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Ljubljana, June 27th, 2012

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# TABLE OF CONTENTS

INTRODUCTION .................................................................................................................. 1

1  COMPULSIVE BUYING .................................................................................................. 4
   1.1  Compulsive Consumption Behaviours ................................................................. 4
   1.1.1  Commonalities of compulsive behaviours ..................................................... 5
   1.1.2  Differences in compulsive behaviours ............................................................ 6
   1.2  Definitions and Etiology of Compulsive Buying ................................................... 6
   1.3  Precursors of Compulsive Buying ....................................................................... 11
       1.3.1  Personality traits ......................................................................................... 12
       1.3.2  Emotional states ......................................................................................... 14
   1.4  Socio-demographic Characteristics of Compulsive Buyers ................................. 16
       1.4.1  Women versus men .................................................................................... 16
       1.4.2  Level of education .................................................................................... 18
       1.4.3  Household income level ............................................................................ 18
   1.5  Consequences of Compulsive Buying .................................................................. 19
       1.5.1  Positive feelings associated with buying .................................................... 19
       1.5.2  Family arguments related to buying ............................................................ 20
       1.5.3  Financial consequences ............................................................................. 21
       1.5.4  Other consequences of compulsive buying ................................................. 23
   1.6  The Frequency of Buying and Amounts Spent ..................................................... 23
   1.7  Providing Help to Compulsive Buyers .................................................................. 24

2  MEASURING COMPULSIVE BUYING ....................................................................... 26
   2.1  The Clinical Screener ......................................................................................... 26
   2.2  The Compulsive Buying Index (CBI) .................................................................. 28
   2.3  Limitations of Other Scales ............................................................................... 29

3  COMPULSIVE BUYING ACROSS DIFFERENT RETAIL CHANNELS .................. 30
   3.1  Compulsive Buying on the Internet .................................................................... 30
   3.2  Television Shopping and Compulsive Buying ..................................................... 32
   3.3  Compulsive Buying Through Catalogs ............................................................... 33

4  THE EMPirical STUDY OF COMPULSIVE BUYING IN SLOVENIA ..................... 33
   4.1  Evidence on Slovene Consumers and Their Buying Habits .................................. 33
   4.2  Research Hypotheses for the Study .................................................................... 36
   4.3  Research Methods ............................................................................................. 37
       4.3.1  Data collection and sampling ..................................................................... 37
       4.3.2  Constructs, variables and measurement scales .......................................... 38
       4.3.3  Data analysis ............................................................................................. 41
   4.4  Descriptive Statistics ........................................................................................ 41

5  HYPOTHESES TESTING AND DISCUSSION OF FINDINGS ................................. 45
   5.1  Hypotheses Related to Precursors of Compulsive Buying .................................. 45
   5.2  Hypotheses Related to Socio-demographics ...................................................... 52
   5.3  Hypotheses Related to Consequences of Compulsive Buying ............................ 58
TABLE OF TABLES

Table 1: A summary table of socio-demographic characteristics and CBI ........................................ 44
Table 2: Descriptive statistics of CBINDEX for men and women (student sample) ........................... 53
Table 3: Descriptive statistics of CBINDEX for men and women (general sample) ........................... 54
Table 4: The results of all hypotheses ..................................................................................................... 83

TABLE OF FIGURES

Figure 1: Obsessive-Compulsive Spectrum Disorder ............................................................................. 8
Figure 2: Biopsychosocial Model of Melissa ......................................................................................... 10
Figure 3: Precursors, socio-demographics and Consequences of CB .................................................. 11
Figure 4: Graphical summary overview of the hypotheses ................................................................. 37
Figure 5: Histogram – CBINDEX with normal curve (student sample) ............................................... 41
Figure 6: Histogram – CBINDEX with normal curve (general population) ......................................... 43
Figure 7: Histogram – MATERIALISM with normal curve (student sample) ....................................... 46
Figure 8: Scatterplot – CBINDEX & MATERIALISM with best fit line (student sample) .................. 47
Figure 9: Histogram – CBINDEX with normal curve (general sample) ............................................... 47
Figure 10: Scatterplot – CBINDEX & MATERIALISM with best fit line (general sample) ................ 48
Figure 11: Histogram – NEGATIVEFEEL with normal curve (student sample) ................................. 49
Figure 12: Scatterplot – CBINDEX & NEGATIVEFEEL with best fit line (student sample) .............. 50
Figure 13: Histogram – NEGATIVEFEEL with normal curve (general sample) ................................. 51
Figure 14: Scatterplot – CBINDEX & NEGATIVEFEEL with best fit line (general sample) .............. 51
Figure 15: Histograms – CBINDEX with normal curve separately for men and for women (student sample) .................................................................................................................. 53
Figure 16: Histograms – CBINDEX with normal curve separately for men and for women (general sample) .......................................................................................................................... 54
Figure 17: Scatterplot – CBINDEX & EDUCATION with best fit line (general sample) .......... 56
Figure 18: Scatterplot – CBINDEX & INCOME with best fit line (student sample) .......................... 57
Figure 19: Scatterplot – CBINDEX & INCOME with best fit line (general sample) .......................... 58
Figure 20: Histogram – POSITIVEFEEL with normal curve (student sample) ................................. 59
Figure 21: Scatterplot – CBINDEX & POSITIVEFEEL with best fit line (student sample) .......... 59
Figure 22: Histogram – POSITIVEFEEL with normal curve (general sample) ................................. 60
Figure 23: Scatterplot – CBINDEX & POSITIVEFEEL with best fit line (general sample) .......... 61
Figure 24: Histogram – ARGUE with normal curve (student sample) ................................................. 62
Figure 25: Scatterplot – CBINDEX & ARGUE with best fit line (student sample) ............................. 62
Figure 26: Histogram – ARGUE with normal curve (general sample) ................................................. 63
Figure 27: Scatterplot – CBINDEX & ARGUE with best fit line (general sample) ............................. 64
Figure 28: Scatterplot – CBINDEX & CARDOWE with best fit line (student sample) ................... 65
Figure 29: Scatterplot – CBINDEX & CARDOWE with best fit line (general sample) ...................... 66
Figure 30: Histogram – CLOTH_FR with normal curve (student sample) ........................................ 67
Figure 31: Scatterplot – CBINDEX & CLOTH_FR with best fit line (student sample) .......... 68
Figure 32: Histogram – CLOTH_FR with normal curve (general sample) ...................... 69
Figure 33: Scatterplot – CBINDEX & CLOTH_FR with best fit line (general sample) ....... 69
Figure 34: Histogram – CLOTH_EUR with normal curve (student sample) ................... 71
Figure 35: Scatterplot – CBINDEX & CLOTH_EUR with best fit line (student sample) ....... 71
Figure 36: Histogram – CLOTH_EUR with normal curve (general sample) .................... 72
Figure 37: Scatterplot – CBINDEX & CLOTH_EUR with best fit line (general sample) ...... 73
Figure 38: Histogram – INTERNET with normal curve (student sample) ....................... 74
Figure 39: Scatterplot – CBINDEX & INTERNET with best fit line (student sample) ........ 75
Figure 40: Histogram – INTERNET with normal curve (general sample) ....................... 75
Figure 41: Scatterplot – CBINDEX & INTERNET with best fit line (general sample) ........ 76
Figure 42: Histogram – TV with normal curve (student sample) .................................. 77
Figure 43: Scatterplot – CBINDEX & TV with best fit line (student sample) .................. 78
Figure 44: Histogram – TV with normal curve (general sample) .................................. 78
Figure 45: Scatterplot – CBINDEX & TV with best fit line (general sample) ................. 79
Figure 46: Histogram – CATALOGS with normal curve (student sample) ...................... 80
Figure 47: Scatterplot – CBINDEX & CATALOGS with best fit line (student sample) ....... 81
Figure 48: Histogram – CATALOGS with normal curve (general sample) ...................... 81
Figure 49: Scatterplot – CBINDEX & CATALOGS with best fit line (general sample) ....... 82
INTRODUCTION

Compulsive buying was introduced to consumer behaviour research approximately 25 years ago by Faber, O’Guinn and Krych (1987). Since then a lot of literature studying different aspects of this behaviour has been published, indicating that it remains of interest to scholars and practitioners. In their later work O’Guinn and Faber (1989, pp. 147 – 148) suggest that compulsive buying fits within the wider framework of compulsive consumption behaviours; this includes such behaviours as eating disorders, compulsive gambling, kleptomania, alcoholism and drug addiction. Compulsive consumption is defined as: “… a response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behaviour that will ultimately cause harm to the individual and/or to others” (O’Guinn, & Faber, 1989, p. 148).

Various definitions of compulsive buying exist, but in our research we will use the definition offered by Ridgway, Kukar–Kinney and Monroe (2008, p. 622): “… a consumer’s tendency to be preoccupied with buying that is revealed through repetitive buying and a lack of impulse control over buying”. This definition includes dimensions of two disorders: obsessive-compulsive disorder (OCD) – that is preoccupation with buying, repetitive buying and impulse-control disorder (ICD) – that is the lack of control over the urge/impulse to buy (Ridgway et al., 2008, p. 622).

Researchers have found that some personality traits prevail in compulsive buyers. They tend to have lower levels of self-esteem, significantly higher levels of fantasy-imagination and general compulsivity and are more materialistic than non-compulsive buyers (O’Guinn, & Faber, 1989, pp. 152 – 153). Negative mood states also influence compulsive buying behaviour. Compulsive buyers often experience negative feelings like sadness, depression, angeriness, anxiousness and boredom before engaging in compulsive buying. By engaging in such behaviour they desire to improve their negative mood state (Faber, & Christenson, 1996, pp. 809 – 813; Ridgway, Kukar–Kinney, & Monroe, 2006, p. 131; Sneath, Lacey, & Knnett–Hensel, 2009, p. 53).

Several scales for measuring compulsive buying exist. One of the most widely known is the Clinical Screener for compulsive buying. This scale consists of seven items with assigned weights from which a final score is calculated to determine whether the respondent can be classified as a compulsive buyer (Faber, & O’Guinn, 1992, p. 468). The Clinical Screener has some major limitations. Firstly, it does not have items that measure the obsessive-compulsive dimension of compulsive buying. It focuses only on the impulse-control dimension. Secondly, the scale includes four items that are related to income or address financial consequences of spending. Consequently, the screener does not identify compulsive buyers who have higher incomes and can afford their compulsive spending. Moreover, the negative consequences should not be measured when classifying compulsive buyers, but should be measured independently as outcomes of the behaviour (Ridgway et al., 2008, pp. 624 – 625). That is
why in our study, we decided to use the compulsive buying scale proposed by Ridgway et al. (2008, pp. 625 – 628) which overcomes the above mentioned limitations of the Clinical Screener. This scale, named the Compulsive Buying Index (CBI), comprises six items measured on a seven-point Likert scale: My closet has unopened shopping bags in it; Others might consider me a shopaholic; Much of my life centers around buying things; I buy things I don’t need; I buy things I do not plan to buy and I consider myself an impulsive purchaser.

In our research we also focus on compulsive buying across different retail channels such as: Internet, television shopping channels and catalogs. Is compulsive buying associated with the frequency of buying via these various retail channels? Kukar–Kinney, Ridgway and Monroe (2009, pp. 298 – 299) believe that the Internet environment has features that can encourage compulsive buying. The consumer can buy at any time and thus more frequently, buy unobserved, experience immediate positive feelings and satisfy the urge to buy quicker. In their study Kukar–Kinney et al. (2009, p. 306) also found that compulsive buyers reported spending a larger amount of their fashion dollars on the Internet than at brick-and-mortar stores (60 % vs. 40 %). On the other hand, non-compulsive buyers reported spending approximately equally via both retail channels. Lee, Lennon and Rudd (in Hyejune, Chae–Mi, Vertica, & Youn–Kyung, 2011, p. 12) propose that the private and friendly environment of TV shopping may also stimulate compulsive consumption. Researchers found that the more hours TV shoppers spent watching TV shopping channels, the more likely they were to demonstrate compulsive buying behaviour. The above mentioned retail channels may contribute to the magnification of compulsive consumption and therefore should be studied in the context of compulsive buying behaviour.

Compulsive consumption leads to many negative consequences for the buyer. The most serious one is that they often have high debts that may have severe negative repercussions on other aspects of their lives, for example: forcing them to sell their property or write bad checks. Most of compulsive buyers also report having feelings of guilt and anxiety over their behaviour (Faber et al., 1987, p. 133). These severe negative consequences serve as one of the reasons for studying the phenomenon of compulsive buying. This dysfunctional compulsive behaviour creates economic and emotional problems for the individuals, their families and also for their creditors. Providing help to such people is not only a humanitarian issue but also in the interests of society as a whole (O’Guinn, & Faber, 1989, p. 147).

The number of compulsive buyers in the United States of America (the U. S.) was estimated by Faber and O’Guinn in 1992 (p. 466) ranges from 1.8 to 8.1 %. The two estimates were obtained by using different thresholds for the Clinical Screener for identifying compulsive buyers. In a more recent study conducted by Koran, Faber, Aboujaoude, Large and Sarpe (2006, p. 1807) the estimated number of compulsive buyers in the U. S. adult population (18 years and older) was found to be 5.8 %. This can be interpreted as more than one in 20 individuals or 58 out of a 1000 individuals suffering from compulsive buying. According to O’Guinn and Faber (2006, p. 9) compulsive buying disorder exists in various developed and
developing countries for example England, Germany, France, Sweden, Spain, Australia and Mexico, among others.

The purpose of our master’s thesis is to broaden the knowledge in the field of consumer behaviour, more specifically in the area of compulsive buying behaviour in Slovenia. In our master’s thesis we identify and describe the features of compulsive buying behaviour in Slovenia such as precursors of compulsive buying, socio-demographics, consequences of compulsive buying, the frequency of buying clothes, shoes and accessories, the amounts of money spent and compulsive buying across different retail channels.

The goals of our master’s thesis are:
- To offer an extensive, in-depth and high quality theoretical section by analyzing the existing scientific literature on the topic of interest;
- To conduct an empirical study of compulsive buying in Slovenia to examine the role of:
  - socio-demographic characteristics;
  - precursors and consequences;
  - frequency of buying and expenditures;
  - venues of shopping.

While carrying out the research work secondary and primary data was collected. A large number of up-to-date scientific articles and books were analyzed to form the basis of our theoretical section. A survey method was used to collect the primary data for the empirical study of compulsive buying in Slovenia. Two non-probability samples of data were gathered by distributing a questionnaire. The fist sample consisted of 216 students from the same year group studying at the Faculty of Economics, University of Ljubljana and the second sample of 408 members of the general population. Quantitative data analysis was carried out for the two samples. The Compulsive Buying Index was calculated and used as the main measure for compulsive buying behaviour. Statistical methods such as Spearman’s rank-order correlation coefficient (Spearman’s rho), a nonparametric Mann-Whitney U test, Kolmogorov-Smirnov test for normality and inference tests regarding the population’s correlation coefficient were used. The results of the data analysis and hypotheses tests are presented and discussed in the empirical section of the master thesis.

The master’s thesis consists of five main chapters. The first chapter of the thesis and its subchapters, discuss the phenomenon of compulsive buying. More specifically, we present compulsive buying as a category of compulsive consumption behaviours and point out commonalities and differences among compulsive behaviours. Various definitions and the three main etiological theories of compulsive buying are presented. Next, we describe the main precursors of compulsive buying, which are divided into two categories: personality traits (self-esteem, fantasizing, materialism and general compulsivity trait) and emotional states (negative feelings leading to buying, depression, anxiety and stress). In this chapter we also talk about socio-demographic characteristics of compulsive buyers like gender, level of
education and household income. In Subchapter 1.5 we describe the negative consequences of compulsive buying behaviour, which include: family arguments, financial consequences, positive feelings associated with buying, etc. Subchapter 1.6 provides information regarding the high frequency of buying clothes, shoes and accessories and the amounts of money spent by compulsive buyers. We conclude the first chapter of the theoretical section with a description of existing methods of providing help to compulsive buyers. It gives an overview of the most known organizations offering education and treatment for such behaviour.

In the second chapter we present an overview of different compulsive buying measurement scales and their limitations. The scale to measure the Compulsive Buying Index proposed by Ridgway et al. (2008, pp. 625 – 628) which is used in our research is also described in this chapter. In Chapter 3, the theoretical background for analysis of compulsive buying across different retail channels is presented. The empirical part of our research is described in Chapter 4. This chapter begins with evidence on Slovene consumers buying habits. Then the summary overview of hypotheses tested in the study is presented. The research methods used in our work are explained in detail, including data collection, sampling, constructs, variables, measurement scales and data analysis. We conclude the fourth chapter with descriptive statistics of the two samples, the student sample and the general population sample. In the final chapter, the tests of the 13 hypotheses are presented. Each hypothesis was tested using both samples and the results are compared and discussed.

1 COMPULSIVE BUYING

Chapter 1 describes in detail the phenomenon of compulsive buying from various aspects. Firstly, compulsive buying is presented as part of a broader category of compulsive behaviours. Further on, definitions, classifications and etiology of compulsive buying are presented. Then the precursors of compulsive buying, which include different personality traits and emotional states, are discussed. Socio-demographic characteristics (gender, level of education and household income) are analysed in relation to compulsive buying. Later on, the consequences of this behaviour are described, these include: short-term positive feelings associated with buying, family arguments pertaining to buying, financial consequences and others. The frequency of buying clothes, shoes and accessories and the amounts of money spent on these items are also discussed. This chapter is concluded with an overview of existing methods and organizations that provide help to compulsive buyers.

1.1 Compulsive Consumption Behaviours

Compulsive buying can be considered as part of a wider category of compulsive consumption behaviours (O’Guinn, & Faber, 1989, p. 147). That is why it is important to understand the underlying concept of compulsive consumption behaviours.
In some cases, consumption can become a dysfunctional form of behaviour. For such people consumption becomes a central activity, has a compulsive quality and may affect many aspects of their lives. Compulsive consumption is inappropriate, excessive and disruptive behaviour of individuals who seem to be impulsively driven to consume. Despite the severe consequences of such behaviour, compulsive consumers continue to buy. Compulsive shoppers fear receiving another large bill or meeting creditors. Some hide their purchases so that they are not discovered, others even engaged in criminal activities in order to pay their bills. Compulsive consumption behaviour seems very similar to addictive behaviour (Faber et al., 1987, pp. 132 – 133). O’Guinn and Faber (1989, p. 148) define compulsive consumption as: “… a response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behaviour that will ultimately cause harm to the individual and/or others”. Examples of such behaviours include: eating disorders, compulsive gambling, kleptomania, alcoholism, drug addiction, etc.

1.1.1 Commonalities of compulsive behaviours

According to Faber et al. (1987, pp. 133 – 135) different compulsive behaviours have a variety of commonalities:

- Physical and/or psychological dependence on an activity/substance.
  Psychological dependence in this case is used in the context of such behaviours as work, exercise, sex, etc. For example, such a person would engage in work as a response to an interpersonal difficulty. Discussions with compulsive consumers show that they display inappropriate consumptive behaviours in response to different situations. They speak about shopping as something they need to do in response to something else in their life.
- Occasional loss of control regarding the behaviour which leads to problems in normal life functioning.
- An impulse or urge to engage in the behaviour.
  Compulsive consumers, during their shopping, can feel completely out of control and buy things that they do not need. They also experience an irresistible urge to buy.
- Denial of negative consequences of the behaviour.
- Repeated failures in efforts to stop/modify the behaviour.
- Use of the behaviour as a mean of coping with stress, demands, pressure or unpleasant emotions/situations.
  Many compulsive purchasers indicate that they are most likely to buy something when they are depressed or feel bad about themselves.
- Lowered self-esteem.
  People who work with compulsive consumers and credit debtors say that low self-esteem and trying to please others are common characteristics of compulsive spenders.
– Negative consequences of the behaviour.  
For example, in the case of compulsive buying: credit debts, forced sales of property, writing bad checks, etc. Some compulsive consumers report hiding their purchases from their families and feeling guilty about their behaviour.

Before the research conducted by Faber et al. (1987) there was virtually no published literature on the issue of compulsive consumption. In their research the authors showed how compulsive buying (or as they call it throughout their article – compulsive spending) fits the etiology of compulsive behaviours like: gambling, eating disorders, alcoholism, etc. Following this research more and more scientific articles appeared on the topic of compulsive buying.

1.1.2 Differences in compulsive behaviours

To better understand various types of compulsive consumption behaviours it is also important to know the differences that exist between them. All of these behaviours have negative consequences, but some of them can also lead to severe physical harm to the individual (alcoholism, drug abuse, smoking, overeating, etc.). On the other hand, such compulsive behaviours as kleptomania, compulsive buying and gambling do not lead to direct physical consequences. Another distinction is the degree of disapproval of the compulsive behaviour by society. For example, some behaviours may be viewed as a crime or a disease, others as simply a bad habit. The final difference is the ultimate treatment goal. For some compulsive consumption behaviours the final goal is total abstinence from the behaviour (alcoholism, smoking, gambling, etc.) for other compulsive behaviours, the goal is to modify the behaviour rather than avoid it completely (overeating, compulsive buying, etc.). For the latter, total abstinence is not really a realistic goal (O’Guinn, & Faber, 1989, p. 149).

Compulsive behaviours can be distinguished from just extreme forms of normal behaviour. For example, we can easily distinguish alcoholics from social drinkers or anorexic/bulimic people from people that are on a diet. The compulsive behaviour is uniquely different with respect to the motivations for engaging in it and the consequences of the behaviour (O’Guinn, & Faber, 1989, p. 149).

1.2 Definitions and Etiology of Compulsive Buying

The earliest clinical description of compulsive buying was provided by Emil Kraepelin in 1915 and was called oniomania or buying mania (Black, 2009, p. 5). According to Bleuler (in Black, 2009, p. 6) for buying maniacs (oniomaniacs) buying is compulsive, leads to senseless debt, always involves women, has an element of impulsiveness and the patients can not think differently or understand the consequences of their behaviour.
In general, compulsions are defined by the American Psychiatric Association as: “Repetitive behaviours … or mental acts … that the individual feels driven to perform in response to an obsession. The behaviours or mental acts are aimed at preventing or reducing anxiety or distress…” (Obsessive-Compulsive Disorder, 2012). Researchers propose different definitions and classifications of compulsive buying. For example, O’Guinn and Faber (1989, p. 149) define compulsive buying as: “… chronic, repetitive purchasing that occurs as a response to negative events or feelings.” Such behaviour brings short-term positive rewards, but in the long-term leads to negative consequences. However, for these individuals it becomes very difficult to stop the behaviour. Another view of compulsive buying, based on social psychology, is proposed by Dittmar (2005, p. 470): “… extreme preoccupation with mood and identity repair through material goods…” Dittmar (2004b, p. 424) lists the core addictive features of compulsive buying: irresistible impulse, loss of control and continuing with excessive buying despite aversive consequences. Black (2007, p. 14) characterized compulsive buying disorder by: “excessive shopping cognitions and buying behaviour that leads to distress or impairment”. He mentions that opinions of researchers, about which type of disorder to classify as compulsive buying, are split. Different variants have been proposed: addictive disorder, obsessive-compulsive disorder, impulse-control disorder, mood disorder and others. We tried to find a definition and classification of compulsive buying behavior provided by European organizations, but no information was available, not even from the European Psychiatric Association (European Psychiatric Association, 2012).

In our research the following definition of compulsive buying is used (Ridgway et al., 2008, p. 622): “… a consumer’s tendency to be preoccupied with buying that is revealed through repetitive buying and a lack of impulse control over buying”. This definition includes dimensions of two disorders: a) obsessive-compulsive disorder (OCD) – that is preoccupation with buying, repetitive buying, and b) impulse-control disorder (ICD) – that is the lack of control over the urge/impulse to buy. This theory is referred to by many researchers as classification of an obsessive-compulsive spectrum disorder (Ridgway et al., 2008, pp. 622 – 623). McElroy, Keck, Harrison, Smith and Strakowski (in Ridgway et al., 2008, p. 623) claim that ICD is characterized by an irresistible impulse to perform harmful behaviour whilst OCD is an anxiety disorder characterised by obsessions (thoughts and preoccupations) and compulsions that cause distress, anxiety, take a lot of time and interfere with normal everyday life. Common manifestations of obsessive compulsive disorders include: checkers (constantly checking that the stove, iron was turned off), washers (washing hands, cleaning house repeatedly because of germs, diseases, etc.), orderers (spending lots of time to make sure everything is in its place), hoarders (collecting objects for a long time thinking they might be of need in the future and being unable to get rid of them), etc (Gardner, 2003). Ridgway et al. (2008, p. 623) argue that compulsive buying should be classified as a disorder that has elements of both ICD and OCD. Compulsive buying is also under consideration for entry as a disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association (O’Guinn, & Faber, 2006, p. 2).
Figure 1 illustrates disorders which could be seen as obsessive-compulsive spectrum disorders and contain elements of both ICD and OCD. Disorders closer to the right-hand side exhibit more features of ICD, others that are closer to the left-hand side have more features of OCD.

