.250	536.371	<.001	.736
Group	16.838	2	8.419	17.486	<.001	.154
Age	5.955	1	5.955	12.368	<.001	.061
Group * Age	2.950	2	1.475	3.063	.049	.031
Error	92.443	192	.481			
Total	2317.338	198				
Corrected Total	146.905	197				

a. R Squared = .371 (Adjusted R Squared = .354)

Table 20: Results of including higher education as a covariate for additional ANCOVA

Tests of Between-Subjects Effects

Dependent Variable: averageFinal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	47.652 ^a	5	9.530	18.436	<.001	.324
Intercept	1904.512	1	1904.512	3684.200	<.001	.950
Group	37.396	2	18.698	36.171	<.001	.274
nohighereducation	.489	1	.489	.946	.332	.005
Group * nohighereducation	2.281	2	1.141	2.206	.113	.022
Error	99.253	192	.517			
Total	2317.338	198				
Corrected Total	146.905	197				

a. R Squared = .324 (Adjusted R Squared = .307)

Table 21: Results of including employment as a covariate for additional ANCOVA

Tests of Between-Subjects Effects

Dependent Variable: averageFinal

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	45.939 ^a	5	9.188	17.472	<.001	.313
Intercept	919.132	1	919.132	1747.861	<.001	.901
Group	13.920	2	6.960	13.235	<.001	.121
unemployed	.077	1	.077	.146	.703	.001
Group * unemployed	.655	2	.327	.623	.538	.006
Error	100.965	192	.526			
Total	2317.338	198				
Corrected Total	146.905	197				

a. R Squared = .313 (Adjusted R Squared = .295)

8.3 Raw data

Gender	Age	Employment	Education	Country	no_emotional1	no_emotional2	no_emotional3	no_societal1	no_societal2	no_societal3	high_emotional1	high_emotional2	high_emotional3	high_societal1	high_societal2	high_societal3	low_emotional1	low_emotional2	low_emotional3	low_societal1	low_societal2	low_societal3
2	20	6	4	183	5	3	4	3	3	3												
2	19	6	4	183	3	3	3	3	3	3												
2	21	6	4	183							4	4	3	4	4	4						
1	20	6	4	122													5	3	5	3	3	3
2	56	1	5	183							4	4	4	3	3	3						
1	20	6	4	183	3	4	3	3	3	4												
1	63	4	5	183													4	4	4	4	3	4
1	27	1	5	183	4	4	4	4	2	3												
2	34	6	5	183							5	5	5	5	5	5						
2	31	6	4	183													4	3	4	1	2	2
2	27	2	5	183													4	4	4	4	4	4
1	20	6	4	183	3	3	3	3	3	3												
2	25	6	3	183							4	4	4	4	4	4						
1	21	6	4	122							4	3	4	3	3	3						
1	37	1	5	165	3	4	3	3	3	4												
1	21	6	4	183													1	1	1	1	1	1
1	26	1	3	183							4	4	4	4	3	3						
2	51	1	5	183	5	4	5	5	4	5												
2	18	2	2	137													4	3	3	3	2	4
2	19	6	4	183	4	4	4	3	3	4												
2	29	1	6	183													1	2	1	1	2	2
2	23	1	4	183							5	5	5	5	5	5						
1	22	6	4	17													3	2	2	2	2	2
2	32	1	5	183							4	4	4	4	3	4						
2	21	6	4	183	4	3	4	3	3	4												
2	26	6	3	138							5	4	3	4	3	3						
2	24	1	3	183							4	4	3	4	3	4						

1	28	1	5	183	3	3	3	3	3	3												
2	38	1	2	183							4	4	4	4	4	4						
2	21	6	4	137	4	4	4	3	3	3												
2	44	1	3	94													2	1	2	1	2	1
1	20	6	4	191							5	5	4	3	3	3						
2	19	6	4	163													4	3	3	3	2	3
1	21	1	4	137	4	3	3	3	3	3												
1	20	6	4	138													3	3	4	2	2	3
1	20	2	4	163							4	3	4	3	3	4						
2	26	6	5	185							4	4	4	4	2	3						
1	20	6	4	138	3	3	3	3	3	3												
2	21	6	4	183													1	1	1	1	3	3
2	32	2	3	183	3	3	3	2	4	4												
1	21	6	4	84													3	2	4	1	3	3
1	18	1	2	107							4	4	4	5	3	4						
1	35	1	5	183													1	1	1	1	1	1
2	21	6	4	183							5	5	5	5	5	5						
2	20	6	4	183	4	3	3	3	3	3												
1	19	6	2	10	4	3	3	3	3	3												
1	20	6	4	65							4	3	3	2	2	3						