Abbreviations for Figure 1 are as follows: OCD – obsessive-compulsive disorder, AN – anorexia nervosa (keeping body weight very low by starving/exercise), Trich – trichotillomania (pulling out hair to relieve tension), Klep – kleptomania (impulsive stealing which brings pleasure even though one can afford the items), IIU – impulsive Internet usage, PG – pathological gambling (Ridgway et al., 2008, pp. 623 – 624).

Several misconceptions exist regarding compulsive buying. The first confusing aspect is the name. Self-help groups and the press mostly refer to people suffering from compulsive buying as shopaholics, but this name simplifies the disorder and can prevent sufferers from being taken seriously. At the time of naming the disorder, the closest disorder was compulsive gambling. That is how the name compulsive buying appeared. Later however, compulsive gambling was renamed to pathological gambling due to confusions about whether it is an OCD or an ICD. The same confusion exists about compulsive buying, that is why it would have been better to use the term pathological buying for this phenomenon (O’Guinn, & Faber, 2006, p. 4).

Compulsive buying is also easily confused with impulse buying. This is possible because some classify compulsive buying as an ICD and also because there are similarities between the two behaviours. Extreme cases of impulsive buying may be similar to descriptions of compulsive buying. Impulsive buying occurs as a reaction to a specific item or environment, meaning that it is externally generated. On the other hand, compulsive buying is internally generated by an urge to buy. Compulsive buying is about the buying process, whilst impulsive buying is about the item being purchased. Consequences of compulsive buying are much more severe than the consequences of impulsive buying. Impulsive buying is viewed as individual instances of losing control over purchasing behaviour, whereas compulsive buying...
is a chronic and complete breakdown of self-control over the behaviour (O’Guinn, & Faber, 2006, pp. 4 – 5).

Another debate is whether compulsive buying is really a psychological disorder or an extreme case of a behaviour. O’Guinn and Faber (2006, pp. 5 – 6) believe that it is a disorder and that compulsive buyers should be distinguished from general consumers.

Compulsive buying should also not be confused with excessive buying. Compulsive buyers do buy excessively but not all excessive buyers are compulsive. Excessive buying is associated with large amounts of money spent and large quantities of things bought. Some excessive buyers can buy many things because they have a lot of money to spend, others can not afford their buying but have high levels of materialism or poor financial skills. That is why to analyze whether an excessive buyer is compulsive we need to understand the underlying motivation of the purchasing, the situation when it occurs, attitude to the item bought and the consequences of the behaviour (Faber, 2011, p. 7).

It is important to understand what causes people to become compulsive buyers. Three main theories have been proposed to explain the etiology of compulsive buying. These are: biological, psychological and sociological. The biological theory proposes that there is a genetic predisposition to compulsive behaviours. This theory is most supported in the fields of alcoholism and drug addiction. Some supporters of this theory have even suggested that compulsive behaviour may occur because of varying levels of brain activity. In one of the discussions with compulsive buyers, it was found that many compulsive buyers agree that they enjoy speeding on the highway in their car and parachute jumping. These manifestations of thrill seeking may support the idea that compulsive behaviour may be somewhat caused by the lack of some kind of chemical produced by stimulation and excitement (Faber et al., 1987, pp. 134 – 135).

The psychological theory proposes that individuals may engage in compulsive behaviours in order to cope with stress or low self-esteem. People who have worked with compulsive buyers support this and say that in general they have low self-esteem. The sociological theory proposes that beliefs about cultural norms and peer pressure cause compulsive buying. The society and its subgroups even encourage some compulsive behaviours. For example, media glamorizes such behaviours as smoking, gambling and consuming alcohol in commercials and make them seem exciting and appropriate (Faber et al., 1987, p. 135).

Despite the belief that compulsive buying may have resulted due to TV programs and other media where people possess many nice things, when compulsive buyers were asked directly what role advertising and media play in their problem, the answer was: “What does that have to do with this problem?” (O’Guinn, & Faber, 2006) Nevertheless, it is possible that advertising and other media make individuals believe that happiness can be found in consumption and can conduce those who have low self-esteem to cope with their problem.
through buying. In addition, compulsive buyers may be very vulnerable to advertisements of credit cards which suggest that lack of current funds should be no barrier to an individual’s ability to purchase even expensive items. Credit cards allow compulsive buyers to go into large amounts of debt. That is why the problem of compulsive buying has increased with the growth of the credit card industry (Faber et al., 1987, p. 135).

Ertelt, Marino and Müller (2011, pp. 23 – 25) tried to combine the three etiological theories of compulsive buying into a biopsychosocial model of compulsive buying using a case example of Melissa. Melissa is 20 years old and works part time at a cosmetics counter. In her childhood Melissa spent a lot of her leisure time going shopping with her mother. Her mother enjoyed buying expensive items that she would use to impress their guests. After a fight with Melissa’s father, she would take Melissa shopping for “retail therapy”. Melissa was impressed by the attention from sales people. When Melissa was 18, she got her first credit card and would now take her friends out for dinner and enjoyed the associated feeling of prestige. When Melissa moved away from her parents to college, she experienced depression because of loneliness and started to engage in “retail therapy” to feel better. She enjoyed the attention, compliments and the power when she bought things that others her age could not afford (even though her purchases were charged to credit cards). Later she found a job in a store in a shopping centre and was very happy that her position provided her with many discounts on the clothes she liked.

Figure 2: Biopsychosocial Model of Melissa


Figure 2 above graphically displays the biopsychosocial model of Melissa’s case of compulsive buying behaviour. It includes the three theories described above – social,
psychological and biological. Under the social part of the model, the authors included factors that were part of Melissa’s environment from childhood, for instance values expressed by her family (mainly her mother). These include: affluent family circumstances, mother’s high valuation of expensive belongings and enjoyment of attention from sales personnel. Biological factors have an unclear contribution to Melissa’s compulsive behaviour. Especially after moving away from her parents, psychological factors had a big influence on Melissa’s behaviour, such as: loneliness, power, prestige, depression and acceptance.

1.3 Precursors of Compulsive Buying

Researchers have identified several precursors of compulsive buying behaviour and the relationships between these precursors and compulsive buying. For example, Prakash and Lif (2009) identified ten major chronic consumer states that directly influence compulsive buying behaviour based on an in-depth literature review. Prakash and Lif (2009, p. 686) define consumer states as those that: “... are associated with an adult consumer and which have a possibility of directly and indirectly manifesting in the behaviour the consumer demonstrates in their purchasing decision”. The authors identified the following consumer states: low self-esteem, depression, obsessive-compulsiveness, self discrepancies, emotion related buying, proneness to fantasy, anxiety, desire for stimulation, emotional instability and low conscientiousness (Prakash, & Lif, 2009, p. 687).

In the following subchapters (1.3.1 and 1.3.2) we discuss in detail the main precursors of compulsive buying identified by many authors. Figure 3 schematically illustrates these main precursors along with socio-demographic characteristics that influence compulsive buying behaviour. Socio-demographic characteristics are presented in Chapter 1.4 and include gender, education level and household income level. The right-hand side of Figure 3 depicts the consequences of compulsive buying that are discussed a bit later on in Chapter 1.5 (financial consequences, family arguments, etc.).

*Figure 3: Precursors, socio-demographics and Consequences of CB*

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<thead>
<tr>
<th>Precursors &amp; socio-demographics</th>
<th>Consequences</th>
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<tbody>
<tr>
<td>1. Low self-esteem</td>
<td>1. Positive feelings associated with buying</td>
</tr>
<tr>
<td>2. Fantasizing</td>
<td>2. Family arguments</td>
</tr>
<tr>
<td>4. General compulsivity trait</td>
<td>4. Others</td>
</tr>
<tr>
<td>5. Emotional states</td>
<td></td>
</tr>
<tr>
<td>6. Gender</td>
<td></td>
</tr>
<tr>
<td>7. Education</td>
<td></td>
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<tr>
<td>8. Income</td>
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</tr>
</tbody>
</table>

Compulsive Buying Behaviour
1.3.1 Personality traits

Low self-esteem
People who work with compulsive consumers almost always mention that the commonality among them is that they have low self-esteem and that they try hard to please other people (Faber et al., 1987, p. 134). Ridgway et al. (2008, p. 629) found a negative correlation (\( \rho \)) between self-esteem and compulsive buying, meaning that the lower the respondent’s self-esteem, the higher their compulsive buying tendency (\( \rho = -0.08, p < 0.05 \)). We can see that this correlation is weak but significant. O’Guinn and Faber (1989, p. 153) found in their research that their sample of compulsive buyers had significantly lower self-esteem scores than a general population sample. In the qualitative data that they gathered, many compulsive buyers referred to themselves as being bad, guilty, unattractive and lacking a clear identity. Jacobs (in O’Guinn, & Faber, 1989, p. 150) suggests that compulsive behaviours are an attempt to temporarily block or overcome feelings related to low self-esteem. Also, in a study conducted by Dittmar and Drury (2000, p. 135) answers given by their respondents describing impulse purchases indicate the presence of low self-esteem: “… I think I probably wanted to make myself feel that I was something better than I was. And so to do that I bought expensive clothes, expensive make-up, expensive perfumes and things…”

Fantasizing
O’Guinn and Faber (1989) conducted a study which explored the phenomenon of compulsive buying. They collected quantitative data from self-identified problem buyers who wrote to the California-based self-help group for problem buyers and from the general population, to serve as a comparison group. Their survey included many different measures and one of them was fantasy. The researchers found that the fantasy-imaginative level of compulsive buyers was significantly higher than that of the general sample. When talking with compulsive buyers, they would often mention such phrases as: “Gee, wouldn’t it be nice to really be able to do this, to really be able to afford this…” (O’Guinn, & Faber, 1989, p. 153) A stronger tendency to fantasize may allow consumers to escape from reality in shopping situations and to dissociate themselves from the negative consequences of compulsive buying behaviour (O’Guinn, & Faber, 1989, p. 153). In addition, fantasizing may help individuals to temporarily escape from negative self-images and result in grandiosity. Grandiosity is a clinical concept, indicating a phase when compulsive buyers acknowledge that they have a problem, but think that unlike other people, they can control it (O’Guinn, & Faber, 2006, p. 13).

Materialism
Richins and Dawson (1992, pp. 304, 307 – 308) define materialism as a value, which shows the importance that an individual places on possessions and the acquisition of material goods in order to achieve their goals or an end state. This value can guide the choices that an individual selects. People that value material possessions highly, will behave differently from people that value them less. The authors conceptualize materialism as having three main
domains: acquisition centrality (possessions and their acquisition are central in the lives of materialists), the role of acquisition in happiness (possessions and their acquisition are seen by materialists as central to their satisfaction and happiness) and the role of possessions in defining success (the number and quality of possessions for materialists is the measure of success). For the purpose of brevity, the domains are called – centrality, happiness and success.

Dittmar (2004a, pp. 206 – 207) suggests that material goods are used by people to express who they are and to construct an identity of who they would like to be. For example, in advertising, goods are very often linked to symbols of an ‘ideal self’ and consumers purchase not just the goods but the symbols linked to them. Some material goods are used as practical tools to make life easier, others as a sign of social identity (social standing, socio-economic status, belonging to a subculture, etc.) or personal identity (unique qualities, values, personal history and memories, symbols of interpersonal relationships, etc.). From the emotional point of view, material goods can be used for comfort or mood manipulation.

Relationships between compulsive buying and materialism have been examined by many researchers (Dittmar, 2005; Jalees, 2007; O’Guinn, & Faber, 1989; Ridgway et al., 2008). In their study, O’Guinn and Faber (1989, pp. 151 – 154), measured the overall construct of materialism using Belk’s measure. This includes three dimensions: possessiveness, non-generosity and envy. They found that compulsive buyers scored higher on materialism than non-compulsive buyers. However, the authors believe that if compulsive buying is a compulsive behaviour, compulsive buyers should not have a greater desire to own things than general consumers, but instead this behaviour should occur as a result of low self-esteem and self-worth. They analyzed the three dimensions of materialism and determined that compulsive buyers did not score higher on possessiveness than non-compulsive consumers, but that the difference lay in the envy and non-generosity dimensions. Interviews with compulsive buyers show that the purchased item itself is often of little importance. In extreme cases compulsive buyers did not even remove the items from their packaging. O’Guinn and Faber (2006, p. 10) believe that compulsive buyers leave some things in their packaging because these items can remind them of the problematic behaviour they have. To leave them unopened and out of sight is less threatening. In general, O’Guinn and Faber (2006, p. 10) view compulsive buying as being about the act of buying rather than possessing and acquiring the object.

Dittmar (2005, pp. 467, 472) performed a study of compulsive buying in the UK which examined gender, age and endorsement of materialist values as predictors of compulsive buying. One of the major findings was that materialistic value endorsement is one of the strongest predictors of individuals’ compulsive buying. The author believes that compulsive buying is aimed at mood repair and identity improvement and thus an association between materialism and compulsive buying exists. She explains that Belk’s measure of materialism used by O’Guinn and Faber does not include central dimensions of materialistic values like:
viewing material possessions as a central life goal, as indicators of success and as sources of happiness. In the authors view, possessiveness in Belk’s measure may assess attachment to already owned goods and not the acquisition of new and better goods. That is why in our study, to measure materialism, we used the scale proposed by Richins (2004, p. 217) which includes dimensions like centrality, happiness and success.

Ridgway et al. (2008, p. 629) found in their study a significant correlation between compulsive buying and materialism, proposing that materialistic consumers are more likely to exhibit compulsive buying tendencies. In our empirical study we decided to test the following hypothesis H1: *The higher the respondent scores on the Compulsive Buying Index, the more materialistic he/she is.*

*General compulsivity trait*

Apart from all the above mentioned personality traits, compulsive buyers also possess a general compulsive personality trait (O’Guinn, & Faber, 1989, p. 149). It was found by Kolotkin, Revis, Kirkley and Janick (in O’Guinn, & Faber, 1989, p. 149) that this trait can be the best predictor for some compulsive disorders (e.g., excessive eating). O’Guinn and Faber (1989, pp. 151 – 153) measured the general compulsivity trait using a five-item scale of psychasthenia (obsessive-compulsive syndrome) of the Minnesota Multiphasic Personality Inventory (MMPI). The authors’ findings revealed that compulsive buyers scored significantly higher on the compulsivity trait than general consumers. This does not mean that compulsive buyers are clinically compulsive, but suggests that there is a higher probability within the compulsive buyer population of possessing the general compulsivity trait. This supports the view that compulsive buying is best conceptualised as a form of compulsive consumption.

**1.3.2 Emotional states**

In the study conducted by Faber et al., (1987, p. 133) the authors found that most compulsive buyers purchase things as a result of stress or an unpleasant situation. When respondents were asked to complete the sentence “I am most likely to buy myself something when...” 43.5 % of compulsive buyers mentioned negative emotional states in their first response, for example depression or negative self-image. Another 30.4 % of compulsive buyers also mentioned negative emotions, but not as their first response. Faber and Christenson (1996, pp. 805 – 806) suggest that people engage in some behaviours in order to prolong or change a certain mood state. People who are in a positive mood will engage in a behaviour to prolong their positive mood, while people in a negative mood will engage in a behaviour to change their emotional state into a more positive one. These results strongly suggest that compulsive buying behaviour is partially motivated by a desire to improve a negative mood state.

Faber and Christenson (1996, pp. 803, 809 – 813) conducted a study of mood states experienced before and during shopping for 24 compulsive buyers and a comparison group.
Respondents were asked to assess the frequency of feeling nine mood states (from never to often) just before engaging in shopping and during shopping. Seven mood states were included in both feelings before shopping and feelings during shopping: happy, sad/depressed, angry, irritable, excited, anxious and bored. Two additional moods were added for before shopping – proud and hurt and two for during shopping – powerful and wild. Respondents were also asked to indicate whether their mood changed as a result of buying. Chronic mood states such as depression and anxiety were also measured. The researchers found a significant difference between the group of compulsive buyers and the comparison group with respect to all six measured negative mood states prior to buying. This means that compulsive buyers experience each of the negative moods before engaging in buying more frequently than non-compulsive buyers. At least one third of the compulsive buyers reported often experiencing such mood states as: bored (47.8% of compulsive buyers), sad/depressed (39.1%) and anxious (34.8%). Regarding mood change, 95.8% of compulsive buyers said their mood changed immediately after making a purchase, whereas only 29.2% of the comparison sample said the same. Finally, the researchers found that compulsive buyers had significantly higher levels of clinical depression and anxiety.

Ridgway et al. (2008, p. 629) in their study found that depression, anxiety and stress positively correlated with scores on the Compulsive Buying Index ($\rho$ values 0.21, 0.31, 0.26, with all $p$-values < 0.01). In addition, negative feelings leading to buying were found to positively correlate with the CBI ($\rho = 0.65$, $p < 0.01$). Sun, Wu and Youn (2004) carried out a quantitative study by gathering a sample of 224 college students, both graduate and undergraduate. After analyzing their data the researchers came to the conclusion that compulsive buying is positively related to the psychological trait known as emotional instability or neuroticism. Johnson and Attmann (2009, pp. 397, 399 – 401) also obtained the same results. They found a significant positive relationship between neuroticism and compulsive clothing buying in their study conducted on 228 undergraduate female students attending a university in the Midwestern United States. According to Pervin (in Johnson, & Attmann, 2009, p. 397), individuals that score high on neuroticism are likely to be worrisome, nervous, emotional, anxious, insecure, inadequate, etc.

Based on the theory presented above, we decided to propose the following hypothesis H2: 

**There is a positive relationship between the Compulsive Buying Index and negative feelings leading to buying.**
1.4 Socio-demographic Characteristics of Compulsive Buyers

1.4.1 Women versus men

It is thought that women are more likely to be compulsive buyers than men. Some researchers disagree with this, arguing that the difference is that compulsive buying manifests differently in each gender. Men usually spend more on cars and electronics while women purchase clothes and accessories. However, it may be that all these categories of items are actually bought to increase their self-esteem. The reason why compulsive consumption can be more common among women is because they have been socialized with the belief that shopping brings pleasure. Also, compulsive consumption can be more apparent among women because it is thought that they are more likely to admit that they have a problem and seek help (Faber et al., 1987, p. 136).

There are three main motivations that can characterize buying: functional, emotional-social and identity-related. Functional motivations include efficiency and economy, emotional-social motivations include emotional involvement and social interaction, identity-related motivations include self-expression and ideal self. These motivations are gendered. For women all three are typical, whereas for men usually the first one is the most important (Dittmar, 2004a, p. 207). Campbell (in Dittmar, 2004a, p. 207) suggests that women have a positive attitude to buying and associate it with leisure time. Men, on the other hand, view buying as a task that they want to accomplish as quickly as possible and with minimum effort.

When comparing two samples, one consisting of compulsive buyers and the other of the general population, O’Guinn and Faber (1989, p. 152) found that the samples were significantly different with respect to gender. Women represented the 92% of the compulsive buyers’ sample, while the general sample had an approximately equal number of men and women. The compulsive buyers’ sample was collected from people who wrote to the California-based self-help group for problem buyers and the comparison sample was gathered from the general population of three Illinois cities. It is possible to explain why the sample of compulsive buyers is highly skewed toward women by several factors. Most articles, interviews and talk-shows related to compulsive buying appear in female-oriented media, thus, mainly exposing women to the information about this problem. Also, women are more likely to seek help for their problems. These factors could help explain why samples of compulsive buyers are often predominately female.

Reisch, Gwozdz and Raab (2011, pp. 4 – 8) conducted the first study of compulsive buying in Denmark. They collected data from a representative sample of 1015 consumers using an online questionnaire in the year 2010. The age of the respondents ranged from 15 to 84 years. From their sample 5.81% of consumers were identified as compulsive buyers. The researchers analyzed compulsive buying with respect to gender and found that the mean value of the compulsive buying scale for women was significantly higher than for men with 7.94%
of women questioned classified as prone to compulsive buying but only 3.25% of men. The authors concluded that women are more prone to compulsive buying than men. The authors also examined how incidence of compulsive buying was influenced by both gender and age. Their findings indicate that, for various age groups, there is a prevalence of women among compulsive buyers. They divided respondents into four age groups: from 15 to 24, from 25 to 44, from 45 to 60 and from 61 to 84. The percentages of men and women prone to compulsive buying for each age group were the following: 0% and 4.9%, 6% and 13.2%, 3.1% and 7.4%, 1.7% and 2.9%, respectively.

Research carried out by Shoham and Makovec Brenčič (2003, pp. 130 – 132) in Israel also showed that gender was a significant predictor of compulsive buying. Data was gathered from 112 individuals using a structured questionnaire which was distributed in middle class neighbourhoods in a northern city in Israel. In the sample, the percentages of men and women were almost equal (45.5% and 54.5% respectively). After data analysis, researchers found that women were significantly more likely to demonstrate compulsive buying behaviour than men. Similar results were found by Akagün Ergin (2010, p. 336) in the study of Turkish consumers – women were found to be significantly more affected by compulsive buying than men. Women are the main carers for children and homemakers in Turkey. For them, shopping plays a strong emotional role and helps deal with boredom, stress, low self-esteem, etc.

According to the American Psychiatric Association (in Faber, & O’Guinn, 1992, p. 461) all impulse control disorders are skewed in relation to gender: pathological gambling tends to affect mostly men, kleptomania mostly women. Historically, women are more likely to suffer from eating disorders (anorexia, bulimia), whereas men tend towards alcohol and substance abuse (O’Guinn, & Faber, 2006, p. 9). As we already pointed out before, compulsive buying encompasses elements of impulse control disorder and thereby it is not surprising that it is also gendered.

The evidence clearly suggests that compulsive buying behaviour is much more widespread among women. Many studies have found that among compulsive buyers, from 80 to 95% are women (Black, 2001, p. 21). In their research, Ridgway et al. (2008, p. 628) also found that compulsive buying significantly correlates with gender, implying that women have a higher compulsive buying tendency than men (ρ = 0.1, p < 0.05). Dittmar (2005, p. 471) notes that as long as cultural norms continue to view shopping as being linked to women’s personal, social and gender identities, buying behaviour is most likely to remain gendered. The same is also true as long as women stay the main home-makers and caregivers for children. Based on the research findings discussed above we decided to test the following hypothesis H3 on our two samples: Women score significantly higher on the Compulsive Buying Index than men.
1.4.2 Level of education

Another socio-demographic characteristic which is interesting to analyze in relation to compulsive buying, is the level of education. Is compulsive buying associated with the education level an individual has? Ridgway et al. (2008, p. 628) found in their study that compulsive buying significantly correlated with education. The relationship between the two was weak and negative ($\rho = -0.11$, $p < 0.5$). This can be interpreted the following way: individuals who score higher on compulsive buying tend to have lower levels of education. The same results were found by Shahjehan, Andleeb Qureshi, Zeb and Saifullah (2012, p. 2192) in their study in Pakistan – compulsive buying was negatively correlated with the level of education. On the contrary, Reisch et al. (2011, p. 8) in their study of compulsive buyers in Denmark found that there is no relationship between the highest level of education obtained and compulsive buying. They believe that people with any education level are equally prone to be compulsive buyers.

Despite the contradictions in previous research findings, we tend to think that in Slovenia there is a negative (inverse) relationship between compulsive buying and the education level. That is why we set out the following hypothesis H4: *Compulsive buying is inversely related to the level of education.*

1.4.3 Household income level

It is interesting to examine how the level of household income influences compulsive buying. Initially researchers believed that people with lower levels of income have a higher likelihood of becoming compulsive buyers and that such behaviour would be more disruptive for them (O’Guinn, & Faber, 2006, pp. 8 – 9). Nevertheless, in many studies researchers have found that compulsive buying is independent of income and that people from various income level groups are equally prone to become compulsive buyers (Faber, & O’Guinn, 1992, p. 461; Ridgway et al., 2008, p. 628). The difference is that people with lower incomes would mostly purchase things in inexpensive shops and sales, whilst high income individuals would buy in expensive boutiques or spend money on cars or real estate. For the latter group, negative financial consequences related to their buying behaviour may occur much later on or may never occur at all. However, other consequences, like family arguments or hiding behaviour, are likely to happen (O’Guinn, & Faber, 2006, p. 9). Research carried out by Reisch et al. (2011, p. 8) in Denmark strongly supports the independence of income and compulsive buying behaviour. In their study, they found that there is no relationship between the household’s net income and compulsive buying, indicating that people with any income level are equally prone to becoming compulsive buyers. Based on the above findings, in our research we would like to test the following hypothesis H5: *The level of household income has no influence on compulsive buying.*
1.5 Consequences of Compulsive Buying

1.5.1 Positive feelings associated with buying

The first potential consequence of compulsive buying that we included in our research is short-term positive feelings or a “high” associated with buying (Ridgway et al., 2008, p. 629). When describing negative emotional states, we already mentioned the study conducted by Faber et al. (1987, p. 133). It is interesting to find that research shows while compulsive consumers may sometimes gain pleasure or excitement from the act of buying, they seem not to experience enjoyment from owning or using the objects which they purchase. An interesting point raised in Faber et al. (1987, p. 135) is that many people experience positive emotions during shopping, the issue lies in at what point this becomes abnormal?

It is suggested that a feedback loop develops within a compulsive consumer, whereby positive reinforcement is initially experienced during, or immediately, following the performance of compulsive behaviours in the form of temporary relief from negative affective states: temporary “emotional lifts” or “highs” (Workman, & Paper, 2010, p. 98). Elliott, Friese and Koenig (in Faber, & Christenson, 1996, p. 807) indicated that some respondents escape from negative feelings only when they are shopping. Over the long term, however, the severity of negative outcomes resulting from the compulsive behaviour reinforces low self-esteem, guilt and negative affect, motivating the individual to repeat the behaviour to induce the temporary positive affective state. This cycle repeats itself, with long-term outcomes eventually becoming disastrous (Workman, & Paper, 2010, p. 98). O’Guinn and Faber (1989, p. 148) suggest that compulsive buying behaviour is analogous to other addictive behaviours in many ways. When differences were examined for preshopping and shopping moods, compulsive buyers were more likely to move from negative to positive moods. The findings suggest that compulsive buyers may be using buying behaviour to manage undesirable mood states (Faber, & Christenson, 1996, p. 803).

Although long-term consequences of compulsive buying have been described as generally negative and harmful to the individual as well as to others, for the short term, compulsive buying provides escape from negative feelings. Reduced anxiety, stress and tension, increased self-esteem and sense of self worth, escape from feelings of loneliness and heightened positive affective states are major positive outcomes for compulsive buyers. As already mentioned above, these positive feelings provide further motivation to repeat the behaviour in an effort to sustain them. The behaviour serves as self-medication for the undesirable mood state, eventually becoming an operant conditioned response when negative feelings recur. (Faber, & Christenson, 1996, p. 808; O’Guinn, & Faber, 1989, p. 150; Workman, & Paper, 2010, p. 105)

The study conducted by Faber and Christenson (1996, pp. 812 – 813, 816) showed that positive mood states that were felt at least sometimes while shopping were more common
among the compulsive buyers compared to a comparison group: 91.7% of compulsive buyers reported feeling happy, 91.3% excited and 73.9% said they felt powerful in the process of shopping. A change of mood was indicated for 83.3% of the compulsive buyers. Their mood improved immediately after a purchase, although 12.5% admitted that this lasted only a short time and then they became more upset or depressed afterwards. Postpurchase moods respondents were asked to describe included feeling “high”, “powerful”, “excited”, “elated”, “more important” and “feeling like someone else”. Almost all (95.8%) of the compulsive buyers said that their mood shifted in a positive direction as a result of buying. This supports the notion that compulsive buyers may have learned to use buying as a way to manage their mood states, thereby serving as a form of self-medication (Faber, & Christenson, 1996, pp. 812–813, 816).

Christenson et al. (1994, p. 8) also found similar results: many compulsive buyers feel happy (83%) or powerful (71%) when shopping, although this temporary emotional lift was generally followed by a significant let down.

In the study conducted by Ridgway et al. (2008, p. 629), positive feelings were measured from responses to questions that we also used for our research (see Subchapter 4.3.2 where constructs, variables and measurement scales are presented). The results of the study showed a positive correlation between the Compulsive Buying Index and positive feelings associated with buying ($\rho = 0.59$, p-value < 0.01). We decided to test this correlation with hypothesis H6: There is a positive relationship between the Compulsive Buying Index and the positive feelings associated with buying.

1.5.2 Family arguments related to buying

Even routine, daily shopping can sometimes lead to arguments with family or people who are close to the one doing the shopping. A compulsive factor is not necessarily needed to provoke discussion about and individual’s decisions concerning why he/she bought something that might be unnecessary in the eyes of the other. Especially when financial capability and responsibility is not just an individual concern but a mutual decision (as it is in most families), arguments over expenditures are common (Pirog, & Roberts, 2007, p. 72).

In a research study carried out by O’Guinn and Faber (1989, p. 155), the authors found that arguments over money issues, threats of separation and even divorce are common among families that have a member with a compulsive buying problem. In their study, a female compulsive buyer aged 40 reported that her husband could not deal with this problem anymore and told her: “I’m leaving you. We’ll get a divorce. That’s it. It’s your problem. You did it. You fix it up”. Although compulsive buyers need support in dealing with their problem, unfortunately their behaviour mostly leads to pushing their closest family and friends away.
Also, Faber and O’Guinn (1992, p. 461) noted possible consequences of compulsive buying among family members, but the damage caused to family relationships was not specifically studied as an outcome of compulsive buying in their study. In 2008, Ridgway et al. (pp. 623, 630) assessed the data on frequency of family arguments related to buying among the respondents of the survey. In relation to the Compulsive Buying Index it was found that frequency of family arguments related to buying was positively correlated with scores on the CBI ($\rho = 0.44, p < 0.01$). As we were also interested in this relationship, we stated H7: There is a positive relationship between the Compulsive Buying Index and the frequency of family arguments pertaining buying.

1.5.3 Financial consequences

The criteria for classifying a behaviour as a psychiatric disorder are that the symptoms must be present for a significant period of time and the behaviour has caused, or causes, significant distress or negative consequences either for the individual performing the behaviour or for those around them (Psychiatric Disorders, 2012) One of the potential negative consequences of compulsive buying behaviour we discuss in this subchapter are financial consequences, such as credit card debt (O’Guinn, & Faber, 1989, p. 155; Ridgway et al., 2006, p. 132).

O’Guinn and Faber (1989, p. 155) compared groups of compulsive and non compulsive buyers. The average amount of major credit cards in the group of compulsive buyers (3.7) was higher than that for general consumers (2.2). Fewer compulsive buyers paid credit cards in full each month (1.0 versus 2.0 for general consumers) and the number of credit cards within $100 of their limit was higher for compulsive buyers (1.8 versus 0.4 for general consumers). Schlosser, Black, Repertinger and Freet (1994, p. 208) reported in their research that compulsive buyers had an average of 3.8 credit cards with an outstanding balance each month. Furthermore, researchers were interested in the portion of income used every month just to pay off existing debts. Approximately 50% of compulsive buyers’ household income and just 20% of the income for non-compulsive buyers was used each month to pay off debts. (O’Guinn, & Faber, 2006, p. 10)

Trying to reduce the negative financial effects of compulsive buying is in the interest of both, people who suffer from compulsive buying and society in general. For society, such behaviour (compulsive consumption and credit abuse) may increase the amount of bad debt and drive up interest rates, as well as causing human misery. For the compulsive buyers themselves, this problem can overpower all other parts of their lives (Faber et al., 1987, p. 135). In a study by Belk (1985, p. 276), one of the sentence completion questions asked about the one thing which would make him/her the happiest at that current point in his/her life. 15% of the respondents completed the sentence mentioning money or financial success. 56.5% of compulsive buyers said "no more debts" and 8.7% said more money was the one thing in life which would make them the happiest.
Among the U. S. college students, credit card abuse is a real problem. Ability to get a loan has a great impact on their educational path. When applying for a job, prospective employers routinely look at credit history of the potential candidate. In connection to compulsive buying, research showed that the relationship between student’s attitude towards money, as well as compulsive buying, is strengthened by credit card usage. Thus, credit card usage exacerbates the problem of compulsive buying (Roberts, & Jones, 2001, pp. 230, 232). Norum (2008, p. 274) did research which supports the hypothesis that there is a positive association between irrational use of credit cards and compulsive buying. One of the studies showed that a high level of consumer buying tendency predicts higher levels of credit card debt (Joireman, Kees, & Sprott, 2010, p. 164). More recent research, conducted in 2011, also supports the hypothesis of a positive correlation between credit card misuse and compulsive buying (Palan, Morrow, Trapp, & Blackburn, 2011, p. 89), suggesting that student behaviour in the U. S. and its consequences have not changed much in the last ten years.

Studies on this topic have also been carried out with Australian, Taiwanese and British consumers. The results show that compulsive buyers use credit cards more often, spend more in total and overspend more severely than non-compulsive buyers. Additionally, one part of the research among Taiwanese and British consumers found that compulsive buyers are more willing than non-compulsive buyers to use credit cards, despite the cash penalty incurred when doing so (Lo, & Harvey, 2011, pp. 83, 87; Phau, & Woo, 2008, p. 455).

Ridgway et al. (2008, p. 630) measured financial consequences of compulsive buying by asking the respondents questions about the number of credit cards paid in full each month and the number of credit cards within $100 of their limit. A negative correlation was found between the number of credit cards paid in full each month and the Compulsive Buying Index ($\rho = 0.11, p < 0.01$). The correlation between number of credit cards within $100$ of their limit and the Compulsive Buying Index ($\rho = 0.10, p < 0.05$) was found positive. Researchers noted that these two items taken alone are not necessarily consequences of compulsive buying. In addition, individual consumer’s financial resources should be studied. Based on this research, we stated the H8: The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.

Most of the research mentioned was done in the United States of America or elsewhere around globe, but not in Slovenia. The characteristics of respondents in those studies and the study we conduct are likely to be different, which is why we can not directly compare the results. A student sample is the easiest and most common sample to use in consumer research, this choice has both negative and positive influences on the research. However, the research allows us to get some idea how various factors influence consumers’ behaviour and what may lead to or correlate with compulsive buying behaviour.
1.5.4 Other consequences of compulsive buying

In previous research two more consequences of compulsive buying were identified and studied, but we have decided not to include them in our research. One of them is frequent returns of purchased items which is not really practiced in Slovenia. Hassay and Smith (1996, pp. 745 – 746) suggested that it may be important to the compulsive buyer that unwanted products can be returned anonymously. In the U. S. or in Canada, where the research was conducted, products may be returned to retail outlets in person or even by mail without questions asked. The results of the study reveal that there exists a significant difference in the attitudes and behaviours of compulsive and non-compulsive buyers with respect to product returns. Compulsive buyers were more likely to exchange a product they were dissatisfied with than non-compulsive buyers. Additionally, compulsive buyers reported having returned more products in the previous six months than non-compulsive buyers – on average 5.45 versus 3.48 times (Hassay, & Smith, 1996, p. 748). Ridgway et al. (2008, p. 630) came to the same conclusion that a positive relationship exists between the Compulsive Buying Index scores and frequency of returned purchases (\( \rho = 0.13, p < 0.01 \)).

Remorse or guilt associated with buying, often leading compulsive consumers to hide both their behaviour and purchased items from others. The correlation between the scores on the Compulsive Buying Index and hiding compulsive buying behaviour was found to be positive (\( \rho = 0.59, p < 0.01 \)) in the research by Ridgway et al. (2008, p. 629). Faber and O’Guinn (1992, pp. 461, 463) noted this fear compulsive buyers had, e.g., they were horrified that others would know of their behaviour. This suggests that compulsive buyers are aware of their problem and often want to keep it secret from others.

1.6 The Frequency of Buying and Amounts Spent

The excessive nature of compulsive buying can be seen through the number of shopping trips, total amounts spent and other characteristics like credit card debt, time spent on buying and the number of credit cards held (O’Guinn, & Faber, 2006, p. 10). Schlosser et al. (1994 p. 209), in their study of compulsive buyers, found that the average number of shopping trips they make per month was 12.9 with the average amount spent on each trip a little bit below 100$. The number of shopping trips ranged up to 60 times per month.

Ridgway et al. (2008, pp. 633 – 635) conducted a study in which they also examined the frequency of buying and the amounts of money spent. They collected a sample of 309 respondents. Each one was asked to indicate, on average, how much they spend monthly on clothes, shoes and accessories at their top-five retail and Internet stores (in dollars) and also how frequently they bought something in each of these stores per month. After analyzing the data, researchers found that the higher the respondents scored on the CBI, the more frequently they bought items both on the Internet and in retail stores. Also, the monthly average spent at the top-five Internet and retail stores increased significantly as the CBI increased. Moreover,
they compared compulsive versus non-compulsive buyers on the frequency of buying and the amounts spent by dividing their sample into these two categories according to the CBI score with a threshold of 25 or more being classified as a compulsive buyer. Their results showed that compulsive buyers buy more frequently from Internet and retail stores, and spend higher amounts than non-compulsive buyers. Thus, we set out hypotheses H9 and H10: *The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index; The amount of money spent monthly on clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.*

**1.7 Providing Help to Compulsive Buyers**

As described in previous subchapters, we can see that compulsive buying is a serious problem that leads to many negative consequences. It is essential to understand how it is possible to treat and help such individuals. In the U. S., several organizations exist that help compulsive buyers recover from their problem. These include Shopaholics Anonymous, Stopping Overshopping, Debtors Anonymous, Addicted.com and others.

Shopaholics Anonymous is part of the Shulman Center for Compulsive Theft, Spending & Hoarding. This center provides education, assessment and treatment to individuals, couples and families for compulsive spending, stealing and hoarding disorders (Shulman Center for Compulsive Theft, Spending & Hoarding, 2012). On the website of Shopaholics Anonymous individuals can find the definition of compulsive shopping, causes of such behaviour, consequences and different statistics related to over shopping and spending (the number of compulsive buyers in America, gender differences, credit card debt, etc). Users of this website are offered to participate in a test, calculate their score and identify whether they are compulsive buyers. Here you can also read testimonials from people that were treated by the Shulman Center. Shopaholics Anonymous offers expert counselling in person, by phone or online. The basic program consists of ten one hour-long sessions with Mr. Shulman, reading and working with books and participation in a local or online support groups (Shopaholics Anonymous, 2012).

Another organization that offers help to compulsive buyers and also training to therapists about compulsive buying, is Stopping Overshopping (also known as Shopaholic no more). It is directed by Dr. April Benson – a “known” psychologist who “specializes in treatment of compulsive buying disorder”. The website of Stopping Overshopping provides information about compulsive buying, its assessment and various links to other help groups, audio/video resources and recommended reading. They offer individual coaching and group coaching as well as training for therapists (Stopping Overshopping, 2012).

Addicted.com is a website for people suffering from addictions. It provides a large amount of information resources like: recent articles about addictions, descriptions of various addictions (anorexia, bulimia, gambling, shopping addiction, Internet addiction, etc.) and information about locations of treatment centres and counsellors nearby. The website also offers addiction
self tests, an online forum and a possibility to call or send a question by e-mail and receive an
answer from specialists (Addicted.com, 2012).

As mentioned previously, one of the negative financial consequences of compulsive buying
behaviour is the possible high level of debt. A known fellowship named Debtors Anonymous
(DA) which helps people recover from compulsive debting exists. There are no fees to
become a member of DA. The only requirement is to have a strong wish to cope with your
debt problems. On the DA website you can take a quiz to find out whether you have a
problem with debt and read about the main signs of compulsive debting (Debtors

Workman (2010, pp. 10, 61, 79) conducted a study of compulsive buying by collecting data at
Debtors Anonymous (DA) meetings over a period of 12 months from people that experienced
compulsive buying and also carrying out six in-depth interviews. The purpose of her research
was to examine the human consciousness of compulsive buyers. In her research study, after
taking part in a large number of DA meetings, Workman (2010, pp. 88 – 90) describes how
DA functions. It is a program based on the principals of Alcoholics Anonymous and has 12
steps to personal recovery (these steps can be found on the fellowship website). Meetings are
arranged at least once a week for two hours during which people can share and support each
other. Such meetings are organized in different cities around the world. During the meeting,
a speaker usually shares his/her experience and recovery from compulsive debting. A few times
a year, workshops are organized by DA members where they discuss general topics
of compulsive debting, for example how family members can help their loved ones cope with
compulsive debting. One of the principals of the fellowship is anonymity, names of
participants are hidden.

Members of DA do not have the same addiction. Some can be compulsive buyers, others earn
less than they need to afford their living or cope with their high bills for medical care,
education, etc. But what is common among the members is that they try to live without
unsecured debt. This is debt that is not supported by something tangible, for example credit
card debt. To sum up, DA members should not buy what they can not afford. There are
currently over 500 DA meetings in more than 40 states and 20 countries (Donsky, 2010).
Debtors Anonymous is also situated in the UK (Debtors Anonymous UK, 2012).

In Slovenia, Logout – a Help Centre for Compulsive Users of the Internet (Logout, center
pomoči pri prekomerni rabi Interneta) exists where an individual can find information about
compulsive buying on the Internet. The website also contains advice how to cope with this
problem (Logout, center pomoči pri prekomerni rabi Interneta, 2012). We tried to find more
European organizations that provide help to compulsive buyers, but we were not successful.
Mostly, help and counselling are offered to deal with drug, alcohol, gambling and other
problems, but not specifically with compulsive buying.
Common solutions to cure compulsive buying include drug treatment, self-help groups and cognitive behavioural therapy. Some researchers suggest that attempts to categorize compulsive buying as a disorder and medicalize it move attention away from societal factors related to compulsive buying. By categorizing it as an illness, the focus is of the individual as the source of the problem. This results in treatment using pharmaceuticals being favoured. The authors believe that it is critical to classify compulsive buying (Lee, & Mysyk, 2004, pp. 1709, 1713). Sherhorn, Reisch, & Raab (in Lee, & Mysyk, 2004, p. 1714) propose that if compulsive buying is classified as a societal problem, then treatment is mostly based on self-help groups where individuals are taught to self-regulate better.

2 MEASURING COMPULSIVE BUYING

Chapter 2 describes different existing methods for measuring compulsive buying. The main two scales discussed are the Clinical Screener and the Compulsive Buying Index (which is used in the current research). Limitations of the Clinical Screener and of several other measurement scales are also presented in this chapter.

2.1 The Clinical Screener

Faber and O’Guinn (1992, pp. 459 – 469) in the article “A Clinical Screener for Compulsive Buying” explain the development of a scale to identify compulsive buyers. The need for a new scale which would determine compulsiveness of a buyer arose from the lack of research about the negative aspects of consumer behaviour. To fully understand and identify a problem, it is necessary to look at all aspects of the behaviour, not just the positive ones. Previous researchers were dependent on self-selected samples, identifying people with specific consumption problems through a unified screening instrument would make results easier to gather, analyze and compare. From the very beginning of studying the subject of compulsive buying and developing an appropriate means for scale development, Faber and O’Guinn were aware of the respondents sample imperfection. That is the fact that some people who might really fit into the category of compulsive buyers and need professional help may not contribute to research for a variety of reasons. Perhaps they are too embarrassed, too frightened, or unaware of how to get help or have not yet acknowledged that they have a problem.

Previous research left unanswered several important questions that encouraged Faber and O’Guinn (1992) to make an effort to answer these questions by developing the Clinical Screener. To ensure a screening instrument is truly tapping compulsive buying and not just any disorder, researchers took care to develop a set of items that could provide the best predictive indicator of whether a person has a compulsive buying problem.

A survey was given to a sample of self-identified compulsive buyers (388 people) and a sample of members of the general population (292 people), to serve as a comparison group.
Both samples were found to be representative of the general population of the United States. The survey covered a wide range of issues from the items chosen specifically for use in developing a screener, to measures of psychological and behavioural correlates and outcomes of compulsive buying. The variety of variables examined contributes to establishing the validity of the resulting index.

The items chosen for a screening instrument emerged from previous research, observations of compulsive buyers and discussions with therapists. Initially, 29 items were selected as potential questions for use in a screening instrument. Responses were designed in such a way that participants indicated either their agreement with statements on a five-point Likert scale or their frequency of experiencing a feeling or behaviour on a five-point scale ranging from “very often” to “never.” It was found that seven of these items contributed significantly to the model. These were: “Bought things even though I could not afford them,” “Felt others would be horrified if they knew of my spending habits,” “Wrote a check when I knew I did not have enough money in the bank to cover it,” “If I have any money left at the end of the pay period, I just have to spend it,” “Made only the minimum payments on my credit cards,” “Felt anxious or nervous on days I did not go shopping,” and “Bought something in order to make myself feel better.”

Probability distributions of being a compulsive buyer revealed lower level for the sample of general population and higher level for the self-identified clinical group. A comparison of the two populations showed overlay of probability distributions and their obvious distinction. The screening instrument appeared to be suitable for correct identification of compulsive buyers. The cut-off point was defined at a scale score of 1.34; that is, based on previous criterion usage, two standard deviations above the general population mean. Following from this, 22 people in the general sample were classified as compulsive buyers.

Reliability and face validity of the scale were assessed by the homogeneity of the items comprising the scales and by conducting preliminary qualitative and survey studies, reviewing the psychiatric literature and consulting with psychiatrists and therapists who were experienced in dealing with compulsive buying or other disorders. Internal validity was supported when the results analyzed using the Clinical Screener produced the same results as those tested with variables previously found to relate to compulsive buying. External validity was determined when the Clinical Screener was tested among readers of a newspaper in which small ads were placed inviting readers to contribute to the survey. The results showed a similar distribution to the first two samples and correctly classified compulsive buyers using the Clinical Screener criteria, thus the screening instrument and weights seemed to possess a high degree of external validity.
2.2 The Compulsive Buying Index (CBI)

In 2008, Ridgway et al. (pp. 622 – 639) published an article in which the need for and development of a new measure for compulsive buying was explained. The need for a newly adapted measure rose from findings that previous measures had some limitations because of which the measurement of compulsive buying was not as precise as it should be. Some of the shortcomings of the Clinical Screener were described above. One of them was being overly focused only on the impulse-control dimension and not containing any items tapping the obsessive-compulsive dimension of buying. Also, the scale that contained four items either income dependent or addressing financial consequences of spending were not suitable to identify those consumers with higher incomes who could afford their compulsive spending. Thus, the Clinical Screener may misclassify some compulsive buyers because of the aforementioned dependence on income-related items.

In contrast to other measures of compulsive buying, briefly described in the next subsection, Ridgway et al. (2008) focused on identifying underlying behavioural tendencies rather than potential consequences of behaviour. Various consequences of compulsive buying, including financial, emotional and behavioural consequences, were measured separately. The contribution of this research was, besides developing a measure of compulsive buying and validating the scale, in expanding the conceptualization of the compulsive-buying construct by incorporating both obsessive-compulsive and impulse-control dimensions.

The initial item selection included 121 questions, based on a review of existing articles covering the compulsive buying construct definition and its dimensions – obsessive-compulsive buying and impulsive buying. Those items were individually examined by three consumer researchers who narrowed the number of items down to 15.

352 undergraduate students completed the survey that included those 15 items and some other additional variables. After testing the items with statistical methods, six items remained in the final set, three for each of the dimensions: “My closet has unopened shopping bags in it,” “Others might consider me a ‘shopaholic,’” “Much of my life centers around buying things,” “I buy things I do not need,” “I buy things I did not plan to buy,” and “I consider myself an impulse purchaser.” Items were measured on a seven-point Likert scale or, where frequency was asked, on seven-point scale ranging from “never/strongly disagree” to “very often/strongly agree.”

In order to validate the new scale with a more age heterogeneous consumer sample, 551 survey responses from university staff members was gathered. The six compulsive-buying items were measured on seven-point scales from which a composite index (the Compulsive Buying Index or CBI) was formed by summing the individual scores. To verify that the compulsive buying construct they had developed was linked to other theoretical constructs, researchers investigated the relationships between compulsive buying and previously
identified precursors and consequences of compulsive buying. Some of the results of how the Compulsive Buying Index correlated with these variables are presented throughout this thesis.

When the researchers compared the variables of their newly developed scale to the Clinical Screener, the explanatory power proved to be higher for the new scale, with the exception of variables concerning financial issues and family arguments.

For determining an appropriate cut-off point for the Compulsive Buying Index, the correlation between the Compulsive Buying Index and negative feelings/hiding purchases/arguing with family about buying/self-reported frequency of buying were examined. The analysis revealed a sudden increase of the listed variables values when the Compulsive Buying Index reached 25. Subsequently, all respondents who scored 25 or more were classified as compulsive buyers. Using the CBI, 8.9 % of the university staff were classified as compulsive buyers but only 5.0 % were classified as compulsive buyers using the Clinical Screener.

The Compulsive Buying Index was also validated by using actual purchase data. A national study was conducted with a consumer sample of respondents from 42 states (Ridgway et al., 2008, pp. 633 – 636). The data was obtained from self-reported consumer purchases and from purchase record data. Matching these purchase data with the consumers’ responses to the questions from the Compulsive Buying Index scale, allowed the researchers to show that the new measure correlates with purchase behaviour. The distributed survey was fully completed by 306 respondents and contained questions about general buying behaviour, both on the Internet and at brick-and-mortar stores, the compulsive buying scale, questions about individual consumer characteristics and demographic questions. Results were comparable to the previous two studies Ridgway and co-authors did on this topic and showed very similar levels of performance despite the different respondent sample characteristics.

In our thesis we decided to use this approach, developed by Ridgway et al. (2008, pp. 622 – 638) to detect compulsive buyers and see how the Compulsive Buying Index correlates with the chosen variables – see the Chapter 5 on hypotheses testing.

2.3 Limitations of Other Scales

In addition to the two scales for measuring compulsive buying that we have described in the previous two subsections, five other scales were developed by different researchers in order to measure compulsive buying. The limitations of these five scales were summed up in an article by Ridgway et al. (2008, pp. 625 – 627) and served as the basis for developing the newest compulsive buying scale.

The scales did not adequately measure the two dimensions, obsessive-compulsive and impulsive-control. One of them (Monahan, Black, & Gabel, 1996) focused exclusively on the obsessive-compulsive dimension, while others (Christenson et al., 1994; d’Astous, 1990,
Edwards, 1993; Lejoyeux, Tassain, Solomon, & Ades, 1997; Valence, d’Astous, & Fortier, 1988) included only items intended to measure the impulse-control dimension. Because most of the previously developed scales were not tested and measured among various or numerous samples of consumers, they were also of limited applicability as well as inadequate validity and reliability.