2	21	6	4	170													1	1	1	1	1	1
2	18	6	4	143													4	2	4	3	3	3
2	23	2	3	83	4	3	4	3	3	3												
2	22	6	4	183							5	5	4	4	3	5						
1	20	6	4	67							1	2	4	2	2	2						
2	40	3	3	88	4	3	4	3	3	3												
2	28	6	2	84													3	3	3	3	3	3
2	20	6	4	137													2	2	1	3	2	2
2	34	1	3	183							5	3	3	5	3	3						
2	18	6	2	84	4	4	4	4	4	4												
2	20	6	4	137													3	4	2	2	4	5
2	19	6	4	183	5	4	4	3	3	3												
2	18	6	2	183							4	3	3	3	3	3						

1	21	6	4	183													4	3	3	3	3	3
2	20	6	4	65							1	3	3	3	4	4						
2	25	6	5	116	4	4	4	3	3	3												
1	23	6	4	122	3	3	3	3	3	3												
1	21	6	4	142													4	3	3	2	3	3
1	30	1	3	136							3	4	4	4	3	3						
2	30	1	5	143													2	2	3	2	2	2
2	26	6	4	65							4	3	4	3	3	3						
1	23	2	4	122	4	3	3	3	3	3												
2	21	6	4	100													3	2	3	1	1	2
2	25	2	5	183							5	5	5	4	4	4						
2	28	1	4	183	3	3	3	3	3	3												
2	45	6	4	183													3	3	4	4	3	3
2	21	6	3	53	4	3	4	3	3	3												
2	32	2	3	53													3	3	4	3	3	3
2	22	6	4	122							4	3	4	3	3	4						
1	25	1	5	183	1	1	1	1	1	1												
2	20	6	4	183							5	5	5	5	5	5						
2	20	1	1	183	4	4	4	4	4	4												
2	20	6	4	183													1	1	2	1	3	1
2	22	6	4	122													4	3	4	3	3	3
2	20	6	3	122							4	4	4	3	3	3						
2	81	6	4	142	3	3	3	3	3	3												
1	20	3	4	183	3	3	3	3	4	3												
1	18	6	4	183							4	4	4	3	3	4						
2	52	4	3	61													5	4	4	4	4	4
1	33	1	3	100	3	3	3	3	3	3												
2	61	1	5	183	4	4	4	4	4	4												
2	55	1	3	183	5	4	5	3	3	3												
2	55	7	2	183							5	4	4	3	4	4						
2	27	2	3	183													4	4	4	4	4	4
2	18	6	1	183													2	3	2	3	2	2
1	16	6	2	183	4	4	4	3	3	4												
2	16	6	2	183	4	4	4	4	4	4												
1	72	5	3	187							5	5	5	5	5	5						

1	86	5	4	61												5	5	5	4	4	4
2	16	6	2	183												2	2	3	1	1	2
2	16	6	1	183						4	4	3	4	4	4						
1	18	6	2	183	4	3	4	3	3	3											
2	16	6	1	183						4	4	4	3	3	3						
1	15	6	1	183	4	3	3	4	4	3											
1	34	4	3	183												1	1	1	1	1	1
2	37	1	3	187	4	4	4	3	3	3											
3	16	5	1	183												1	1	1	1	1	1
2	38	1	3	183						3	3	3	3	3	3						
1	30	1	5	183												4	3	3	4	3	3
1	31	1	3	183	1	3	3	3	3	3											
1	16	3	1	183						4	4	4	4	3	4						
2	20	6	4	137												4	3	3	3	3	3
1	34	1	6	183						2	2	1	2	4	3						
1	57	1	5	61	5	5	5	5	5	5											
1	21	6	3	141						4	3	3	5	3	4						
2	22	6	3	183												3	1	3	1	1	1
1	25	1	3	163	4	3	4	3	3	3											
2	21	6	4	44						4	4	4	4	3	4						
1	26	6	4	122												5	4	4	3	3	4
1	24	6	4	122	4	4	4	4	4	4											
1	20	2	2	84						3	3	3	3	3	3						
2	32	1	5	65	5	4	4	3	3	3											
1	20	6	4	122												4	3	2	3	2	3
1	27	1	5	9												2	1	1	2	1	1
1	21	6	4	100						5	3	4	3	3	3						
1	26	1	5	17	4	3	4	3	3	3											
1	30	1	3	24												5	5	5	3	3	3
1	22	1	4	142	4	3	4	4	4	4											
1	28	6	4	122						3	2	3	3	2	3						
1	22	6	4	122	4	3	4	3	3	3											
1	23	1	3	185												2	1	2	1	3	1
2	20	6	4	192						4	3	3	4	4	4						
2	24	2	3	183						5	5	5	5	5	5						