Several scales contained wording problems. Double-barrelled items used in two of the scales (d’Astous, 1990; Valence et al., 1988) may have resulted in inaccuracies in the responses being measured. As buying is the main construct of interest to be measured, using items referring to shopping and not exclusively to buying, deviates from the main idea being investigated.

Some of the scales (d’Astous, 1990; Edwards, 1993; Lejoyeux et al., 1997; Valence et al. 1988) included the consequences of compulsive buying that we describe in Chapter 1.5 in the measure itself. These consequences arise after the act of compulsive buying, therefore, items used in the scales should not include questions tapping this issue. Harmful consequences and the outcomes of compulsive buying should not be overlooked, but it is more appropriate that they be measured separately.

3 COMPULSIVE BUYING ACROSS DIFFERENT RETAIL CHANNELS

Chapter 3 discusses compulsive buying across three different retail channels. The following subchapters present an analysis of compulsive buying on the Internet, compulsive buying and its relation to television shopping, as well as compulsive buying through catalogs.

3.1 Compulsive Buying on the Internet

In 2000, Lyons and Henderson (2000, p. 739) described emergent compulsive buying on the Internet as an “old problem in a new market place.” The convenience of Internet shopping, which can be done from home or the office offers freedom to the consumer (Compulsive Buying on the internet: Recent research, 2012). Information on the product, price comparisons and other details can be found very fast at any time in one place. The buying transaction is easy and remote, after submitting credit card details, often all that is required is one click of a button. Over one-fifth of respondents in the U. S. survey agreed that they spend more online than they intend to (UCLA Internet report 2003, 2012), and young UK adults were concerned about overspending when buying online because buying on the Internet does not really feel like spending money (Dittmar, Long, & Bond, 2007, pp. 341 – 342). Buying on the Internet is convenient and encourages the usage of credit card (Vicdan, & Sun, 2008, p. 604). The results of the study conducted in France showed that compulsive buyers’ connections to online shopping sites are longer and more frequent (Lejoyeux, Mathieu,
Embouazza, Huet, & Leguen, 2007, p. 42) than are the non-compulsive buyers’ connections. These studies strengthen the suggestion that individuals could show compulsive buying tendencies online.

Dittmar et al. (2007, pp. 334, 351, 355) found that the tendency to buy compulsively on the Internet is related to materialism as well as to emotion and identity motives. Materialistic individuals who seek to enhance their emotions and identity when buying goods online are reported as the most inclined to become compulsive buyers. This suggests that materialism is a precursor to compulsive buying at both brick-and-mortar stores and in the buying environment of the Internet.

Similarly, Wang and Jang (2008, pp. 693, 698 – 699) examined the relationships between personality traits, harmonious and obsessive passion, compulsive buying behaviour and online shopping. Results from Taiwanese students who completed the survey showed that passion can lead to online shopping dependency and is related to compulsive buying behaviour. One of the hypotheses tested in the research was that individuals who display compulsive buying behaviour would be more dependent on online shopping. The results showed a significant relationship. This may be because the Internet provides a more convenient and quicker channel for compulsive buyers to purchase from than brick-and-mortar stores do. Additionally, compulsive buyers with a passion for online shopping were found to be prone to manifesting their behaviour in traditional shopping in brick-and-mortar stores as well.

Another study conducted among Taiwanese students proposes a general social psychological model to predict online compulsive buying tendencies (Chang, Lu, Su, Lin, & Chang, 2011, pp. 3289 – 3290). It was indicated that compulsive buying on the Internet is directly influenced by vanity with regards to appearance, emotional buying motives and identity buying motives. The results of the study suggest that in order to prevent or reduce compulsive buying on the Internet, awareness in the context of education, consumer advice or therapy could help. It is important to encourage individuals, particularly young students, to develop a critical stance toward materialistic values and messages that online buying offers a psychological benefit.

Ridgway et al. (2008, p. 635) found a positive relationship between the Compulsive Buying Index and the frequency of buying clothing and accessories on the Internet ($\rho = 0.19$, $p < 0.01$). They further developed research in the field of compulsive buying with regard to Internet purchases. They tested different relationships surrounding preferences to shop and buy on the Internet rather than at brick-and-mortar stores. Some of the findings were as follows. This study found support for hypothesis predicting a positive relationship between consumers’ motivation to buy unobserved on the Internet and their score on the Compulsive Buying Index. Another hypothesis tested related to positive relationship between consumers’ motivation to search for product information on the Internet and compulsive buying did not hold. (Kukar–Kinney et al., 2009, pp. 298 – 300, 302)
In Slovenia, in the first quarter of 2011, 73% of households had access to the Internet, which is five percentage points more than in the same period in 2010 (Statistical Office of the Republic of Slovenia, 2011). It was found that 69% of people between the ages of 10 and 74 described themselves as ‘regular Internet users’, with 66% of people using the Internet at least once a week. Younger people used the Internet more regularly, with 98% of people aged 10 to 24 describing themselves as ‘regular Internet users’ compared to only 29% of people aged 55 to 74. These statistical data show a high level of usage of the online world among Slovenes which could possibly result in an increasing percentage of people buying on the Internet. In the first quarter of 2011, 20% of Slovene respondents reported having ordered or bought goods on the Internet (17% in the same period in 2010). People mostly ordered or bought clothes, sporting goods, travel or holiday accommodation (e.g., hotel reservations), household goods, tickets for events, books, magazines, newspapers and computer hardware. Although Slovenia is a small country and we would expect people to buy Internet goods from abroad, the statistics shows that most e-buyers bought products from national sellers.

The statistics show that Internet usage in Slovenia is already at a high level and still increasing. That is why we decided to examine the relationship between compulsive buying and purchasing via the Internet by testing the H11: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet.

3.2 Television Shopping and Compulsive Buying

Television shopping has been cited as a medium that encourages compulsive buying because of the private and friendly environment. While watching television shopping programs, one is at home where no judgments of others exist and this could be a stimulus to buy compulsively. Researchers found that TV shoppers’ compulsive buying behaviour was influenced by the number of hours they spent watching TV shopping programs – the longer they watched TV shopping programs, the more likely they were to exhibit compulsive buying behaviour. (Roberts, 1998, p. 307)

Ridgway and Kukar–Kinney (2005, pp. 431, 433 – 435) conducted a qualitative research by analyzing testimonial telephone calls received and put on-air at QVC television shopping network in the U. S. The testimonial calls were categorized into four themes including: I Love QVC Products and Their Quality, My Buying is Out of Control, I Love the QVC Hosts as Friends/Family and I Am Treating Myself to Gifts. The themes represented in the content analysis in relation to compulsive buying, sorted under My Buying is Out of control, were general overspending, buying one item in each colour, buying an entire line of make-up, running credit cards to the limit, waiting until husband is asleep to begin ordering, watching late in the night, taking off of work to watch QVC.
Park, Lim, Bhardwaj and Kim (2011, pp. 15, 17) did research among TV shoppers where they identified four benefit segments of TV home shoppers – convenience seekers, product-oriented shoppers, unique seekers and apathetic shoppers. When they tested whether consumers seeking different benefits from TV shopping would exhibit different consumer characteristic in terms of compulsive buying, no significant difference was detected.

Television shopping is the second buying venue we decided to test in relation to compulsive buying. Stating \( H12: \) The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through television shopping programs.

### 3.3 Compulsive Buying Through Catalogs

Personally we have no experience buying through catalogs, but some of our acquaintances frequently buy clothes, accessories or other goods by ordering them from catalogs regularly received by post. To browse through a catalog is possibly an even more private experience than watching a television shopping program so we expect the results to be similar.

Although we have not found any relevant research articles about catalogs as a retail channel in relation to compulsive buying, we decided to test \( H13: \) The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through catalogs.

### 4 THE EMPIRICAL STUDY OF COMPULSIVE BUYING IN SLOVENIA

Chapter 4 describes the empirical study of compulsive buying carried out in Slovenia. An overview of modern Slovenian consumer habits is presented. Further on, a summary of hypotheses tested in the study and the research methods used are outlined. The chapter concludes with descriptive statistics of the two samples gathered in the study (the student sample and the general population sample).

#### 4.1 Evidence on Slovene Consumers and Their Buying Habits

An article titled “Shopping centre, my second home,” appeared in 2010 in a Slovenian magazine (Žigon, 2010). It explains how and why shopping became one of the most essential free time activities. The author explains how to avoid the temptation of compulsive buying. Another article titled “Are you addicted to buying?” explains that there is nothing wrong with going to the stores from time to time and ‘treating yourself’ by buying something you do not really need (Doljak, 2010). The thing to consider is whether we can control our behaviour and stop buying at any time, along with being aware that material things can not buy us happiness. An article titled “God in shopping bags” compares consumption to a world religion (Zgonik, 2011). Consumers search a certain sense in products as believers search in God. It is likely
that these articles were published to educate people about the problem because excessive buying behaviour was noted in the Slovene society.

A year ago, an interview was conducted with mag. Mateja Videčnik, employed at the Slovene Consumers’ Association (Zgonc, 2011). For many years she worked for big companies and studied consumer psychology. She warns consumers to think more on their own when going shopping. Our desire for a bargain can lead us to buy things we actually do not need. Well planned shopping demands more energy, but in the end, we are more satisfied, self-confident and healthier. Videčnik describes the average Slovene consumer as one that has been affected by a crisis during the last two years. Ways of thinking and habits have changed. The majority of consumers in Slovenia lowered the amount of things being bought, their living costs have risen and people say they are hardly able to save money. Consumers started to buy more often in discount stores where the prices are generally lower. Purchases are reasonably well planned in advance and some consumers had to cut expenses for vacations, new clothes, a car or a flat. As far as Slovene consumers is concerned, Videčnik says, they have become more sensible and rational. A sentence she uses to describe the current most probable thought process of the Slovene consumer is: “I can order coffee, but the cake – I would rather skip it.”

Buying things we do not need is a consequence of different motives. Videčnik mentions five main reasons why Slovenes, or people in general, buy unneeded items (Zgonc, 2011). One segment of consumers finds low price compelling, thinking “I am stupid if I do not buy this product, I am sure there will come a day when I need it!” The second reason is that some products are presented in a way that subconsciously influences the consumer to buy them. Thus, the consumer can not control the urge to purchase the product. The motive “Everyone has it, so it is of major importance that I also possess it!” is the third reason she mentions, followed by the fourth reason, the fear of missing a unique opportunity – an example of newly improved mobile phones or washing machines that have numerous functions, of which we regularly use only a few, yet we still want to buy new ones with more and more functions. The last and the most powerful motive she lists is the desire to feel secure and accepted.

From the article mentioned above we can conclude that Slovene consumer mentality is similar and comparable to that of consumers in other countries. There are not many articles written that refer specifically to compulsive buying in Slovenia. Some articles can be found in magazines where compulsive buying and advice how to avoid it is presented, whereas research on this topic, done among Slovenes, is found in a few universities’ theses works. We assume that compulsive buying behaviour is not as widely spread among Slovenes as among the U. S. citizens. We did find a Slovene Internet page “Logout – a Help Centre for Compulsive Users of the Internet” (Logout, center pomoči pri prekomerni rabi Interneta) where compulsive buying on the Internet is described as an addiction (Logout, center pomoči pri prekomerni rabi Interneta, 2012). It contains advice how to deal with the problem and indicates the presence and awareness of compulsive behaviour among Slovenes.
Within the framework of the Slovenian Marketing Association’s (DMS – Društvo za marketing Slovenije) activities, data on consumer behaviour in the current economic situation has been gathered twice a year since 2009. In April 2012, responses from a representative sample of 1000 Slovene consumers were gathered. The results show the highest rate of awareness of recession collected so far. Eight out of ten respondents said that the crisis affects them, but they have gradually adapted to it. In connection to buying habits, 59 % of respondents spent less and an additional 15 % plan to spend less. These proportions are higher than in autumn 2011 – 50 % and 12 %, respectively – because the consumers are adapting to economic changes and their financial capabilities. Almost half of the respondents (42 %) stated that their financial situation had already deteriorated, with almost a third (27 %) of respondents expecting their financial situation to become worse – in autumn 2011, these shares were lower, 35 % and 23 %. (Trženjski monitor DMS – pomlad 2012, 2012)

Gathered and analyzed data from the research conducted in April 2012 show a higher percentage of respondents who do not restrain their consumption habits (48 %) in comparison to autumn 2011 (42 %) and spring 2011 (45 %) (Trženjski monitor DMS – pomlad 2012, 2012). The results were interpreted as a consequence of distinctive rationalized consumption. Consumers adapt their buying habits, find other alternatives, cheaper venues of shopping and rearrange their priorities of products and services. Such changes help ameliorate conditions for the consumer; she/he starts to feel that she/he does not need to give up on particular products in full. This probably means consumers get used to living and spending under the new conditions.

The tendency to rationalized consumption through altering buying habits is growing (Trženjski monitor DMS – pomlad 2012, 2012). When asked, 73 % of consumers considered their purchases were more planned and well considered than a year ago (up from 70 % in autumn 2011). The share of consumers who often purchase low-price products was 56 % (53 % in autumn 2011) and 38 % of respondents said they buy frequently in discount stores (36 % in autumn 2011). The frequency of buying well known branded products, products made in Slovenia and eco-products has lowered. While we have a chance to get loyalty cards in the majority of stores in Slovenia, it is interesting to find 12 % of the respondents said they do not possess any of them. One more fact worth mentioning is that almost three quarters (71 %) of the respondents said they grow fruits and vegetables at home due to financial circumstances to provide their own supply.

There is not much literature on Slovene consumer buying behaviour that covers specifically compulsive buyers. Since compulsive buyers have different characteristics than non-compulsive buyers, we think they should be studied as a separate consumer segment within consumer research.
4.2 Research Hypotheses for the Study

The list of hypotheses tested in this study is presented below. It includes hypotheses related to: precursors of compulsive buying (H1 – H2), socio-demographics (H3 – H5), consequences of compulsive buying (H6 – H8), the frequency of buying clothes, shoes and accessories and the amounts of money spent (H9 – H10) and compulsive buying across different retail channels (H11 – H13).

H1: The higher the respondent scores on the Compulsive Buying Index, the more materialistic he/she is.

H2: There is a positive relationship between the Compulsive Buying Index and negative feelings leading to buying.

H3: Women score significantly higher on the Compulsive Buying Index than men.

H4: Compulsive buying is inversely related to the level of education.

H5: The level of household income has no influence on compulsive buying.

H6: There is a positive relationship between the Compulsive Buying Index and positive feelings associated with buying.

H7: There is a positive relationship between the Compulsive Buying Index and the frequency of family arguments pertaining to buying.

H8: The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.

H9: The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

H10: The amount of money spent monthly on clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

H11: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet.

H12: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through television shopping programs.

H13: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through catalogs.

Figure 4 on the next page graphically presents a summary overview of hypotheses tested in our research. The yellow and blue circles present variables used in the study. Each link between the yellow and blue circles corresponds to one of the 13 hypotheses tested. A “+” on the connection line between two circles represents a positive relationship between them, a “−” represents a negative relationship, and “no” stands for no association between the two variables. The link between variables Compulsive Buying and Gender predicts that women score higher on the Compulsive Buying Index than men – stated as “higher for females” in Figure 4.
4.3 Research Methods

4.3.1 Data collection and sampling

To achieve our research goals, both primary and secondary data were collected. Relevant scientific articles and books on the topic of interest were found and analyzed. After studying them and creating the theoretical part of the thesis, an empirical study was carried out. The research strategy is explanatory as we want to explore the relationships between different variables and understand the reasons behind these relationships (Saunders, Lewis, & Thornhill, 2003, p. 124).

Primary data was collected by employing the survey method. Surveys allow the collection of a large amount of data from a sizeable population in a highly economical way (Saunders et al., 2003, p. 360). To gather the necessary statistical data from the Slovene population, a questionnaire was formed with most items measured on a seven-point Likert scale. The respondents were asked to evaluate the statements with response options anchored at 1 = “strongly disagree” and 7 = “strongly agree” or 1 = “never” and 7 = “always”. In addition, a neutral option was included as the middle point. For obtaining socio-demographic data,
buying frequencies, amounts of money spent, credit card information and other data, some of the questions were open-ended (see Appendix A). After the data collection process, quantitative analysis was conducted on two distinct non-probability samples. The first sample consisted of 216 students from the same year of study on the Faculty of Economics and the second sample of 408 members of the general Slovene population.

The student sample was collected by handing out paper based questionnaires to approximately 200 students during class lectures and asking them to complete them. To collect data for the second sample, from the general population, we created an online questionnaire. The link to this questionnaire was sent to our friends and colleagues and they were asked to pass it on to others. Due to this, the exact structure of the sample was difficult to predict accurately. This is a non-probability convenience sampling technique and involves selecting those cases that are the easiest to access (Saunders et al., 2003, p. 213). The process of data collection was continued for four months, until our required sample size of approximately 400 respondents was reached.

4.3.2 Constructs, variables and measurement scales

Below is a detailed description of the constructs, assigned variables and measurement scales that we used in our research.

Construct: The Compulsive Buying Index (CBI)
The CBI is the main measure of compulsive buying behaviour which allows us to identify whether the respondent is a compulsive buyer or not and to what extent. The measurement scale for this construct was developed by Ridgway et al. (2008, pp. 625 – 632) and comprises six items measured on a seven-point Likert scale (1 = “never/strongly disagree” and 7 = “very often/strongly agree”): My closet has unopened shopping bags in it; Others might consider me a ‘shopaholic’; Much of my life centres around buying things; I buy things I don’t need; I buy things I do not plan to buy and I consider myself an impulsive purchaser. Six variable names were assigned to each item correspondingly: COMP1, COMP2, COMP3, IMPULSE1, IMPULSE2 and IMPULSE3. The sum of all six variables is calculated creating a new variable named CBINDEX with a possible range from 6 to 42. If the CBINDEX is equal or greater than 25, the respondent is classified as a compulsive buyer. The respondent is classified as a non-compulsive buyer if the CBINDEX is equal or less than 24. The variable CBINDEX is measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Construct: Materialism
Materialism was measured using the nine-item short version material values scale (MVS) proposed by Richins (2004, p. 217): Buying things gives me a lot of pleasure; I admire people who own expensive homes, cars and clothes; The things I own say a lot about how well I’m doing in life; It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like; My life would be better if I owned certain things I don’t have; I’d be happier if I could
afford to buy more things; I try to keep my life simple, as far as possessions are concerned; I like to own things that impress people; I like a lot of luxury in my life. Nine variable names were assigned to each item correspondingly: MATER1 – MATER9. This measure contains the three domains of materialism discussed in the theoretical section: success (MATER2, MATER3 and MATER8), centrality (MATER1, MATER7 and MATER9) and happiness (MATER4, MATER5 and MATER6). Each item was measured on a seven-point Likert scale with 1 = “strongly disagree” and 7 = “strongly agree”. A variable named MATERIALISM was created by calculating the average of the nine items measured. This variable is measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Construct: Negative Feelings Leading to Buying
This construct was measured with three items on a seven-point Likert scale (1 = “strongly disagree” and 7 = “strongly agree”): Having a bad day can lead me to go on a buying spree; I find that I buy the most when I am depressed; When I feel lonely, I go shopping (Ridgway et al., 2008, p. 629). Three variable names were assigned to each item correspondingly: BADDAY, DEPRESSED, LONELY. The average of the three variables is calculated and the variable named NEGATIVEFEEL is created. This variable is measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Construct: Positive Feelings Associated with Buying
This construct was measured with a scale proposed by Ridgway et al. (2008, p. 629): I find buying very pleasurable; The process of buying provides me with a lot of gratification (at least temporarily); I feel excited when I go on a buying spree. These items were also measured on a seven-point Likert scale (1 = “strongly disagree” and 7 = “strongly agree”). The following variable names were assigned: MATER1, HAPPY and EXCITEMENT. Then a new variable named POSITIVEFEEL was created by calculating the average of the three items measured. POSITIVEFEEL is measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Construct: Family Arguments
Engaging in family arguments about buying behavior is seen as a negative consequence of compulsive buying. This construct was assessed by asking respondents the question: How often do you argue with your family about your excessive buying? (Ridgway et al., 2008, pp. 629 – 630) The response was measured on a seven-point Likert scale with 1 = “never” and 7 = “always”. A variable named ARGUE was assigned. ARGUE is measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Construct: Financial Consequences of Buying
Financial consequences of compulsive buying were measured by asking the question: What is your current amount of credit card debt? The response options were: €0, €1–100, €101–250, €251–500, €501–1000, €1001–2500, €2501–5000 and more than €5000. The variable named CARDOWE was assigned. CARDOWE is measured on an ordinal measurement scale (Argyrous, 2005, pp. 9 – 10).
Construct: Venues of Shopping
This construct examines buying across different retail channels, more specifically how frequently do respondents buy on the Internet, through television shopping programs and catalogs. Three items were measured: How frequently do you buy on the Internet; How frequently do you buy through television shopping programs (for example Top Shop); How frequently do you buy through catalogs. Each item was measured on a seven-point Likert scale with 1 = “never” and 7 = “always”. Three variables were assigned correspondingly, named: CATALOGS, INTERNET and TV. These variables are measured on an interval scale (Argyrous, 2005, pp. 10 – 11).

Other important variables and their measurement scales:

CBCATEGORY – divides the respondents into two categories based on the value of the Compulsive Buying Index: compulsive buyer (CBI ≥ 25) and non-compulsive buyer (CBI ≤ 24). Nominal measurement scale.

GENDER – each respondent was asked to indicate their gender. Nominal measurement scale.

AGE – each respondent was asked to indicate his/her age in years. Ratio measurement scale.

EDUCATION – was measured by asking the respondents: what is the highest level of education that you have reached? Response options were provided: primary school, high school/vocational school/gymnasium, undergraduate degree and postgraduate degree. Ordinal measurement scale.

INCOME – was measured by asking the respondents: What is the net monthly income of your household? Response options were offered: ≤ €500, €501–1000, €1001–1500, €1501–2000, €2001–3000, €3001–4000, ≥€4001. Ordinal measurement scale.

OCCUPATION – was measured by asking the responded to choose one of the following categories: unemployed, employed part-time, employed full-time, pupil/student, housewife etc. and pensioner. Ordinal measurement scale.

CLOTH_FR – indicates how many times per year the respondent buys clothes, shoes and accessories. Ratio measurement scale.

CLOTH_EUR – indicates the average amount of money spent monthly on clothes, shoes and accessories. Ratio measurement scale.

In the questionnaire that was distributed to respondents, all items measuring different constructs and variables were translated into Slovenian (see Appendix A). In Appendix B you can find a summary of all the hypotheses, variables that correspond to each hypothesis, their measurement scales and the appropriate statistical tests used to test each individual hypothesis.
4.3.3 Data analysis

Quantitative data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software. The Compulsive Buying Index (CBI) was calculated as the measure of compulsive buying behaviour. The following statistical methods were used to analyze the data and test our hypotheses: Spearman’s rank-order correlation coefficient, a nonparametric Mann-Whitney U test, Kolmogorov-Smirnov test for normality and inference tests regarding population’s correlation coefficient. The results of the data analysis and hypotheses tests are presented and discussed in the empirical part of our master thesis – chapters 4.4 and 5.

4.4 Descriptive Statistics

Student sample
The size of the student sample was N = 216 respondents. Among the respondents 144 (66.7 %) were female and 68 (31.5 %) male, four respondents (1.8 %) did not indicate their gender. 211 respondents answered the question related to their age (five missing). The average age was 20.75 years with a range from 18 to 27 years and a standard deviation of 1.3. Approximately 37.9 % have a monthly net household income below €1500, 33.9 % from €1501–3000 and 16.6 % above €3000, 11.6 % of respondents did not reply to this question.

Figure 5: Histogram – CBINDEX with normal curve (student sample)

The Compulsive Buying Index was calculated for the sample. The mean value was 16.46 (range from 6 to 40), SD = 6.66 and the median and mode values were 16. Depending on their score on the CBI, respondents were divided into two categories: non-compulsive buyers (CBINDEX ≤ 24) – representing 85.6 % of the sample (185 respondents) and compulsive
buyers (CBINDEX ≥ 25) – 14.4 % of the sample (31 respondents). From the histogram on the previous page (Figure 5), we can see that the data is slightly skewed to the right (skewness = 0.7). In this and all other following histograms, the red line depicts the normal curve as a comparison. A comparison table of all socio-demographic characteristics and CBI scores for both the student sample and the general population sample can be found in Table 1 on page 44.

As many statistical inference tests (for example, a t-test) require that the data under analysis is normally distributed, we performed the Kolmogorov-Smirnov test to assess whether the CBINDEX had a normal distribution. The results of this test indicated that the CBINDEX significantly deviates from the normal distribution (p = 0.0005, see Appendix C). In order to obtain a normal distribution, we transformed the CBINDEX by taking the natural logarithm from it and also by excluding outliers (there were two cases with a CBINDEX above 35, valid N = 214). After this transformation we received a slightly higher significance in the Kolmogorov-Smirnov test p = 0.011. But still this value was below 0.05, meaning that we did not manage to achieve normality with the help of the transformation (see Appendix C). Thus, the CBINDEX was not normally distributed for the student sample.

*General population sample*

The size of the sample collected from the general population was N = 408 respondents. Among the respondents, 275 (67.4 %) were female and 133 (32.6 %) male. The average age was 30.1 years with a range from 18 to 89 years (SD = 10.49). Approximately 36.7 % had a net monthly household income below €1500, 46.8 % from €1501–3000 and 12.7 % above €3000, 3.8 % of respondents did not reply to this question. The occupation of respondents was: 7.4 % unemployed, 50 % employed (5.9 % employed part-time), 39 % pupils or students, 1 % housewives and 2.7 % pensioners. Respondents also had the following levels of education: 1.7 % primary school, 40.4 % high school/vocational school/gymnasium, 52.5 % undergraduate degree and 5.4 % postgraduate degree.

The Compulsive Buying Index was calculated and found to have a mean value of the CBI 13.01 (CBI range from 6 to 40), SD = 4.77 and a median value of 12. Multiple modes were found to exist, of which the smallest value was eight. Depending on their score on the CBI, respondents were divided into two categories: non-compulsive buyers (CBINDEX ≤ 24) – representing 98.3 % of the sample (401 respondents) and compulsive buyers (CBINDEX ≥ 25) – 1.7 % of the sample (seven respondents). The histogram on the next page (see Figure 6) displays the distribution of the Compulsive Buying Index in the general population sample. We can see that the data is skewed to the right (skewness = 1.44).
We performed the Kolmogorov-Smirnov test of assess whether the CBINDEX of the general population sample was normally distributed. The results of this test indicated that the CBINDEX significantly deviates from the normal distribution (p = 0.0005, see Appendix C). In order to obtain a normal distribution, we went further and transformed the CBINDEX by taking the natural logarithm from it and also by excluding outliers (these were four cases with a CBINDEX above 30, valid N = 404). But even after this transformation, we did not manage to achieve normality, Kolmogorov-Smirnov p-value was still equal to 0.0005 (see Appendix C). Thus, the CBINDEX was not normally distributed for the general population sample.

After calculating the Compulsive Buying Index for both samples, we can see that the percent of compulsive buyers in the general population sample is much lower than in the student sample (1.7% vs. 14.4%). One of the possible reasons for this distinction could be the difference in average age of the samples: 30.1 years in the general population sample and 20.75 years in the student sample. The difference is almost ten years. As it was found in the study conducted by Dittmar (2005, p. 487) that the incidence of compulsive buying varies according to age and that younger consumers engage more in compulsive buying, this was not unexpected. The same results were also found by Shahjehan et al. (2012, p. 2192) in their study in Pakistan – compulsive buying was negatively correlated with age.

A comparison table of all socio-demographic characteristics and CBI scores for both, the student sample and the general population sample is presented on the next page in Table 1
### Table 1: A summary table of socio-demographic characteristics and CBI

<table>
<thead>
<tr>
<th></th>
<th>Student sample</th>
<th>General sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Size</strong></td>
<td>216</td>
<td>408</td>
</tr>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>men</td>
<td>68 (31.5 %)</td>
<td>133 (32.6 %)</td>
</tr>
<tr>
<td>women</td>
<td>144 (66.7 %)</td>
<td>275 (67.4 %)</td>
</tr>
<tr>
<td>missing</td>
<td>4 (1.8 %)</td>
<td>-</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>20.75</td>
<td>30.10</td>
</tr>
<tr>
<td>SD</td>
<td>1.30</td>
<td>10.49</td>
</tr>
<tr>
<td>range</td>
<td>18 – 27</td>
<td>18 – 89</td>
</tr>
<tr>
<td>missing</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; €1500</td>
<td>37.9 %</td>
<td>36.7 %</td>
</tr>
<tr>
<td>€1501 – 3000</td>
<td>33.9 %</td>
<td>46.8 %</td>
</tr>
<tr>
<td>&gt; €3000</td>
<td>16.6 %</td>
<td>12.7 %</td>
</tr>
<tr>
<td>missing</td>
<td>11.6 %</td>
<td>-</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>primary school</td>
<td>-</td>
<td>1.7 %</td>
</tr>
<tr>
<td>high/vocational school/gymnasium</td>
<td>-</td>
<td>40.4 %</td>
</tr>
<tr>
<td>undergraduate degree</td>
<td>-</td>
<td>52.5 %</td>
</tr>
<tr>
<td>postgraduate degree</td>
<td>-</td>
<td>5.4 %</td>
</tr>
<tr>
<td><strong>OCCUPATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unemployed</td>
<td>-</td>
<td>7.4 %</td>
</tr>
<tr>
<td>employed</td>
<td>-</td>
<td>50.0 %</td>
</tr>
<tr>
<td>pupils or students</td>
<td>-</td>
<td>39.0 %</td>
</tr>
<tr>
<td>housewives</td>
<td>-</td>
<td>1.0 %</td>
</tr>
<tr>
<td>pensioner</td>
<td>-</td>
<td>2.7 %</td>
</tr>
<tr>
<td><strong>CBI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>16.46</td>
<td>13.01</td>
</tr>
<tr>
<td>SD</td>
<td>6.66</td>
<td>4.77</td>
</tr>
<tr>
<td>range</td>
<td>6 – 40</td>
<td>6 – 40</td>
</tr>
<tr>
<td>mode</td>
<td>16</td>
<td>8*</td>
</tr>
<tr>
<td>median</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>skewness</td>
<td>0.70</td>
<td>1.44</td>
</tr>
<tr>
<td>kurtosis</td>
<td>0.26</td>
<td>4.55</td>
</tr>
<tr>
<td>compulsive buyers</td>
<td>31 (14.4 %)</td>
<td>7 (1.7 %)</td>
</tr>
<tr>
<td>non-compulsive buyers</td>
<td>185 (85.6 %)</td>
<td>401 (98.3 %)</td>
</tr>
</tbody>
</table>

* Multiple values exist. The smallest value is shown.

Initially we wanted to test hypotheses which compared compulsive buyers with non-compulsive buyers based on different characteristics. However, after analysis of the two samples it was found that there were only seven respondents identified as compulsive buyers in the general population sample, less than 2 %. The group of only seven respondents is too small to be able to meaningfully test hypotheses that compare compulsive buyers with non-compulsive buyers. Thus, the hypotheses were altered so that in the analysis, compulsive buying is examined as a continuous variable, rather than by dividing it into two categories.
We examine different positive/negative relationships associated with compulsive buying using various correlation tests.

5 HYPOTHESES TESTING AND DISCUSSION OF FINDINGS

In Chapter 5, each of the 13 hypotheses is tested for the student sample and the general population sample. After each hypothesis test, the results are discussed and compared to the findings of other researchers. The chapter concludes with an overview of all the empirical findings of the current study.

5.1 Hypotheses Related to Precursors of Compulsive Buying

H1: The higher the respondent scores on the Compulsive Buying Index, the more materialistic he/she is.

To test this hypothesis, the relationship between variables MATERIALISM (measured on an interval scale) and CBINDEX (measured on an interval scale) was analysed.

Usually, to analyze the direction and strength of the relationship between two variables measured on an interval/ratio scale and perform an inference test about the population correlation – the Pearson product-moment correlation coefficient can be used. But there is an important assumption that needs to hold in order to be able to conduct this inference test – the pairs of variables should be drawn from a bivariate normal probability distribution. There is no exact way to check for the bivariate normality assumption, but partially this can be assessed by checking whether both variables have a normal distribution (Devore, 2011, pp. 511 – 514).

In Chapter 4.4 it was demonstrated that the variable CBINDEX both for the student sample and for the general population sample is not normally distributed even after a natural logarithm transformation and the exclusion of major outliers. Based on these results, it was obvious that it was not possible to perform an inference test about the population correlation using the Pearson product-moment correlation coefficient as the main assumption is violated. Therefore to test the hypothesis, Spearman’s rank-order correlation was used.

There are a few advantages of using the Spearman’s rho for inferences: there is no need to assume that the underlying relationship between the two variables is linear and no assumptions of normality are made regarding the distributions of the two variables (Walpole, Myers, Myers, & Ye, 2007, p. 692). Another advantage is that this test is not influenced by outliers or extreme scores (Israel, 2008, p. 112). The same logic for using Spearman’s rho is applied to all of the subsequent hypotheses where both variables are measured on an interval/ratio measurement scale.
**Student Sample**

In the student sample, the number of valid cases for MATERIALISM variable was N = 213, three were missing. The mean value of materialism was 4.03 and the SD was 1.1, with a range from 1 to 6.33. The median was 4.11 and the mode 4.78. The histogram in Figure 7 illustrates the frequency distribution of MATERIALISM variable. The respondents marked “1” – strongly disagree and “7” – strongly agree when answering the nine questions related to measuring materialism. The neutral point was “4”, indicating that the respondent can not decide on the answer (neither agrees nor disagrees). An average of all materialism items was taken to obtain MATERIALISM variable. The higher is the value of the variable, the more materialistic is the respondent. These values are depicted on the horizontal axis with a possible range from 1 to 7. From the below histogram and the measures of central tendency it is seen that the distribution is slightly skewed to the left (skewness = – 0.24).

*Figure 7: Histogram – MATERIALISM with normal curve (student sample)*

The scatterplot in Figure 8 on the next page depicts the overall pattern of the relationship between the two variables CBINDEX and MATERIALISM. It is hypothesised that there is a positive relationship between the two variables. The red line on the scatterplot (and on all following ones) is the line of best fit. On the scatterplot below, a slight positive association can be noticed. Most likely, if there is a positive relationship, it is not very strong. A few outliers were present with the following values of MATERIALISM and CBINDEX correspondingly: 13 and 1, 1.11 and 28, 3.11 and 32, 3.44 and 32, 5.11 and 40, 5.22 and 7, 5.78 and 38, 6.33 and 10 (marked with red boxes on the scatterplot).
The following results were obtained: Spearman’s rho = 0.335 and p = 0.0005 (see Appendix D). A significant correlation at the 0.01 level between the Compulsive Buying Index and materialism was found. The relationship was weak, positive, and significant, indicating that as the Compulsive Buying Index increases, so do the materialistic values of an individual and vice versa. Our hypothesis H1 holds for the student sample.

**General Population Sample**

In the general population sample, the number of valid cases for the MATERIALISM variable was N = 408. The mean value of materialism was 3.12 and the SD was 1.02, with a range from 1 to 6.44. The median was 2.89 and the mode 2.56. Similarly as in the student sample, Figure 9 depicts the frequency distribution of the MATERIALISM variable and a normal curve. From the histogram and the measures of central tendency it is seen that the distribution is skewed to the right (skewness = 0.68).

*Figure 9: Histogram – MATERIALISM with normal curve (general sample)*
The scatterplot in Figure 10 depicts the overall pattern of the relationship between the two variables CBINDEX and MATERIALISM. It is expected that there is a positive relationship between the two variables. A slight positive association can be noticed on the scatterplot. Most likely, if there is a positive relationship, its strength is quite weak. There were a few outliers with the following pairs of values of MATERIALISM and CBINDEX correspondingly: 1 and 8, 3 and 27, 3 and 26, 4.89 and 38, 5 and 6, 5.56 and 33, 5.78 and 10, 6.33 and 40, 6.33 and 32 (marked with red boxes on the scatterplot).

*Figure 10: Scatterplot – CBINDEX & MATERIALISM with best fit line (general sample)*

The following results were obtained for the Spearman’s rho and inference test: Spearman’s rho = 0.362 and p = 0.0005 (see Appendix D). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and materialism. The relationship was weak, positive, and significant, indicating that as the Compulsive Buying Index increases so do the materialistic values of an individual and vice versa. Our hypothesis H1 holds for the general population sample.

**Discussion**

The analysis above indicates that for both samples, there is a positive significant relationship at the level of 0.01 between the Compulsive Buying Index and materialism. The hypothesis holds with the following values of Spearman’s rho: 0.335 (student sample) and 0.362 (general population sample). The strength of the relationship is almost the same in both samples. These results correspond to the findings of Ridgway et al. (2008, p. 629), suggesting that materialistic consumers are more likely to exhibit compulsive buying tendencies. Also, Dittmar (2005, pp. 467, 472) found that materialism is one of the strongest predictors of compulsive buying.
**H2:** There is a positive relationship between the Compulsive Buying Index and negative feelings leading to buying.

To test this hypothesis and examine this relationship, two interval scale variables CBINDEX and NEGATIVEFEEL were analysed.

**Student Sample**
The variable NEGATIVEFEEL was calculated for 215 students (one missing). For this sample, the negative feelings associated with buying had a mean value of 2.28 and a standard deviation of 1.59, with a possible range from 1 to 7. The value of the median was 1.67 and the mode was 1. Figure 11 displays the frequency distribution of the NEGATIVEFEEL variable which was calculated as an average of responses to three questions regarding the negative feelings leading to buying. If the respondents strongly disagreed with the statement in the question, he or she chose “1” as a response, if strongly agreed then “7”. The neutral point was “4,” indicating that the respondent can not decide on the answer (neither agrees nor disagrees). Higher values of the NEGATIVEFEEL variable mean that negative feelings (depression, loneliness or bad day) have a higher influence on the respondent to engage in buying. These different values of NEGATIVEFEEL are depicted on the horizontal axis of Figure 11 with a possible range from 1 to 7. From the measures of central tendency and the histogram below it is seen that data is skewed to the right (skewness = 1.26).

*Figure 11: Histogram – NEGATIVEFEEL with normal curve (student sample)*

The overall pattern of the relationship between the two variables (CBINDEX & NEGATIVEFEEL) and the line of best fit can be seen from the scatterplot below (Figure 12). It is hypothesised that there is a positive relationship between the two variables. The
scatterplot below clearly suggests a positive association. A few outliers were present with the following pairs of values of NEGATIVEFEEL and CBINDEX: 3.67 and 7, 4 and 9, 4 and 7, 7 and 40, 7 and 38, 7 and 12 (marked with red boxes on the scatterplot).

Figure 12: Scatterplot – CBINDEX & NEGATIVEFEEL with best fit line (student sample)

Spearman’s rho was calculated and an inference test performed. The following results were found: Spearman’s rho = 0.567 and p = 0.0005 (see Appendix E). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and the negative feelings leading to buying. The relationship was moderate and positive, indicating that as the Compulsive Buying Index increases, so do the negative feelings leading to buying and vice versa. Our hypothesis H2 holds for the student sample.

General Population Sample
In the general population sample, the number of valid cases for the NEGATIVEFEEL variable was N = 408. The mean value of the negative feelings leading to buying was 1.55 and the SD was 0.94, with a range from 1 to 7. The median and mode were equal to 1. Similarly as in the student sample, Figure 13 on the next page illustrates the frequency distribution of the NEGATIVEFEEL variable. It is seen from the histogram and the measures of central tendency that the distribution is skewed to the right (skewness = 2.23).

The scatterplot in Figure 14 on the next page depicts the overall pattern of the relationship between the CBINDEX and NEGATIVEFEEL. We expect there is a positive relationship between the two variables. From the scatterplot, a slight positive association can be noticed. A few outliers were present with the following pairs of values of NEGATIVEFEEL and CBINDEX: 1 and 38, 1.33 and 32, 5 and 33, 6 and 20, 7 and 40 (marked with red boxes on the scatterplot).
Spearman’s rho and an inference test were carried out: Spearman’s rho = 0.317 and p = 0.0005 (see Appendix E). A significant correlation at the 0.01 level between the Compulsive Buying Index and the negative feeling leading to buying was discovered. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so do the negative feelings leading to buying and vice versa. Our hypothesis H2 holds for the general population sample.

Discussion
The above analysis indicates that for both samples, there is a positive significant relationship at the level of 0.01 between the Compulsive Buying Index and negative feelings leading to
buying. The hypothesis holds for both samples. The relationships are of different strength – moderate for the student sample (Spearman’s rho = 0.567) and weak for the general population sample (Spearman’s rho = 0.317). These results are similar to the findings of other researchers. For example, Faber et al. (1987, p. 133) found that most compulsive buyers purchase things as a result of stress or an unpleasant situation. In a study carried out by Faber and Christenson (1996, pp. 803, 809 – 813) the researchers found that compulsive buyers experience negative mood states (depression, boredom, anxiety, anger, etc.) significantly more often than non-compulsive buyers. Ridgway et al. (2008, p. 629) found a significant positive correlation between negative feelings leading to buying and the CBI with $\rho = 0.65$.

5.2 Hypotheses Related to Socio-demographics

**H₃**: Women score significantly higher on the Compulsive Buying Index than men.

To test this hypothesis we analyzed the relationship between two variables: GENDER – measured on a nominal scale (where “0” is assigned to man and “1” to woman) and CBINDEX – measured on an interval measurement scale.

In Chapter 4.4 we demonstrated that the CBI variable is not normally distributed for both samples. The same holds for the CBI variable separately for men and women in the student and the general population sample (see Appendix F). The significance of all four Kolmogorov-Smirnov normality tests is below 0.05, indicating the absence of normal distribution.

In this case we can use a nonparametric Mann-Whitney U test that does not have a normality assumption. This test is used to find whether there is a significant difference between the medians of two independent samples. It is similar to the parametric independent samples t-test which assesses the difference between the means. Mann-Whitney U test assigns ranks to the scores of both groups. This test requires arbitrary assignment of two groups (in our case this is the GENDER variable – “0” for man and “1” for woman) and the scores should be at least of ordinal scale (in our case the CBI is measured on an interval scale). The main advantages of this test are that it is distribution-free and equal numbers of cases in both groups are not required (Israel, 2008, pp. 29 – 30).

**Student Sample**

In the student sample there were 144 (66.7 %) female and 68 (31.5 %) male respondents, four respondents (1.9 %) did not indicate their gender. The mean, median, mode, standard deviation and range values of the CBINDEX variable are presented in Table 2 on the next page for men and women. It is apparent from the Table 2 that all of the values are higher for female than for male respondents and the difference seems to be quite substantial.
Table 2: Descriptive statistics of CBINDEX for men and women (student sample)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBI mean</td>
<td>14.72</td>
<td>17.47</td>
</tr>
<tr>
<td>CBI median</td>
<td>13.50</td>
<td>16.00</td>
</tr>
<tr>
<td>CBI mode</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>CBI SD</td>
<td>5.77</td>
<td>6.88</td>
</tr>
<tr>
<td>CBI range</td>
<td>from 6 to 32</td>
<td>from 6 to 40</td>
</tr>
</tbody>
</table>

Figure 15 illustrates the frequency distribution of the CBINDEX variable separately for men and for women. It is seen from the histogram below and the measures of central tendency that for both, men and women, the distributions are slightly skewed to the right (skewness = 0.759 – for men, skewness = 0.604 – for women).

Figure 15: Histograms – CBINDEX with normal curve separately for men and for women (student sample)

After performing the Mann-Whitney U test for the CBINDEX and GENDER as a grouping variable, following results were obtained: $U = 3755.5$, $p = 0.006$, women had an average rank of the CBI equal to 114.42 and men equal to – 89.73 (see Appendix G). These results indicate that there is a significant difference between men and women in their median CBI values. It can be further concluded that women scored significantly higher on the Compulsive Buying Index than men. These results support our hypothesis H3.

General Population Sample

In the general population sample there were 275 (67.4 %) female and 133 (32.6 %) male respondents. The mean, median, mode, standard deviation and range values of the CBINDEX variable are presented in Table 3 on the next page for men and women. It is visible from
Table 3 that most of the values are higher for female than for male respondents, but the difference does not seem to be very high.

Table 3: Descriptive statistics of CBINDEX for men and women (general sample)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBI mean</td>
<td>12.46</td>
<td>13.27</td>
</tr>
<tr>
<td>CBI median</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>CBI mode</td>
<td>9</td>
<td>8 and 14</td>
</tr>
<tr>
<td>CBI SD</td>
<td>4.42</td>
<td>4.92</td>
</tr>
<tr>
<td>CBI range</td>
<td>from 6 to 33</td>
<td>from 6 to 40</td>
</tr>
</tbody>
</table>

Figure 16 illustrates the frequency distribution of the CBINDEX variable separately for men and for women. It is seen from the histogram below and the measures of central tendency that for both, men and women, the distributions are skewed to the right (skewness = 1.059 – for men, skewness = 1.561 – for women).

Figure 16: Histograms – CBINDEX with normal curve separately for men and for women (general sample)

After performing the Mann-Whitney U test for the CBINDEX and GENDER as a grouping variable, the following results were obtained: U = 16621, p = 0.134, women had an average rank of the CBI equal to 210.56 and men equal to –191.97 (see Appendix G). These results indicate that there is no significant difference between men and women in their median CBI values. It can be further concluded that there is no significant difference in how men and women scored on the Compulsive Buying Index in the general population sample. Hypothesis H3 does not hold for this sample.

Discussion
From the above analysis, we can see that in both, the student sample and the general population sample, the mean and median values of the CBI were higher for women than for
men (17.47 and 16 vs. 14.72 and 13.5; 13.27 and 13 vs. 12.46 and 12). Nevertheless, this
difference was rather low in the general population sample. After conducting the Mann-
Whitney U test we have found that the hypothesis H3 holds only for the student sample and
was rejected for the general population sample. The results for the student sample are not
outstanding and are supported by many researchers (Black, 2001, p. 21; Dittmar, 2004a, p.
207; Reisch et al., 2011, pp. 4 – 8; Ridgway et al., 2008, p. 628; Shoham, & Makovec
Brenčič, 2003, pp. 130 – 132). On the other hand, some researchers believe that it is just a
stereotype that women are more likely to be compulsive buyers than men and that the
difference is that it manifests differently in each gender. Men tend to spend more on
electronics and cars, whereas women on clothes, shoes and accessories (Faber et al., 1987, p.
136). To find out whether H3 was rejected for the general population sample due to sampling
error or there is really no significant difference between the CBI scores of men and women, it
would be a good idea to test it again on a more representative sample of Slovene consumers.

H4: Compulsive buying is inversely related to the level of education.

This hypothesis could only be tested for the general population sample, as in the student
sample all respondents had the same level of education.

To test this hypothesis it was necessary to analyze the relationship between two variables:
EDUCATION (measured on an ordinal scale) and CBINDEX (measured on an interval scale).
According to Argyrous (2005, p. 179) in order to describe a relationship between two
variables that have ordinal scales or one ordinal and one interval/ratio, it is possible to use
Spearman’s rank-order correlation coefficient. Spearman’s rho works with ranks rather than
with original data: while the original data may be ordinal, the ranks are interval/ratio.

Also, as we mentioned before, when using Spearman’s rho for inferences there is no need to
assume that the underlying relationship between the two variables is linear, no assumptions of
normality are made regarding the distributions of the two variables and the test is not
influenced by outliers or extreme scores (Israel, 2008, p. 112; Walpole et al., 2007, p. 692).

General Population Sample
As mentioned in Chapter 4.4, respondents of the general population sample had the following
levels of education: 1.7 % primary school, 40.4 % high school/vocational school/gymnasium,
52.5 % undergraduate degree and 5.4 % postgraduate degree. Figure 17 presents a graphical
illustration of the association between the variables CBINDEX and EDUCATION. The
horizontal axis shows the education levels mentioned above, starting from the lowest – “1”
for primary school and finishing with the highest – “4” for a postgraduate degree. On the
vertical axis are the values of CBI. Few outliers were present and had the following values of
EDUCATION and CBINDEX: 3 and 40, 3 and 38, 3 and 32, 4 and 33 (marked with red boxes
on the scatterplot). The line of best fit is almost horizontal, telling us that there is most likely
no relationship between the two variables.
With the help of SPSS we calculated the Spearman’s rho and its significance value for the general population sample (valid N = 408). The results were the following: Spearman’s rho = –0.063 and p = 0.203 (see Appendix H). We can see that there is no significant correlation between the level of education and compulsive buying. Thus, our hypothesis does not hold and we can say that there is no relationship between compulsive buying and the level of education.

Figure 17: Scatterplot – CBINDEX & EDUCATION with best fit line (general sample)

Discussion
After conducting statistical analysis, hypothesis H4 was rejected for the general population sample – no significant correlation was found between the education level and the Compulsive Buying Index. The theory on whether there is a relationship between the education level and compulsive buying is contradictory. For example, Reisch et al. (2011, p. 8) in their study conducted in Denmark found that there is no association between them. Our findings also support this notion. On the other hand, Ridgway et al. (2008, p. 628) found a significant negative relationship between education and compulsive buying in their study conducted in U.S. Therefore, it would be a good idea to further investigate this relationship in future studies.

H5: The level of household income has no influence on compulsive buying.

To test this hypothesis we analyzed the relationship between two variables: INCOME (measured on an ordinal scale) and CBINDEX (measured on an interval scale). Following the same logic as in H4, Spearman’s rho was used to test this hypothesis.

Student sample
In the student sample N = 191 respondents answered the question about their net monthly household income. 25 respondents (11.6%) did not reply to this question. In our research, we defined seven income categories: the first one ≤ €500 (3.2% of respondents), the second one
€501–1000 (14.8 %), the third €1001–1500 (19.9 %), the fourth €1501–2000 (15.7 %), the fifth €2001–3000 (18.1 %), the sixth €3001–4000 (9.7 %), the seventh ≥ €4001 (6.9 %).