2	24	6	3	157													2	1	1	1	1	1
2	25	6	4	88	5	4	4	4	4	4												
1	23	2	3	113						4	4	3	4	3	4							
1	29	1	3	161													4	3	3	3	2	3
1	24	1	3	185						4	3	4	4	3	4							
1	31	1	3	183													3	1	2	3	3	3
1	21	6	4	168	3	4	3	3	3	3												
1	19	2	4	48													3	3	4	4	3	4
2	22	6	4	122	4	4	4	3	3	3												
1	21	1	3	122							3	2	3	3	3	2						
2	22	6	2	122	4	4	4	3	3	3												
1	24	2	3	17													2	2	3	3	3	3
1	23	6	4	10							4	4	3	4	3	4						
1	20	6	4	65							4	4	4	4	3	3						
2	23	6	3	10	5	5	5	4	3	4												

1	56	1	6	185													5	5	4	5	5	4
1	20	6	4	17	4	4	3	3	3	3												
1	22	2	4	7							4	3	3	3	3	3						
1	21	6	4	42													2	3	2	2	3	2
4	26	1	5	8							4	4	4	4	3	3						
2	35	1	5	183	4	4	3	3	3	4												
1	21	2	4	122													4	3	3	3	2	4
2	21	1	4	65	5	3	4	4	4	3												
1	21	6	4	17													2	2	3	3	3	3
2	20	6	4	183							5	5	5	5	5	5						
2	19	6	4	183	3	4	4	3	4	4												
1	17	6	1	183													1	2	1	1	3	2
2	16	6	1	122	4	4	4	3	3	3												
1	23	1	3	101													4	4	3	3	3	4
2	19	6	4	9							4	4	4	4	4	4						
1	21	3	3	10													4	4	4	4	3	4
1	23	2	3	48							4	4	4	4	3	4						
1	22	6	4	42	4	4	3	3	3	4												

1	22	2	4	82							4	4	4	4	4	4						
1	26	1	3	141	4	4	4	3	3	3												
2	41	1	3	42													4	4	3	3	3	4
2	26	1	5	17							4	4	3	3	3	3						
2	18	6	2	7	3	3	4	3	3	4												
1	28	1	3	185													2	2	2	3	2	3
1	28	1	5	65													4	2	2	3	2	3
2	21	6	2	173	5	5	5	4	3	4												
1	23	6	5	122							4	4	3	4	3	4						
4	21	3	3	122	4	3	3	3	3	3												
1	41	1	5	122							5	5	4	4	3	4						
2	19	6	4	130													3	3	4	3	4	4
2	24	2	3	122							5	4	4	4	4	4						
1	29	1	5	36	3	3	3	3	3	3												
1	25	1	5	10													2	2	2	3	3	3
1	19	6	4	11													2	2	3	2	3	2
1	21	1	3	137	4	4	4	4	3	3												
1	28	1	5	137							4	4	4	4	4	5						
1	51	1	5	183	4	4	3	3	3	4												
1	34	1	5	128													3	3	3	2	3	4
1	26	1	3	168							4	4	4	4	4	4						
3	31	1	5	10													2	2	2	2	2	2
1	22	6	4	67							4	4	4	4	4	4						
1	23	6	5	26	4	4	4	4	3	4												
3	19	6	4	16													2	2	2	2	3	2
2	20	6	4	84	3	3	3	4	3	4												
2	20	6	4	183							5	5	5	5	4	5						
2	22	6	5	43													4	3	3	3	3	3
2	24	1	3	64							4	4	4	4	4	4						
2	45	1	3	75	4	3	3	3	3	3												
2	20	3	4	137													3	2	3	3	3	2
1	20	6	4	76							5	5	5	5	3	4						
1	19	6	4	45													2	2	2	2	3	1
1	56	1	5	122							5	5	4	5	3	5						

2	23	2	3	57							5	5	5	5	4	5						
---	----	---	---	----	--	--	--	--	--	--	---	---	---	---	---	---	--	--	--	--	--	--

Gender:

- 0 - Male
- 1 - Female
- 2 - Other
- 3 - Prefer not to say

Employment status:

- 1 - Employed full time
- 2 - Employed part time
- 3 - Unemployed looking for work
- 4 - Unemployed not looking for work
- 5 - Retired
- 6 - Student
- 7 - Disabled

Education:

- 1 - Less than high school
- 2 - High school diploma
- 3 - Bachelor's degree
- 4 - Bachelor's degree (in process)
- 5 - Master's degree
- 6 - Doctoral Degree

Country:

- 183 - Ukraine