Figure 18 below graphically depicts the relationship between CBINDEX and INCOME. The horizontal axis stands for the income categories mentioned above, increasing from left- to right-hand side. The vertical axis displays the CBI values. The red line of best fit is almost horizontal, indicating that the association between the two variables is very close to zero. Two major outliers were present and had the following values of INCOME and CBINDEX: 3 and 38, 7 and 40 (marked with red boxes on the scatterplot).

Spearman’s rho was calculated and an inference test was performed (valid N = 191). The results of the test (see Appendix I) showed that there is no significant correlation between the Compulsive Buying Index and the net monthly household income, the correlation coefficient was very close to zero (Spearman’s rho = 0.077, p = 0.292). These results support our hypothesis H5 that the level of household income has no influence on compulsive buying.

Figure 18: Scatterplot – CBINDEX & INCOME with best fit line (student sample)

General Population Sample
In this sample N = 393 respondents replied to the question concerning their net monthly household income. 15 respondents (3.7 %) did not reply to this question. The percentages of responses in each income category were as follows: 4.4 % (≤ €500); 12.7 % (€501–1000); 19.6 % (€1001–1500); 18.4 % (€501–2000); 28.4 % (€2001–3000); 8.3 % (€3001–4000); 4.4 % (≥ €4001). Figure 19, below, illustrates the relationship between the CBINDEX and INCOME in the same way as the previous diagram for the student sample. It can be seen from the graph that the relationship between the two variables is very close to zero. Outliers were present and had the following values of INCOME and CBINDEX: 2 and 38, 3 and 33, 4 and 32, 5 and 40 (marked with red boxes on the scatterplot).
The same analysis as was carried out on the student sample was performed for the general population sample (valid N = 393). The results of the test (see Appendix I) showed that there was no significant correlation between the Compulsive Buying Index and net monthly household income (Spearman’s rho = – 0.042, p = 0.407). This result supports our hypothesis H5.

**Figure 19: Scatterplot – CBINDEX & INCOME with best fit line (general sample)**

Discussion
Hypothesis H5 was accepted for both samples, meaning that the level of household income has no influence on compulsive buying. These results correspond to findings of other researchers, indicating that people from various household income groups are equally prone to become compulsive buyers (Faber, & O’Guinn, 1992, p. 461; Ridgway et al., 2008, p. 628).

### 5.3 Hypotheses Related to Consequences of Compulsive Buying

**H6:** There is a positive relationship between the Compulsive Buying Index and the positive feelings associated with buying.

To test this hypothesis, the relationship between variables POSITIVEFEEL (measured on an interval scale) and CBINDEX (measured on an interval scale) was analyzed.

**Student sample**
The variable POSITIVEFEEL was calculated for 213 students (98.6 %), three (1.4 %) were missing. The histogram in Figure 20 on the next page presents the frequency distribution of the variable POSITIVEFEEL, which was calculated as an average of responses to three questions regarding the positive feelings associated with buying. If the respondents did not agree strongly with the statement (meaning positive feelings do not occur while buying) they
replied 1 to the question and vice-versa, 7 indicated strong agreement. If the respondent was unsure how to reply to the question, he/she marked the middle number 4. This variable POSITIVEFEEL is displayed on the horizontal axis of the histogram in Figure 20. Positive feelings associated with buying had a mean value of 4.06 and a SD of 1.68, with a range from 1 to 7. The value of the median was 4.33 and the mode was 4.67. From the measures of central tendency, calculated in SPSS and the histogram in Figure 20 it is seen that the data is slightly skewed to the left (skewness = – 0.09).

*Figure 20: Histogram – POSITIVEFEEL with normal curve (student sample)*

![Histogram](image)

The scatterplot in Figure 21 depicts the overall pattern of the relationship between the two variables for the student sample. It is expected that there is a positive relationship between the two variables. From the scatterplot, a positive association can be noticed. Few outliers were present with the following pairs of values of POSITIVEFEEL and CBINDEX: 1 and 28, 2 and 32, 6 and 7, 6.67 and 40, 7 and 38 (marked with red boxes on the scatterplot).

*Figure 21: Scatterplot – CBINDEX & POSITIVEFEEL with best fit line (student sample)*

![Scatterplot](image)
The Spearman’s rho was calculated and an inference test was performed. The following results were obtained: Spearman’s rho = 0.524 and p = 0.000 (see Appendix J). The correlation between the Compulsive Buying Index and the positive feelings associated with buying was significant at the 0.01 level. The relationship was moderate and positive, indicating that as the Compulsive Buying Index increases so do the positive feelings associated with buying. H6 holds for the student sample.

General Population Sample
The variable POSITIVEFEEL was calculated for all 408 participants of the general population sample. The histogram in Figure 22 shows the frequency distribution where values on horizontal axis have the same meaning as explained for the student sample. The positive feelings associated with buying had a mean value of 2.71 and a SD = 1.52, with a possible range from 1 to 7. The value of the median was 2.33 and the mode was 1.00. From the measures of central tendency, calculated in SPSS and the histogram it is seen that data is skewed to the right (skewness = 0.78).

![Figure 22: Histogram – POSITIVEFEEL with normal curve (general sample)](image)

The overall pattern of the relationship between the two variables CBINDEX and POSITIVEFEEL for the general population sample can be seen from the scatterplot in Figure 23 on the next page. It is hypothesised that there is a positive relationship between the two variables. A slight positive association can be noticed from the scatterplot. Outliers were present with the following pairs of values of POSITIVEFEEL and CBINDEX: 5 and 33, 7 and 40, 7 and 38, 7 and 32 (marked with red boxes on the scatterplot).
In order to test the hypothesis, Spearman’s rho was calculated and an inference test was carried out. The following results were obtained: Spearman’s rho = 0.396 and p = 0.000 (see Appendix J). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and the positive feelings associated with buying. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so do positive feelings associated with buying. H6 holds for the general population sample.

**Discussion**

From the analysis above we can see that for both samples there is a significant positive relationship at the level of 0.01 between the Compulsive Buying Index and the positive feelings associated with buying. Our hypothesis holds, but we still have to note that this relationship was not found to be very strong (moderate for the student sample and weak for the general population sample). These results are similar to the findings of previous researchers. In the studies conducted by Christenson et al. (1994, p. 8), Faber et al. (1987, p. 133), and Faber and Christenson (1996, pp. 812 – 813, 816), results showed that positive mood states were more commonly felt while shopping among the compulsive consumers in comparison to non-compulsive consumers. Ridgway et al. (2008, p. 629) also found a significant positive correlation between the CBI and positive feelings associated with buying ($\rho = 0.59$).

**H7:** There is a positive relationship between the Compulsive Buying Index and the frequency of family arguments pertaining to buying.

To test this hypothesis, the relationship between variables ARGUE (measured on an interval scale) and CBINDEX (measured on an interval scale) was analysed.
**Student sample**

In the student sample, the number of valid cases for the ARGUE variable was \( N = 216 \) (100 \%), none were missing. In the histogram in Figure 24, the frequency distribution of the ARGUE variable is shown. Numbers of the scale on the horizontal axis represent the following responses to the question regarding the frequency of arguing with family members about one’s excessive buying – 1 stands for never, 2 for very rarely, 3 for rarely, 4 for sometimes, 5 for often, 6 for very often and 7 for always. The mean value was 2.40 and the SD was 1.49, with a range from 1 to 7. The median was equal to 2.00 and the mode to 1.00. It is evident from the histogram and the measures of central tendency that the distribution is skewed to the right (skewness = 1.104).

*Figure 24: Histogram – ARGUE with normal curve (student sample)*

![Histogram](image)

*Figure 25: Scatterplot – CBINDEX & ARGUE with best fit line (student sample)*

![Scatterplot](image)
The scatterplot in Figure 25 on the previous page depicts the overall pattern of the relationship between the two variables CBINDEX and ARGUE for the student sample. It is hypothesised that there is a positive relationship between the two variables. The scatterplot indicates a positive association between the two variables. Several outliers were present with the following pairs of values of ARGUE and CBINDEX: 1 and 32, 6 and 40, 6 and 6, 7 and 38 (marked with red boxes on the scatterplot).

To test this hypothesis, Spearman’s rho was calculated and an inference test performed. The following results were obtained: Spearman’s rho = 0.425 and p = 0.000 (see Appendix K). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and frequency of arguing with family members pertaining to buying. The relationship was weak, positive, and significant, indicating that as the Compulsive Buying Index increases so does the frequency of arguing with family members about one’s excessive buying. Our hypothesis H7 holds for the student sample.

**General Population Sample**

In the general population sample, the number of valid cases for the ARGUE variable was N = 408, none were missing. The histogram in Figure 26 shows the frequency distribution where values on horizontal axis have the same meaning as explained above for the student sample. The mean value of ARGUE variable was 2.04 and the SD was 1.34, with a range from 1 to 7. The median was equal to 2.00 and the mode to 1.00. From the histogram and the measures of central tendency it is evident that the distribution is skewed to the right (skewness = 1.430).

**Figure 26: Histogram – ARGUE with normal curve (general sample)**

The scatterplot in Figure 27 on the next page depicts the overall pattern of the relationship between the two variables CBINDEX and ARGUE for the general population sample. It is expected that there is a positive relationship between the two variables. The scatterplot
indicates a slightly positive association between the two variables. Several outliers were present with the following pairs of values of ARGUE and CBINDEX: 1 and 32, 5 and 40, 5 and 38, 7 and 33 (marked with red boxes on the scatterplot).

*Figure 27: Scatterplot – CBINDEX & ARGUE with best fit line (general sample)*

To test the hypothesis, the Spearman’s rho was calculated and an inference test performed. Following results were obtained: Spearman’s rho = 0.342 and p = 0.000 (see Appendix K). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and frequency of arguing with family members pertaining to buying. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so does the frequency of arguing with family members about one’s excessive buying. Our hypothesis H7 holds for the general population sample.

**Discussion**

From the analysis above, we can see that for both samples there is a significant positive relationship at the level of 0.01 between the Compulsive Buying Index and frequency of arguing with family members pertaining to buying. Our hypothesis holds, but we still have to note that this relationship was found to be weak both for the student sample (Spearman’s rho = 0.425) and for the general population sample (Spearman’s rho = 0.342). These results correspond to the research findings of O’Guinn and Faber (1989, p. 155), as well as to the results presented by Ridgway et al. (pp. 623, 630) that showed significant positive correlation between frequency of family arguments related to buying and the CBI (ρ = 0.44).

**H8:** The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.

To test this hypothesis, the relationship between variables CARDOWE (measured on an ordinal scale) and CBINDEX (measured on an interval scale) was analysed. Following the
same logic as in previous hypotheses where one variable is measured on an ordinal scale and another on an interval scale Spearman’s rank-order correlation was used to test the H8.

**Student sample**
For the student sample, the variable CARDOWE was analysed for 120 (55.6 %) valid responses to the question about the amount of credit cards debt. The number of students who did not reply to this question was 96 (44.4 %). Response options from “1” to “8” were offered with the following meanings: €0, €1–100, €101–250, €251–500, €501–1000, €1001–2500, €2501–5000 and more than €5000. There were no students in the sample whose current amount of credit card debt would be €501 or more. Percentages of respondents in each category, starting from the smallest, were: 84.2 %, 10 %, 5 % and 0.8 %. The value of the mode was equal to 1.

The scatterplot in Figure 28 depicts the overall pattern of the relationship between the two variables CBINDEX and CARDOWE for the student sample. It was expected to find a positive relationship between the two variables, but the scatterplot below shows a slight negative association. A few outliers were present with the following pairs of values of CARDOWE and CBINDEX: €0 and 38, €101–250 and 27, €101–250 and 25 (marked with red boxes on the scatterplot).

*Figure 28: Scatterplot – CBINDEX & CARDOWE with best fit line (student sample)*

The results of Spearman’s rho, calculated to test this hypothesis for the student sample with help of SPSS, were as follows: Spearman’s rho = − 0.105 and p = 0.254 (see Appendix L). No significant correlation between the amount of one’s credit cards debt and the Compulsive Buying Index was found. Therefore H8 does not hold for the student sample.

**General Population Sample**
For the general population sample, the variable CARDOWE was analyzed for 251 (61.5 %) valid responses to the question about the amount of credit cards debt. 157 (38.5 %)
participants did not reply to the question. There were no participants in the sample whose current amount of credit card debt would be €1001 or more. Percentages of respondents in each category, starting from the smallest, were: 68.5 %, 13.2 %, 12.7 %, 3.6 % and 2 %. The value of the mode was 1.

The scatterplot in Figure 29 depicts the overall pattern of the relationship between CBINDEX and CARDOWE for the general population sample. It is hypothesised that there is a positive relationship between the two variables. The line of best fit in the scatterplot below is almost horizontal, indicating that the correlation between the CBINDEX and CARDOWE seems to be close to zero. Few outliers were present with the following pairs of values of CARDOWE and CBINDEX: €0 and 40, €0 and 33, €0 and 32 (marked with red boxes on the scatterplot).

![Figure 29: Scatterplot – CBINDEX & CARDOWE with best fit line (general sample)](image)

After calculating the Spearman’s rho in SPSS for the general population sample, the results showed that there is no significant correlation between the Compulsive Buying Index and the amount of one’s credit cards debt: Spearman’s rho = 0.038, p = 0.550 (see Appendix L). The tested hypothesis H8 does not hold also for the general population sample.

**Discussion**

After testing H8 (*The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.*), results for both samples showed no significant correlation between the two variables. There is no relationship between the Compulsive Buying Index and the level of credit card debt an individual has. It was interesting to find that the majority of participants in both samples do not have any credit card debt or if they do, it is not extremely large. Previous studies on correlation between the level of credit card debt and compulsive buying came to the opposite findings (Joireman et al., 2010, p. 164; Lo, & Harvey, 2011, pp. 83, 87; Norum, 2008, p. 8; O’Guinn, & Faber, 1989, p. 155; Palan et al., 2011, p. 89; Phau, & Woo, 2008, p. 455; Ridgway et al., 2008, p. 630). The contradictory results may be due to different characteristics of consumers in Slovenia and other countries.
In Slovenia, the problem of irrational credit card usage is not so widely spread as in the U. S., where most of the studies were conducted. The difference in the results suggests that further investigation on this topic, where the sample’s characteristics would be more similar to the Slovene population, is needed.

5.4 Hypotheses Related to Frequency of Buying and Amounts Spent

H9: The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

To test this hypothesis it was necessary to analyze the relationship between the variables CLOTH_FR (measured on a ratio scale) and CBINDEX (measured on an interval scale).

Student Sample
For the student sample, the number of valid responses to the question about the yearly frequency of buying clothes, shoes and accessories was N = 210, six respondents did not reply to this question. The mean value of the frequency of buying clothes, shoes and accessories per year was 24.13, the SD is 47.03 and the range from 1 to 360 times. The median was 10 and the mode was 3. Figure 30 presents the frequency distribution of the CLOTH_FR variable. The horizontal axis shows the number of times respondents indicated that they buy clothes, shoes and accessories per year. From this histogram and the measures of central tendency, we can see that the distribution is skewed to the right (skewness = 0.168).

Figure 30: Histogram – CLOTH_FR with normal curve (student sample)
From the scatterplot below (Figure 31) the overall pattern of the relationship between the two variables can be seen. CBINDEX values are on the vertical axis and CLOTH_FR values are on the horizontal axis. The red line represents the line of best fit built by SPSS. It was theorised that there would be a positive relationship between the two variables, but judging from the scatterplot, if there is a positive relationship, the strength of it is probably quite weak. A few outliers were present and had the following values of CLOTH_FR and CBINDEX: 100 and 40, 123 and 8, 150 and 38, 150 and 13, 200 and 32, 300 and 10, 360 and 24 (marked with red boxes on the scatterplot).

Figure 31: Scatterplot – CBINDEX & CLOTH_FR with best fit line (student sample)

To test the hypothesis, Spearman’s rho was calculated and an inference test performed. After performing the test, following results were received: Spearman’s rho = 0.328 and p = 0.0005 (see Appendix M). A significant correlation was found between the Compulsive Buying Index and the frequency of buying clothes, shoes and accessories. The relationship was weak, positive, and significant, indicating that as the Compulsive Buying Index increases so does the frequency of buying clothes, shoes and accessories and vice versa. Therefore, H9 holds for the student sample.

General Population Sample
For the general population sample, the number of valid responses to the question about the yearly frequency of buying clothes, shoes and accessories was N = 380, 28 respondents did not reply to this question. The mean value of the yearly frequency of buying clothes, shoes and accessories was 6.24, with a SD of 8.29 and a range from 1 to 100 times. The median was 4 and the mode was 3. Figure 32 on the next page graphically illustrates the frequency distribution of CLOTH_FR for the general population sample. As seen from the histogram below (Figure 32) and the measures of central tendency the distribution is skewed to the right (skewness = 5.37).
The scatterplot in Figure 33 depicts the overall pattern of the relationship between CBINDEX and CLOTH.FR. It was hypothesised that there would be a positive relationship between the two variables, but the scatterplot implies that there is probably little or no causal relationship. Four major outliers were present and had the following values of CLOTH.FR and CBINDEX: 1 and 32, 30 and 38, 50 and 33, 100 and 40 (marked with red boxes on the scatterplot).
After calculating the Spearman’s rho, the following results were obtained: Spearman’s rho = 0.058 and p = 0.256 (see Appendix M). It was found there is no significant correlation between the Compulsive Buying Index and the frequency of buying clothes, shoes and accessories in this sample. Therefore, H9 does not hold.

Discussion
From the above analysis it is seen that for the student sample there is a positive significant correlation between the Compulsive Buying Index and the yearly frequency of buying clothes, shoes and accessories. The hypothesis holds, but it still has to be noted that this relationship was found to be weak (Spearman’s rho = 0.328). This result corresponds to the findings of Ridgway et al. (2008, pp. 633 – 635) in their study conducted in the U.S. They found that the higher the respondents scored on the CBI, the more frequently they bought items both on the Internet and in retail stores. They also compared a group of compulsive buyers versus noncompulsive buyers and found that there is a significant difference between the frequencies of buying for the two groups. Unexpectedly, it was found that for the general population sample, the correlation between the two variables was not significant at the level of 0.05. The correlation coefficient value was very close to zero (Spearman’s rho = 0.058), indicating that no association between compulsive buying and frequency of buying clothes shoes and accessories exists for this sample. One of the possible reasons for such result could be a sampling error and the fact that the number of compulsive buyers was very low in the general population sample (1.7 %). It would be a good idea to test this hypothesis again on a more representative sample of Slovene consumers.

H10: The amount of money spent monthly on clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

To test this hypothesis, the relationship between variables CLOTH_EUR (measured on a ratio scale) and CBINDEX (measured on an interval scale) was analysed.

Student Sample
The number of valid responses to the question about the average monthly amount of money spent on clothes, shoes and accessories in the student sample was N = 203, 13 respondents did not reply to this question. The mean value of the amounts spent was €62.33, the standard deviation was 59.73 and the range from €0 to €400. The median and mode were equal to 50. Figure 34 on the next page displays the frequency distribution of the variable CLOTH_EUR. The horizontal axis shows the average monthly amounts of money spent on clothes, shoes and accessories in €. The vertical axis displays the frequencies of different values of the CLOTH_EUR variable. The normal curve is also depicted as a comparison. From the below histogram and the measures of central tendency it is seen that the distribution is skewed to the right (skewness = 2.59).
The scatterplot in Figure 35 depicts the overall pattern of the relationship between the two variables and the line of best fit can be seen. It is suggested that there is a positive relationship between CBINDEX and CLOTH_EUR. A clear positive association is not seen from the scatterplot. Most likely, that if there is a positive relationship, the strength of it is quite weak. Several major outliers were observed with the following values of CLOTH_EUR and CBINDEX correspondingly: €100 and 38, €300 and 40, €400 and 7 (marked with red boxes on the scatterplot).
In order to test the hypothesis, the Spearman’s rho was calculated and an inference test was performed. We received the following results: Spearman’s rho = 0.307 and p = 0.0005 (see Appendix N). A significant correlation at the 0.01 level between the Compulsive Buying Index and the average monthly amounts of money spent on clothes, shoes and accessories was found. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases so does the monthly amount of money spent on clothes, shoes and accessories. Our hypothesis H10 holds for the student sample.

**General Population Sample**

In the general population sample, the number of valid responses to the question about the amount of money spent on average on clothes, shoes and accessories per month was N = 391, 17 respondents did not reply to this question. The mean value of the average monthly amounts spent was €57.66, the SD was 59.56 and a range from €0 to €500. The median was equal to 40 and the mode to €50. Similar as for the student sample, Figure 36 illustrates the frequency distribution of CLOTH_EUR for the general population sample and the normal curve as a comparison. It is seen from the below histogram and the measures of central tendency the distribution of CLOTH_EUR is skewed to the right (skewness = 2.83).

*Figure 36: Histogram – CLOTH_EUR with normal curve (general sample)*

The scatterplot on the next page depicts the overall pattern of the relationship between the two variables CBINDEX and CLOTH_EUR. It is expected that there is a positive relationship between the two variables. Looking at the scatterplot (see Figure 37), a slight positive association can be noticed. Most likely, that if there is a positive relationship, the strength of it is quite weak. Also, a few major outliers were present with the following values of the
CLOTH_EUR and CBINDEX: €50 and 38, €100 and 40, €200 and 33, €200 and 32, €500 and 12 (marked with red boxes on the scatterplot).

Figure 37: Scatterplot – CBINDEX & CLOTH_EUR with best fit line (general sample)

The Spearman’s rho was calculated and an inference test was carried out. The results were as follows: Spearman’s rho = 0.215 and p = 0.0005 (see Appendix N). The correlation was significant at the 0.01 level between the Compulsive Buying Index and the average monthly amounts of money spent on clothes, shoes and accessories. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases so does the monthly amount of money spent on clothes, shoes and accessories. Our hypothesis H10 holds for the general population sample.

Discussion
From the above analysis it is evident that for both samples there is a positive significant relationship at the level of 0.01 between the Compulsive Buying Index and the amounts of money spent monthly on clothes, shoes and accessories. Our hypothesis holds, with the following values of Spearman’s rho: 0.307 (for the student sample) and 0.215 (for the general population sample). These results support the findings discovered by Ridgway et al. (2008, pp. 633 – 635). In this study they found that the monthly average spent at top-five Internet and retail stores increased significantly as the Compulsive Buying Index increased. Moreover, they found that compulsive buyers spend significantly higher amount than non-compulsive buyers.

5.5 Hypotheses Related to Buying Across Different Retail Channels

H11: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet.
To test this hypothesis relationship, between variables INTERNET (measured on an interval scale) and CBINDEX (measured on an interval scale) was analysed.

**Student sample**

In the student sample, the number of valid cases for the INTERNET variable was N = 216, none were missing. In the histogram in Figure 38, the frequency distribution is displayed. Numbers of the scale on the horizontal axis represent response options to the question regarding the frequency of buying on the Internet: 1 stands for never, 2 for very rarely, 3 for rarely, 4 for sometimes, 5 for often, 6 for very often and 7 for always. The mean value of was 3.24 and the SD was 1.56, with a range from 1 to 7. The median was equal to 3.00 and the mode to 4.00. From the histogram and the measures of central tendency, it can be seen that the distribution is skewed to the right (skewness = 0.164).

*Figure 38: Histogram – INTERNET with normal curve (student sample)*

From the scatterplot in Figure 39 on the next page, the overall pattern of the relationship between the two variables CBINDEX and INTERNET can be graphically analysed for the student sample. It is hypothesised that there is a positive relationship between the two variables. Looking at the scatterplot, it can be seen that there is almost no association between them. Two major outliers were present with the following pairs of values of INTERNET and CBINDEX: 4 and 38, 6 and 40 (marked with red boxes on the scatterplot).

The results of Spearman’s rho and significance that were calculated to test this hypothesis for the student sample were as follows: Spearman’s rho = 0.011 and p = 0.868 (see Appendix O). There was no significant correlation found between the Compulsive Buying Index and frequency of buying on the Internet. Therefore, H11 does not hold for the student sample.
General Population Sample

In the general population sample the number of valid cases for the INTERNET variable was $N = 408$, none were missing. The histogram in Figure 40 shows the frequency distribution where values on horizontal axis have the same meaning as explained above for the student sample. The mean value of the Internet variable was 3.26 and the SD was 1.56, with a range from 1 to 7. The median was equal to 3.00 and the mode to 2.00. From the histogram and the measures of central tendency, it is evident that the distribution is skewed to the right (skewness = 0.205).

From the scatterplot in Figure 41 on the next page, the overall pattern of the relationship between the two variables CBINDEX and INTERNET can be seen for the general population sample. It is expected that there is a positive relationship between the two variables. Looking
at the scatterplot, a slight positive association can be noticed. A few major outliers were present with the following pairs of values of INTERNET and CBINDEX: 4 and 33, 4 and 32, 5 and 38, 6 and 40 (marked with red boxes on the scatterplot).

**Figure 41: Scatterplot – CBINDEX & INTERNET with best fit line (general sample)**

The results of Spearman’s rho and significance calculated to test this hypothesis for the general population sample were as follows: Spearman’s rho = 0.082 and p = 0.098 (see Appendix O). There was no significant correlation between the Compulsive Buying Index and frequency of buying on the Internet. Therefore, H11 does not hold also for the general population sample.

**Discussion**

The results of the analysis for both samples showed no significant correlation between the Compulsive Buying Index and the frequency of buying on the Internet. From histograms for both of the samples, we can conclude that majority of students “sometimes” buy products on the Internet, whereas the general population sample has two peaks – “very rarely” and “sometimes”. The large amount of respondents in the general population sample rarely buying on the Internet might be explained by lower trust in modern venues of shopping that some people have. This could be a reason explaining the contradictory results in comparison to previous studies. In 2000, Lyons and Henderson (2000, p. 739) noted the emerging of compulsive buying on the Internet. Wang and Yang (2008, pp. 693, 698 – 699) examined the relationship between compulsive buying behaviour and online shopping. The results showed a significant relationship. Similarly, Ridgway et al. (2008, p. 635) found a significant positive relationship between CBI and the frequency of buying on the Internet. Further study of compulsive buying behaviour on the Internet should be conducted among Slovenes to compare with our results. The amount of purchases on the Internet increases (Statistical
Office of the Republic of Slovenia, 2011), so we could expect this to influence compulsive buying.

**H12:** The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through television shopping programs.

To test this hypothesis, the relationship between variables TV (measured on an interval scale) and CBINDEX (measured on an interval scale) was analysed.

**Student sample**

In the student sample, the number of valid cases for the TV variable was N = 215, one was missing. The histogram in Figure 42 presents the frequency distribution of the TV variable. Numbers of the scale on the horizontal axis represent response options to the question regarding the frequency of buying through television shopping programs: 1 stands for never, 2 for very rarely, 3 for rarely, 4 for sometimes, 5 for often, 6 for very often and 7 for always. The mean value of the TV variable was 1.59 and the SD was 1.09, with a range from 1 to 7. The median and mode were equal to 1.00. It is evident from the histogram and the measures of central tendency that the distribution is skewed to the right (skewness = 2.210).

*Figure 42: Histogram – TV with normal curve (student sample)*

The scatterplot in Figure 43 on the next page depicts the overall pattern of the relationship between the two variables CBINDEX and TV for the student sample. It is hypothesised that there is a positive relationship between the two variables. Looking at the scatterplot, a positive association can be noticed. Few major outliers were present with the following pairs of values of TV and CBINDEX: 1 and 40, 4 and 38, 6 and 32, 7 and 16 (marked with red boxes on the scatterplot).
The results of the Spearman’s rho and significance calculated to test this hypothesis for the student sample were: Spearman’s rho = 0.414 and p = 0.000 (see Appendix P). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and the frequency of buying through television shopping programs. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so does the frequency of buying through television shopping programs. H12 holds for the student sample.

**General Population Sample**

In the general population sample, the number of valid cases for the TV variable was N = 408, none were missing. The histogram in Figure 44 shows the frequency distribution where values on the horizontal axis have the same meaning as explained above under the student sample section. The mean value of TV was 1.24 and the SD was 0.53, with a range from 1 to 4. The median and mode were equal to 1.00. From the histogram and the measures of central tendency, it is evident that the distribution is skewed to the right (skewness = 2.436).
The scatterplot in Figure 45 depicts the overall pattern of the relationship between the two variables CBINDEX and TV for the general population sample. It is expected that there is a positive relationship between the two variables. From the scatterplot, a positive association can be noticed. A few major outliers were present with the following pairs of values of TV and CBINDEX: 1 and 40, 2 and 38, 2 and 32, 4 and 33 (marked with red boxes on the scatterplot).

![Figure 45: Scatterplot – CBINDEX & TV with best fit line (general sample)](image)

The results of Spearman’s rho and significance calculated to test this hypothesis for the general population sample were: Spearman’s rho = 0.121 and p = 0.015 (see Appendix P). A significant correlation at the 0.05 level between the Compulsive Buying Index and the frequency of buying through television shopping programs was found. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so does the frequency of buying through television shopping programs. H12 holds for the general population sample.

**Discussion**

From the above analysis we can see that for both samples there is a positive significant relationship between the Compulsive Buying Index and frequency of buying through television shopping programs, at the level 0.01 for the student sample and at the level 0.05 for the general population sample. Our hypothesis holds, but we still have to note that this relationship was found to be weak: Spearman’s rho = 0.414 (for the student sample) and Spearman’s rho = 0.121 (for the general population sample). We can not compare our results with findings of previous researchers, as correlation between the frequency of buying through television and compulsive buying was not studied yet.
H13: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through catalogs.

To test this hypothesis, the relationship between variables CATALOGS (measured on an interval scale) and CBINDEX (measured on an interval scale) was analysed.

Student sample
In the student sample, the number of valid cases for the CATALOGS variable was N = 216, none were missing. In the histogram in Figure 46, the frequency distribution of CATALOGS is shown. Numbers of the scale on the horizontal axis represent response options to the question regarding the frequency of buying through catalogs: 1 stands for never, 2 for very rarely, 3 for rarely, 4 for sometimes, 5 for often, 6 for very often and 7 for always. The mean value was 2.32 and the SD was 1.14, with a range from 1 to 6. The median and mode were equal to 2.00. From the histogram and the measures of central tendency, it is evident that the distribution is skewed to the right (skewness = 0.775).

Figure 46: Histogram – CATALOGS with normal curve (student sample)

From the scatterplot in Figure 47 on the next page, the overall pattern of the relationship between the two variables CBINDEX and CATALOGS for the student sample can be observed. It is hypothesised that there is a positive relationship between the two variables. Looking at the scatterplot, a slight positive association can be noticed. Two major outliers were present with the following pairs of values of CATALOGS and CBINDEX: 1 and 40, 4 and 38 (marked with red boxes on the scatterplot).
The results of Spearman’s rho and significance calculated to test this hypothesis for the student sample were: Spearman’s rho = 0.240 and p = 0.000 (see Appendix Q). A significant correlation at the 0.01 level between the Compulsive Buying Index and the frequency of buying through catalogs was found. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so does the frequency of buying through catalogs. H13 holds for the student sample.

**General Population Sample**

In the general population sample, the number of valid cases for the CATALOGS variable was N = 408, none were missing. The histogram in Figure 48 shows the frequency distribution where values on the horizontal axis have the same meaning as explained above in the student sample section. The mean value of CATALOGS was 2.29 and the SD was 1.17, with a range from 1 to 6. The median and mode were equal to 2.00. From the histogram and the measures of central tendency it is evident that the distribution is skewed to the right (skewness = 0.667).
From the scatterplot in Figure 49, the overall pattern of the relationship between the two variables CBINDEX and CATALOGS can be analyzed for the general population sample. It is expected that there is a positive relationship between the two variables. Looking at the scatterplot, a slight positive association can be noticed. A few outliers were present with the following pairs of values of CATALOGS and CBINDEX: 2 and 32, 3 and 38, 3 and 33, 4 and 40 (marked with red boxes on the scatterplot).

Figure 49: Scatterplot – CBINDEX & CATALOGS with best fit line (general sample)

The results of Spearman’s rho and significance calculated to test this hypothesis for the general population sample were: Spearman’s rho = 0.176 and p = 0.000 (see Appendix Q). There was a significant correlation at the 0.01 level between the Compulsive Buying Index and the frequency of buying through catalogs. The relationship was weak and positive, indicating that as the Compulsive Buying Index increases, so does the frequency of buying through catalogs. H13 holds for the general population sample as well.

Discussion
From the analysis above we can see that for both samples there is a positive significant relationship at the level of 0.01 between the Compulsive Buying Index and frequency of buying through catalogs. Our hypothesis holds, but we still have to note that this relationship was found to be weak: Spearman’s rho = 0.240 (for the student sample) and Spearman’s rho = 0.176 (for the general population sample). We can not compare our results with findings of previous researchers, as correlation between the frequency of buying through catalogs and compulsive buying was not studied yet.

5.6 Overview of Findings of the Empirical Study in Slovenia

The findings of our research show that the number of compulsive buyers in the general population sample that we gathered was quite low (1.7 % or seven respondents out of 408).
On the other hand, in the student sample the number of compulsive buyers was very high – 14.4 % or 31 respondents out of 216. This could be due to the average age difference, approximately ten years, between the two samples. As it was already mentioned in the theoretical section, younger consumers are more prone to compulsive buying.

Table 4: The results of all hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Student sample</th>
<th>General sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong>: The higher the respondent scores on the Compulsive Buying Index, the more materialistic he/she is.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H2</strong>: There is a positive relationship between the Compulsive Buying Index and negative feelings leading to buying.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H3</strong>: Women score significantly higher on the Compulsive Buying Index than men.</td>
<td>Accepted</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H4</strong>: Compulsive buying is inversely related to the level of education</td>
<td>Not applicable</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H5</strong>: The level of household income has no influence on compulsive buying.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H6</strong>: There is a positive relationship between the Compulsive Buying Index and the positive feelings associated with buying.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H7</strong>: There is a positive relationship between the Compulsive Buying Index and the frequency of family arguments pertaining to buying.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H8</strong>: The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H9</strong>: The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.</td>
<td>Accepted</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H10</strong>: The amount of money spent monthly on clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H11</strong>: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet.</td>
<td>Rejected</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>H12</strong>: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through television shopping programs.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
<tr>
<td><strong>H13</strong>: The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through catalogs.</td>
<td>Accepted</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Table 4 above summarizes the main findings of our research work by listing which hypotheses were accepted and which were rejected. It was found that in the student sample women tended to score higher on the Compulsive Buying Index than men. For the general population sample no significant difference was found between gender and the CBI scores. The hypothesis that education and compulsive buying are inversely related was applicable only to the general sample and was rejected – education level appears to have no influence on compulsive buying. As was expected, for both samples, it was found that the level of household income has no influence on compulsive buying either. It was shown that for the student sample there was a significant positive relationship between compulsive buying and the yearly frequency of buying clothes, shoes and accessories. It was unexpected to find that the same was not true for the general population sample. For both samples the average
amount of money spent monthly on clothes, shoes and accessories significantly increases with an increase of the CBI – the stronger the tendency towards compulsive buying, the more money spent on the mentioned items. A positive significant correlation was found between materialism and compulsive buying for both samples.

It was also found that the higher the respondent scored on the Compulsive Buying Index, the more he or she reported being influenced by negative feelings, such as a bad day, loneliness or depression, which led to purchase. Positive feelings associated with the buying process were found to be positively correlated with the CBI, meaning that the higher the respondent scores on the CBI, the more positive feelings he/she associates with buying. For both samples no significant correlation was found between compulsive buying and credit card debt. The frequency of family arguments pertaining to buying was found to increase significantly with an increase on the Compulsive Buying Index. Regarding the venues of shopping, a significant positive correlation was found between compulsive buying and the frequency of buying through catalogs and through television shopping programs for both samples. But no significant correlation was found between the CBI and frequency of buying on the Internet.

**CONCLUSION**

During the course of writing this thesis a lot of new information was discovered and different aspects of compulsive buying behaviour were explored. We managed to achieve the purpose of our research and broaden the knowledge in the field of consumer behaviour, more specifically the area of compulsive buying behaviour in Slovenia. We thoroughly examined the following aspects of compulsive buying in Slovenia: socio-demographic characteristics, precursors and consequences of compulsive buying, frequency of buying, the amounts spent and venues of shopping.

Various researchers have found that certain personality traits prevail in compulsive buyers, these include: low self-esteem (Dittmar, & Drury, 2000, p. 135; Faber et al., 1987, p. 134; O’Guinn, & Faber, 1989, p. 153; Ridgway et al., 2008, p. 629), stronger tendency to fantasize (O’Guinn, & Faber, 1989, p. 153; O’Guinn, & Faber, 2006, p. 13), higher materialistic values (Dittmar, 2005, p. 467, 472; Ridgway et al., 2008, p. 629) and posses a general compulsivity trait (O’Guinn, & Faber, 1989, p. 151). Negative mood states like depression, boredom, anxiety and others can influence compulsive buyers to engage in to buying activities (Faber et al., 1987, p. 133; Faber, & Christenson, 1996, pp. 803, 809 – 813; Ridgway et al., 2008, p. 629).

Regarding socio-demographic characteristics, many researchers argue that women are more prone to be compulsive buyers than men (Black, 2001, p. 21; Dittmar, 2004a, p. 207; Reisch et al., 2011, pp. 4 – 8; Ridgway et al., 2008, p. 628; Shoham, & Makovec Brenčič, 2003, pp. 130 – 132). This could be due to the motivations to engage in to buying that are more characteristic for women, like: emotional involvement, social interaction, self-expression and
ideal self seeking. On the other hand for men the functional motivations like efficiency and economy are more characteristic (Dittmar, 2004a, p. 207). Nevertheless, some researchers believe that the reason why most studies find among the respondents the majority of women is because women are more likely to seek help for their problems and because information about compulsive buying mostly appears in women-oriented media (O’Guinn, & Faber, 1989, p. 152). Compulsive buying in men manifests itself differently, mainly by spending more on electronics and cars (Faber et al., 1987, p. 136).

About the relationship between education and compulsive buying opinions are split. Ridgway et al. (2008, p. 628) found a negative relationship, but Reisch et al. (2011, p. 8) found no association between the two. It is interesting to examine how the level of household income influences compulsive buying. Initially researchers believed that people with lower levels of income have a higher likelihood of becoming compulsive buyers (O’Guinn, & Faber, 2006, pp. 8 – 9). Nevertheless, in many following studies researchers have found that compulsive buying is independent of income (Faber, & O’Guinn, 1992, p. 461; Reisch et al., 2011, p. 8; Ridgway et al., 2008, p. 628).

Several negative consequences in relation to compulsive buying were discussed in our research. Compulsive buyers experience short term positive feelings associated with buying which help them overcome negative mood states. This motivates compulsive buyers to repeat their behaviour (Faber, & Christenson, 1996, p. 808; O’Guinn, & Faber, 1989, p. 150; Workman, & Paper, 2010, p. 105). The number of family arguments pertaining to buying was also found to increase with an increase of the Compulsive Buying Index (Ridgway et al., 2008, pp. 623, 630). Another common negative consequence of compulsive buying was found to be credit card debt (O’Guinn, & Faber, 1989, p. 155; Ridgway et al., 2006, p. 132).

Regarding different venues of shopping, Kukar–Kinney et al. (2009, pp. 298 – 299) suggested that the Internet environment has features that can encourage compulsive buying: the consumer can buy at any time, buy unobserved, experience immediate positive feelings and satisfy the urge to buy quicker. Lee, Lennon and Rudd (in Hyejuneet al., 2011, p. 12) proposed that the private and friendly environment of TV shopping may also stimulate compulsive consumption. These retail channels can increase the level of compulsive consumption.

In our study, the number of compulsive buyers in the general population sample was 1.7 % (seven respondents out of 408). In the student sample the number of compulsive buyers was 14.4 % (31 respondents out of 216). This difference could be due to various average ages of the two samples (20.75 years in the student sample and 30.1 years in the general population sample). As it was found by Dittmar (2005, p. 487) younger consumers tend to engage more in compulsive buying. We successfully tested the 13 hypotheses that were proposed based on in-depth analysis of existing scientific literature on the topic of compulsive buying. Most of our findings correspond to those of other researchers, with deviations in the following
hypotheses: Women score significantly higher on the Compulsive Buying Index than men (was rejected for the general population sample); Compulsive buying is inversely related to the level of education (was rejected for the general population sample, the only applicable sample for this hypothesis); The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have (was rejected for both samples); The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index (was rejected for the general population sample); The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet (was rejected for both samples). These results have been discussed in detail in Chapter 5 after testing each specific hypothesis.

The research findings of our study suggest that the compulsive buying problem does exist in Slovenia. It would be a good idea for public policy officials to establish help groups for compulsive buyers. One of the possible options to help compulsive buyers cope with their problem could be providing free online counselling. Such counselling would be accessible and affordable to any individual suffering from the problem and seeking for help. Also, efforts should be undertaken to inform consumers even more than it currently is about the problem of compulsive buying, its characteristics and the negative consequences such behaviour may lead to. Retailers should be aware of and understand consumption habits of compulsive buyers. Of course, they could then use this information in a self interest manner (i.e., to increase sales and profits) and choose communication strategies or create a shopping environment that would be even more attractive to compulsive buyers. However, it is hoped that the research findings will not be used for such unethical purposes. On the contrary, we believe that an understanding of compulsive buying behaviour could help prevent the negative social, psychological and economic consequences this behaviour leads to. Furthermore, we hope that from our analysis of compulsive buying, researchers could get new ideas for further investigation, interpretation or comparison of results. For example, to further investigate what is the number of compulsive buyers in Slovenia (as our results indicate a large variation between the two samples), to compare our results for Slovenia to those in other countries, to test similar hypotheses on a more representative sample that would resemble the Slovene population, etc.

One of the main limitations of this study was imposed by methods used to gather data. Neither of the data samples was demographically representative of the Slovenian population and was not randomly chosen. Participants in the first sample were all students in the same year of study. They have specific characteristics that can not be generalized to the entire population of Slovenia. Students are still not completely independent from their parents with respect to consumption patterns – they mostly still live at home with their parents or their parents support them financially. The methods used to gather the second sample also did not result in a sample of people with characteristics similar to the general Slovenian population. Thus, results can not really be generalised to the Slovenian population. However, for
populations with the same or very similar characteristics as the two gathered samples, it would be acceptable to generalize the findings.

One of the behavioural limitations in the study outside the control of researchers is related to respondents’ perceptions of their behaviour. Respondents may not be aware of the problematic behaviour they have, or indeed be in denial, resulting in answering the questions less than completely honestly. In addition, most previous research has been conducted in the USA or other European countries like the UK or Germany. As cultures, living conditions, customs, habits, etc. are different around the globe, we cannot directly compare the results found in other countries with our results in Slovenia. Still, in the discussions of each tested hypothesis, we briefly compared the results from our study to the existing findings to see whether the same general tendencies were found.

Various areas of compulsive buying can be further explored and developed. A wider quantitative study should be performed by gathering data from a random sample which would demographically represent the Slovenian population. This would overcome one of the limitations of the present study and render a more precise estimation of the size of the compulsive buying problem in Slovenia.

Moreover, it would also be interesting to conduct a deeper analysis of the socio-demographic characteristics of compulsive buyers. Does age, marital status or the region of Slovenia where the respondent lives have any influence on compulsive buying, for instance? Another aspect which could be examined is whether there are relationships between compulsive buying and other compulsive consumption behaviours. Do compulsive buyers, for example, suffer more from alcoholism, bulimia, compulsive Internet usage or other compulsive behaviours? It would also be a good idea to explore how compulsive buyers react to sales, brands, price changes, fashion and other environmental aspects. Insights into compulsive buying increases our knowledge in the area of consumer behaviour research and could be used to create scientifically based treatment programs and help target the groups most at risk of developing this behaviour.

**SUMMARY IN SLOVENE**

**UVOD**

po posedovanju ali uporabi določenih izdelkov, željo po občutkih, ki jih nakup vzbudi oziroma povzroči, da se posameznik vedno znova odloča za nakup. Tovrstno vedenje ima dolgoročno slab vpliv na posameznika in/ali družbo” (O’Guinn, & Faber, 1989, str. 148).


Raziskave so pokazale, da imajo kompulzivni porabniki nekatere skupne osebnostne lastnosti. Običajno so kompulzivni porabniki manj samozavestni, imajo bujno domišljijo, sanjarijo in so bolj materialistično naravnani kot nekompulzivni porabniki (O’Guinn, & Faber, 1989, str. 152 – 153).

Obstaja več načinov in lestvic za merjenje kompulzivnega nakupovanja. Ena izmed bolj znanih je lestvica Clinical Screener, ki sta jo z raziskovanjem porabnikov razvila Faber in O’Guinn leta 1992. Sestavljena je iz sedmih vprašanj, ki so jim pripisane različne vrednosti uteži, iz katerih se izračuna in razbere, ali porabnik nakupuje kompulzivno ali ne (Faber, & O’Guinn, 1992, str. 468). Ta lestvica ima nekatere pomanjkljivosti. Ne vsebuje vprašanj, ki bi merila obsesivno-kompulzivno dimenzijo in vsebuje vprašanja, ki se nanašajo na finančno stanje in posledice. Zaradi tega ne moremo ugotoviti, ali porabniki veliko nakupujejo, ker so premožni in si nakupe lahko privoščijo, ali pa so njihovi nakupi povezani s kompulzivno motnjo. Ravno tako se pojavi problem pri vključevanju posledic v lestvico, ki meri stopnjo kompulzivnosti, saj bi jih morali obravnavati posebej (Ridgway et al., 2008, str. 624 – 625).


Z najino raziskavo sva želeli preučiti, ali se kompulzivno nakupovanje pojavlja tudi pri nakupih preko spleta, televizijskih prodajnih programov in katalogov. Internet naj bi
vzpodbijal kompulzivno nakupovanje, saj omogoča porabniku hiter nakup ob kateremkoli času, v prijetnem domačem okolju, kjer je manj opazovan in lahko takoj poteši željo po nakupih (Kukar–Kinney et al., 2009, str. 298 – 299). Raziskave so pokazale, da kompulzivni porabniki, v primerjavi z nekompulzivnimi, zapravijo več denarja pri nakupih preko spleta kot pa v običajnih trgovinah (Kukar–Kinney et al., 2009, str. 306). Podobno je z nakupovanjem izdelkov in storitev, ki jih oglašujejo na televiziji v okviru prodajnih programov (Lee et al. v Hyejune et al., 2011, str. 12).


Namen najine magistrske naloge je razširiti znanje s področja vedenja porabnikov oziroma podrobnosti, s področja kompulzivnega nakupovanja. V magistrski nalogi opredeliva in opiševa lastnosti kompulzivnega nakupovanja v Sloveniji s pomočjo dejavnikov, kot so socialno-demografske lastnosti, pogostnost nakupovanja oblačil, čevljev in modnih dodatkov, vzroki kompulzivnega nakupovanja, posledice kompulzivnega nakupovanja ter kompulzivno nakupovanje preko različnih prodajnih poti.

Cilja magistrske naloge sta:
- ponuditi bralcu razširjeno, poglajeno in kakovostno teoretično znanje s področja kompulzivnega nakupovanja, kar bova dosegli s preučevanjem obstoječe literature,
- narediti empirično raziskavo kompulzivnega nakupovanja v Sloveniji, kar bo prikazalo vlogo socialno-demografskih lastnosti, vzrokov in posledic kompulzivnega nakupovanja, pogostnosti nakupovanja in višine zapravljenih zneskov ter različnih prodajnih poti.

Hipoteze, ki sva jih preverili v empiričnem delu:
**H1:** Višji kot je indeks kompulzivnega nakupovanja (CBI), bolj je posameznik nagnjen k materializmu;
**H2:** Obstaja pozitivna povezava med CBI in negativnimi čustvi, ki so vzrok za kompulzivno nakupovanje;
**H3:** Ženske dosegajo višje, statistično značilne, rezultate CBI, kot moški;
**H4:** Kompulzivno nakupovanje je negativno povezano s stopnjo izobrazbe;
**H5:** Višina dohodka v gospodinjstvu nima vpliva na kompulzivno nakupovanje;
**H6:** Obstaja pozitivna povezava med CBI in pozitivnimi čustvi, ki so povezani z nakupovanjem;
H7: Obstaja pozitivna povezava med CBI in pogostnostjo družinskih prepirov v povezavi z nakupovanjem;
H8: Višji kot je CBI, bolj je posameznik finančno zadolžen;
H9: Pogostost nakupovanja oblačil, čevljev in modnih dodatkov je statistično značilno večja ob višjem indeksu kompulzivnega nakupovanja (CBI);
H10: Znesek denarja, ki ga posameznik mesečno zapravi za nakup oblačil, čevljev in modnih dodatkov, je statistično značilno višji ob višjem CBI;
H11: Višji kot je CBI, bolj pogosto posameznik nakupuje preko spleta;
H12: Višji kot je CBI, bolj pogosto posameznik nakupuje preko televizijskih prodajnih programov;
H13: Višji kot je CBI, bolj pogosto posameznik nakupuje preko katalogov.


V drugem poglavju so zajete različne metode merjenja kompulzivnega nakupovanja. Tretje poglavje opisuje različne prodajne poti. Empirični del najine raziskave je predstavljen v četrtem poglavju. V zadnjem, petem, poglavju predstaviva rezultate hipotez, ki so bile preverjene na obeh vzorcih.

**KOMPULZIVNO NAKUPOVANJE**

Kompulzivno nakupovanje spada v sklop kompulzivnega vedenja porabnikov (O'Guinn, & Faber, 1989, str. 147). Ta oblika porabništva je neprimerna in pretirana. Čeprav porabniki

Kompluzivno vedenje porabnikov ima nekaj skupnih lastnosti (Faber et al., 1987, str. 133 – 135):
- fizično in/ali psihično odvisnost od določene dejavnosti/snovi;
- občasno izgubo kontrole nad vedenjem, ki povzroča probleme v normalnem življenju;
- nujna potreba po kompluzivnem vedenju;
- zanikanje negativnih posledic kompluzivnega vedenja;
- ponavljače neuspehe pri poizkusih prenehanja s kompluzivnim vedenjem;
- kompluzivno vedenje služi kot zdravilo za stres, zahteve, pritisk ali neprijetna čustva/situacije;
- nižja samozavest;
- negativne posledice kompluzivnega vedenja, kot npr. visoki dolgovi.

Da bi bolje razumeli posamezno vrsto kompluzivnega vedenja porabnikov, je dobro poznati tudi razlike med njimi. Medtem ko je lahko ena vrsta kompluzivnega vedenja obravnavana kot bolezen, se lahko druga smatra kot slaba navada (O’Guinn, & Faber, 1989, str. 149).

Izraz kompluzivnega nakupovanja se nanaša na proces nakupovanja in opisuje “… nagnjenost porabnika k pretiranem nakupovanju, kar se kaže s ponavljajočim se nakupovanjem in pomanjkanjem nadzora nad nenadnimi željami” (Ridgway et al., 2008, str. 622). Kompluzivno nakupovanje se pogosto poenoten z impulzivnim nakupovanjem, kar pa ne pomeni istega načina vedenja. Impulzivno nakupovanje se nanaša na kupljene predmete in je vzpodbjeno iz okolice – pojavlja se kot reakcija na nek izdelek ali okolje (O’Guinn, & Faber, 2006, str. 4 – 5).


Slika 3: Vzroki, socialno-demografske lastnosti in posledice kompulzivnega nakupovanja

Vzroki in socialno-demografske lastnosti

1. Nizka samozavest
2. Sanjarjenje
3. Materializem
4. Splošna nagnjenost h kompulzivnosti
5. Čustvena stanja
6. Spol
7. Izobrazba
8. Dohodek

Posledice

1. Pozitivni občutki, povezani z nakupovanjem
2. Družinski prepiri
3. Finančne posledice
4. Drugo

Negativna čustva in neprijetne situacije so pogosto razlog za kompulzivno nakupovanje (Faber et al., 1987, str. 133; Ridgway et al., 2008, str. 629). Med nakupovanjem se kompulzivnemu porabniku čustva spremenijo tako, da se ob koncu nakupa počuti bolje kot pred nakupovanjem (Faber, & Christenson, 1996, str. 805 – 806).


Rezultati raziskav, povezanih s stopnjo izobrazbe in kompulzivnim nakupovanjem, so bili različni. Ena od raziskav, narejena v Združenih državah Amerike (Ridgway et al., 2008, str. 628), je pokazala, da so ljudje z nižjo stopnjo izobrazbe bolj nagnjeni h kompulzivnem nakupovanju kot tisti, ki so bolj izobrazbeni. Rezultati raziskave med danskimi porabniki (Reisch et al., 2011, str. 8) pa so pokazali, da povezave med tema dvema dejavnikoma ni. Kar se tiče stopnje dohodka, povezava s kompulzivnim nakupovanjem ni bila ugotovljena (Faber, & O’Guinn, 1992, str. 461; Reisch et al., 2011, str. 8; Ridgway et al., 2008, str. 628).


V Združenih državah Amerike obstaja več organizacij (Shopaholics Anonymous, Stopping Overshopping, Debtors Anonymous ipd.), ki porabnike ozaveščajo o problemu in posledicah kompulzivnega nakupovanja. Kompulzivnim porabnikom omogočajo različne programe zdravljenja odvisnosti. V Sloveniji obstaja spletna stran Logout, center pomoči pri prekomerni rabi interneta, na kateri so predstavljene informacije o kompulzivnem nakupovanju preko spleta.
INDEKS KOMPULZIVNEGA NAKUPOVANJA (THE COMPULSIVE BUYING INDEX – CBI)

Obstaja več načinov in lestvic, ki merijo stopnjo kompulzivnega nakupovanja. Lestvica *Clinical Screener*, avtorjev Faberja in O’Guinna (1992), je bila dalj časa v uporabi za ugotavljanje kompulzivnosti porabnikov. Zaradi pomanjkljivosti te lestvice in vseh ostalih na novo nastalih meril kompulzivnosti porabnikov, so avtorji Ridgway et al. (2008) razvili novo mero kompulzivnega nakupovanja – Indeks kompulzivnega nakupovanja (*The Compulsive Buying Index – CBI*). CBI je izračunan iz stopenj strinjanja s šestimi trditvami, na katere se odgovori z izbiro ene od sedmih stopenj (ne)strinjanja (Likertova lestvica) s trditvijo:

- V stanovanju imam še neodprte nakupovalne vrečke.
- Drugi me imajo za ‘shopaholika’ (odvisnika od nakupov).
- Precejšnji del mojega življenja se vrti okrog nakupovanja.
- Kupujem izdelke, ki jih ne potrebujem.
- Kupujem izdelke, ki jih nisem nameraval kupiti.
- Imam se za impulzivnega kupca (kupca, ki se na hitro odloči za nakup).

Rezultat kompulzivnosti se izračuna s seštevkom odgovorov – če se porabnik sploh ne strinja s trditvijo, obkroži število ena, če se popolnoma strinja, obkroži število sedem. Iz tega sledi, da je razpon vsote odgovorov od šest do dvainštirideset. Meja, ki določa kompulzivnost, je bila na podlagi dodatnih raziskav določena pri vsoti 25 (Ridgway et al., 2008, str. 632).

KOMPULZIVNO NAKUPOVANJE PREKO RAZLIČNIH PRODAJNIH POTI

V magistrski nalogi sva želeli preveriti prisotnost kompulzivnega nakupovanja pri nakupih preko spleta, televizijskih prodajnih programov in katalogov, čeprav v Sloveniji najpogosteje nakupujemo v navadnih trgovinah.


Nakupovanje preko katalogov morda ni tako pogosto, da bi kdo že naredil raziskavo s tega področja. Ker poznava nekaj porabnikov, ki pogosto nakupujejo preko katalogov, sva se odločili preveriti tudi ta način nakupovanja in njegov vpliv oziroma povezanost s kompulzivnim nakupovanjem.

**SLOVENSKI PORABNIKI IN NJIHOVE NAKUPOVALNE NAVADE**


**ZNAČILNOSTI VZORCEV V EMPIRIČNI RAZISKAVI**

V Sloveniji še ni bilo narejenih veliko raziskav s področja slovenskih porabljev, ki bi se osredotočile izključno na kompulzivno nakupovanje. Zato sva v magistrski nalogi postavili in preverili hipoteze, vezane na kompulzivno nakupovanje, na dveh vzorcih Slovencev. Zbrane informacije v teoretičnem delu magistrske naloge bralcu predstavijo razširjeno, poglobojeno in kakovostno teoretično znanje s področja kompulzivnega nakupovanja. Empirični del raziskave pa prikaže vlogo socialno-demografskih lastnosti, vzrokov in posledic kompulzivnega nakupovanja, pogostnosti nakupovanja in višine zapravljenih zneskov ter različnih prodajnih poti v povezavi s kompulzivnim nakupovanjem.
V vzorcu študentov je na vprašalnik odgovorilo 216 oseb, od tega 66,7 % žensk in 31,5 % moških. Štirje študenti niso odgovorili na vprašanje o spolu. 211 študentov je napisalo svojo starost, povprečna starost je bila 20,75 let z razponom od 18 do 27 let. Približno 37,9 % vprašanih je prebivalo v gospodinjstvu z mesečnim dohodkom nižjim od 1500 €, med 1501–3000 € je bil mesečni dohodek v gospodinjstvih 33,9 % študentov in nad 3000 € pri 16,6 % vprašanih. Na vprašanje o dohodku ni odgovorilo 11,6 % študentov.

Velikost splošnega vzorca je štela 408 oseb. Število sodelujočih žensk je bilo 275 (67,4 %) ter moških 133 (32,6 %). Povprečna starost je bila 30,1 z razponom od 18 do 89 let. Približno 36,7 % vprašanih je imelo mesečni dohodek v gospodinjstvu nižji od 1500 €, med 1501–3000 € je bil mesečni dohodek v gospodinjstvih 46,7 % vprašanih in nad 3000 € pri 3,8 % sodelujočih v raziskavi. Na vprašanje o dohodku ni odgovorilo 3,8 % sodelujočih. Med vprašanimi je bilo 7,4 % brezposelnih, 50 % zaposlenih za polni delovni čas, 39 % dijakov oziroma študentov, 1 % gospodinj in 2,7 % upokojencev. Dokončane stopnje izobrazbe so bile: 1,7 % osnovna šola, 40,4 % srednja/poklicna šola/gimanzija, 52,5 % višja/univerzitetna ter 5,4 % magisterij ali doktorat.

**REZULTATI EMPIRIČNE RAZISKAVE**

Rezultati najine raziskave so pokazali, da je delež kompulzivnih porabnikov v splošnem vzorcu precej majhen, to je 1,7 % oziroma sedem izmed 408 oseb, ki so odgovorile na elektronski vprašalnik. Po drugi strani je delež kompulzivnih porabnikov v vzorcu študentov zelo visok – 14,4 % oziroma 31 izmed 216 študentov, ki so odgovorili na vprašalnik. Razlog za takšno razliko v deležih je morda v različni povprečni starosti oseb v vzorcih – skoraj 10 let razlike. Glede na teoretično podlago, ki sva jo predstavili, je to razumljivo, saj naj bi bili mlajši porabniki bolj nagnjeni h kompulzivnemu nakupovanju.

Tabela 4 povzema glavne ugotovitve najinega dela. Navedene so hipoteze ter njihovo sprejetje oziroma zavrnitev.

<table>
<thead>
<tr>
<th>Hipoteze</th>
<th>Vzorec študentov</th>
<th>Splošni vzorec</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Višji kot je CBI, bolj je posameznik nagnjen k materializmu.</td>
<td>sprejeta</td>
<td>sprejeta</td>
</tr>
<tr>
<td>H2: Obstaja pozitivna povezava med CBI in negativnimi čustvi, ki so vzrok za kompulzivno nakupovanje.</td>
<td>sprejeta</td>
<td>sprejeta</td>
</tr>
<tr>
<td>H3: Ženske dosegajo višje, statistično značilne, rezultate CBI, kot moški.</td>
<td>sprejeta</td>
<td>zavrnjena</td>
</tr>
<tr>
<td>H4: Kompulzivno nakupovanje je negativno povezano s stopnjo izobrazbe.</td>
<td>/</td>
<td>zavrnjena</td>
</tr>
<tr>
<td>H5: Višina dohodka v gospodinjstvu nima vpliva na kompulzivno nakupovanje.</td>
<td>sprejeta</td>
<td>sprejeta</td>
</tr>
</tbody>
</table>

"(se nadaljuje)"
H6: Obstaja pozitivna povezava med CBI in pozitivnimi čustvi, ki so povezani z nakupovanjem. sprejeta

H7: Obstaja pozitivna povezava med CBI in pogostnostjo družinskih prepirov v povezavi z nakupovanjem. sprejeta

H8: Višji kot je CBI, bolj je posameznik finančno zadolžen. zavrnjena

H9: Pogostnost nakupovanja oblačil, čevljev in modnih dodatkov je statistično značilno večja ob višjem indeksu kompulzivnega nakupovanja (CBI). sprejeta

H10: Znesek denarja, ki ga posameznik mesečno zapravi za nakup oblačil, čevljev in modnih dodatkov, je statistično značilno višji ob višjem CBI. sprejeta

H11: Višji kot je CBI, bolj pogosto posameznik nakupuje preko spleta. zavrnjena

H12: Višji kot je CBI, bolj pogosto posameznik nakupuje preko televizijskih prodajnih programov. sprejeta

H13: Višji kot je CBI, bolj pogosto posameznik nakupuje preko katalogov. sprejeta

**SKLEP**


Iz pridobljenih rezultatov ugotavljava, da je kompulzivno nakupovanje prisotno v Sloveniji. V javnosti bi se lahko več govorilo o problemu kompulzivnega nakupovanja in ustanovilo organizacije za pomoč kompulzivnim porabnikom. Tudi za trgovce je koristno, da so seznanjeni s pojavom kompulzivnega nakupovanja, vsekakor pa ni dobro, da to uporabijo sebi v prid za povečanje prodaje in dobička. Vsebina in rezultati najine magistrske naloge lahko vzpodbudijo nadaljnje raziskave s področja kompulzivnega nakupovanja v Sloveniji in služijo za primerjavo z ostalimi državami ali kasnejšimi ugotovitvami.

Kakovost pridobljenih rezultatov je vprašljiva z vidika zavedanja posameznikov o njihovih morebitnih kompulzivnih navadah. Porabniki se morda ne zavedajo, da je njihovo porabniško vedenje problematično ali ga zanikajo, zaradi česar je možno, da niso odgovarjali iskreno. Prejšnje raziskave s tega področja so bile narejene v Združenih državah Amerike ali drugih evropskih državah, npr. Velika Britanija in Nemčija, kjer so drugačni pogoji za bivanje, drugačna kultura, navade in običaji. Pri primerjavi rezultatov je potrebno upoštevati te različne dejavnike.

REFERENCE LIST


APPENDIXES
TABLE OF APPENDIXES

Appendix A: Questionnaire................................................................. 1
Appendix B: Hypotheses, variables and tests ........................................ 2
Appendix C: Kolmogorov-Smirnov normality test CBINDEX .................. 3
Appendix D: H1 – Spearman correlation MATERIALISM .......................... 4
Appendix E: H2 – Spearman correlation NEGATIVEFEEL ....................... 4
Appendix F: H3 – Kolmogorov-Smirnov normality test CBINDEX & GENDER 5
Appendix G: H3 – Mann-Whitney U test CBINDEX and GENDER ............ 5
Appendix H: H4 – Spearman correlation EDUCATION (general population sample)... 6
Appendix I: H5 – Spearman correlation INCOME .................................... 6
Appendix J: H6 – Spearman correlation POSITIVEFEEL .......................... 7
Appendix K: H7 – Spearman correlation ARGUE .................................... 7
Appendix L: H8 – Spearman correlation CARDOWE ............................... 8
Appendix M: H9 – Spearman correlation CLOTH_FR ............................. 8
Appendix N: H10 – Spearman correlation CLOTH_EUR ......................... 9
Appendix O: H11 – Spearman correlation INTERNET ......................... 9
Appendix P: H12 – Spearman correlation TV ....................................... 10
Appendix Q: H13 – Spearman correlation CATALOGS .............................. 10
Appendix A: Questionnaire

Pozdravljeni! Mariia Parokonna (paromaria@yandex.ru) in Eva Debelec (debelec.eva@gmail.com), pod mentorstvom prof. dr. Irene Vida in prof. dr. Monike Kukar–Kinney, izvajava raziskovalno delo v okviru magistrske naloge na temo: ANALIZA KOMPULZIVNEGA NAKUPOVANJA. Izpolnjevanje anketnega vprašalnika je prostovoljno in traja okrog 5 minut. Za sodelovanje morate biti stari 18 let ali več. Vaši odgovori so anonimni in zaupni ter jih ne bo mogoče identificirati, ko bomo podatke analizirali in o njih poročali. V anketnem vprašalniku ni niti pravilnih niti napačnih odgovorov, zato vas prosimo, da le iskreno izrazite svoje mnenje in odgovorite na vsa vprašanja. Nekatere trditve se vam bodo zdele podobne, vendar niso enake, zato ocenite vsako posebej. Za vaše sodelovanje se vam iskreno zahvaljujemo.

V naslednjih sklopih vprašanj nas zanimajo vaše nakupovalne navade na splošno ter pomen cene in blagovne znamke pri vaših nakupih.

<table>
<thead>
<tr>
<th>Kako pogosto:</th>
<th>Nikoli (1)</th>
<th>Žele redko (2)</th>
<th>Redko (3)</th>
<th>Včasih (4)</th>
<th>Pogosto (5)</th>
<th>Žele pogosto (6)</th>
<th>Vedno (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kupujete preko revij/katalogov</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Kupujete preko Interneta</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Kupujete preko televizijskih prodajnih programov (npr. Top Shop)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Se prepirate z družino zaradi prekome gnjenja</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Kupite izdelke, ki jih ne potrebujete</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Kupite izdelke, ki jih niste nameravali kupiti</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

V kolikšni meri se strinjate z naslednjimi trditvami?

<table>
<thead>
<tr>
<th>Splošno se ne strinjam (1)</th>
<th>Neodločen/a sem (4)</th>
<th>Povsem se strinjam (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V stanovanju imam še neodprte nakupovalne vrečke ali škatle.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Drugi me imajo za &quot;shopaholike&quot; (odvisnika od nakupov).</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Precejšni del mojega življenja se vrti okrog nakupovanja.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nakupovanje mi vsaj začasno prinese veliko veselja.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nakupovanje mi je v veliko zadovoljstvo.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Največ kupim, kadar sem &quot;depresiven/na&quot;.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Slab dan je lahko razlog, dajam kupim izdelke.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Kadar se počutim osamljenega/o, grem po nakupih.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Občudujem ljudi, ki imajo drage hiše, avtomobile in oblačila.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Izdelki, ki jih imaš, povedo veliko o tem, kako ti gre v življenju.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Včasih me motita, da si ne morem privoščiti vsega, kar si želim.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vživljenje bi bilo boljše, če bi imel/a določene izdelke, ki jih nimam.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Če bi si lahko privoščil/a več izdelkov, bi bil/a srečnejši/a.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Kar se tiče materialnih dobrin, poskušam živeti preprosto.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

V kolikšni meri se strinjate z naslednjimi trditvami?

<table>
<thead>
<tr>
<th>Splošno se ne strinjam (1)</th>
<th>Neodločen/a sem (4)</th>
<th>Povsem se strinjam (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rad/a imam izdelke, ki naredijo vtič na druge.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>V svojem življenju imam rad/a luksuzne izdelke.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Zadnji del vprašalnika zajema osnovne demografske ter druge podatke, potrebne za primerjavo z drugimi državami. Vsi odgovori so strogo zaupni in anonimni in jih ne bo možno povezati z osebo, ki jih je navedla. Prosimo, da v navedenih vprašanjih vstavite ali obkrožite ustrezne odgovor.
Kolikokrat na leto kupujete oblačila, čevlje ali modne dodatke? Približno ______ -krat

Koliko denarja porabite v povprečju za nakup oblačil, čevljev in modnih dodatkov na mesec? Približno ______ €/mesec

Spol? Moški Zenski

Starost? (v letih) ______________ let

Najvišja dosežena stopnja izobrazbe?

<table>
<thead>
<tr>
<th></th>
<th>Osnovna šola</th>
<th>Srednja/poklicna šola/gimnazija</th>
<th>Višja/visoka/ univerzitetna</th>
<th>Magisterij ali doktorat</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤€500</td>
<td>€501–1000</td>
<td>€1001–1500</td>
<td>€1501–2000</td>
<td>≥€4001</td>
</tr>
</tbody>
</table>

Neto mesečni dohodek vašega gospodinjstva?

<table>
<thead>
<tr>
<th></th>
<th>Brezposeln/a</th>
<th>Zaposlen/a za krajiš delovni čas</th>
<th>Zaposlen/a za polni delovni čas</th>
<th>Dijak/inja, študent/ka</th>
<th>Gospodinja/ča, skrbnik/ca, ipd.</th>
<th>Upokojenec/ka</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤€500</td>
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<tr>
<td>€501–1000</td>
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<tr>
<td>€1001–1500</td>
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<tr>
<td>€1501–2000</td>
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</tr>
<tr>
<td>€2001–3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>€3001–4000</td>
<td></td>
<td></td>
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<tr>
<td>≥€4001</td>
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</table>

Neto mesečni dohodek vašega gospodinjstva?

<table>
<thead>
<tr>
<th></th>
<th>Brezposeln/a</th>
<th>Zaposlen/a za krajiš delovni čas</th>
<th>Zaposlen/a za polni delovni čas</th>
<th>Dijak/inja, študent/ka</th>
<th>Gospodinja/ča, skrbnik/ca, ipd.</th>
<th>Upokojenec/ka</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤€500</td>
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<td>€501–1000</td>
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<tr>
<td>€2001–3000</td>
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<tr>
<td>€3001–4000</td>
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<tr>
<td>≥€4001</td>
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</tbody>
</table>

Vaš zaposlitveni status?

<table>
<thead>
<tr>
<th></th>
<th>Brezposeln/a</th>
<th>Zaposlen/a za krajiš delovni čas</th>
<th>Zaposlen/a za polni delovni čas</th>
<th>Dijak/inja, študent/ka</th>
<th>Gospodinja/ča, skrbnik/ca, ipd.</th>
<th>Upokojenec/ka</th>
</tr>
</thead>
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</tbody>
</table>

Koliko kreditnih kartic imate? _____ kreditnih kartic

Če ste na prejšnje vprašanje odgovorili z 1 ali več, prosim odgovorite še na zadnje vprašanje:

Koliko denarja trenutno dolgujete preko kreditnih kartic? (približno ocenite)

<table>
<thead>
<tr>
<th></th>
<th>€0</th>
<th>€1–100</th>
<th>€101–250</th>
<th>€251–500</th>
<th>€501–1000</th>
<th>€1001–2500</th>
<th>€2501–5000</th>
<th>nad €5000</th>
</tr>
</thead>
</table>

HVALA ZA SODELOVANJE. VAŠI ODGOVORI NAM BODO V VELIKO POMOČ PRI RAZISKAVI!

Appendix B: Hypotheses, variables and tests

**H1:** The higher the respondent scores on the Compulsive Buying Index, the more materialistic he/she is.

CBINDEX interval Spearman correlation

MATERIALISM interval

**H2:** There is a positive relationship between the Compulsive Buying Index and negative feelings leading to buying.

CBINDEX interval Spearman correlation

NEGATIVEFEEL interval

**H3:** Women score significantly higher on the Compulsive Buying Index than men.

CBINDEX interval Mann-Whitney U test

GENDER nominal

**H4:** Compulsive buying is inversely related to the level of education.

CBINDEX interval Spearman correlation

EDUCATION ordinal

**H5:** The level of household income has no influence on compulsive buying.

CBINDEX interval Spearman correlation

INCOME ordinal

**H6:** There is a positive relationship between the Compulsive Buying Index and the positive feelings associated with buying.

CBINDEX interval Spearman correlation

POSITIVEFEEL interval

**H7:** There is a positive relationship between the Compulsive Buying Index and the frequency of family arguments pertaining to buying.

CBINDEX interval Spearman correlation

ARGUE interval

“(table continues)”
“(continued)”

**H8:** The higher the respondents score on the Compulsive Buying Index, the higher credit card debts they have.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARDOWE</td>
<td>ordinal</td>
<td></td>
</tr>
</tbody>
</table>

**H9:** The frequency of buying clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOTH_FR</td>
<td>ratio</td>
<td></td>
</tr>
</tbody>
</table>

**H10:** The amount of money spent monthly on clothes, shoes and accessories increases significantly with an increase of the Compulsive Buying Index.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOTH_EUR</td>
<td>ratio</td>
<td></td>
</tr>
</tbody>
</table>

**H11:** The higher the respondents score on the Compulsive Buying Index, the more frequently they buy on the Internet.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNET</td>
<td>interval</td>
<td></td>
</tr>
</tbody>
</table>

**H12:** The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through television shopping programs.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>interval</td>
<td></td>
</tr>
</tbody>
</table>

**H13:** The higher the respondents score on the Compulsive Buying Index, the more frequently they buy through catalogs.

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>interval</th>
<th>Spearman correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATALOGS</td>
<td>interval</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix C: Kolmogorov-Smirnov normality test CBINDEX

**Kolmogorov-Smirnov normality test CBINDEX (student sample)**

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic df Sig.</td>
<td>Statistic df Sig.</td>
</tr>
<tr>
<td>CBINDEX .088 216 .000</td>
<td>.959 216 .000</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic df Sig.</td>
<td>Statistic df Sig.</td>
</tr>
<tr>
<td>LN_CBINDEX .071 214 .011</td>
<td>.978 214 .002</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

**Kolmogorov-Smirnov normality test CBINDEX (general population sample)**

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic df Sig.</td>
<td>Statistic df Sig.</td>
</tr>
<tr>
<td>CBINDEX .103 408 .000</td>
<td>.909 408 .000</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction
Tests of Normality

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>LN_CBINDEX</td>
<td>.082</td>
<td>404</td>
</tr>
</tbody>
</table>

- a. Lilliefors Significance Correction

Appendix D: H1 – Spearman correlation MATERIALISM

H1 – Spearman correlation (student sample)

**Correlations**

<table>
<thead>
<tr>
<th></th>
<th>CBINDEX</th>
<th>MATERIALISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>CBINDEX</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATERIALISM</td>
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<tr>
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<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

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

H1 – Spearman correlation (general population sample)

**Correlations**

<table>
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<tr>
<th></th>
<th>CBINDEX</th>
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<tbody>
<tr>
<td>Spearman’s rho</td>
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<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATERIALISM</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
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**. Correlation is significant at the 0.01 level (2-tailed).**

Appendix E: H2 – Spearman correlation NEGATIVEFEEL

H2 – Spearman correlation (student sample)

**Correlations**

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<th>CBINDEX</th>
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<td>Correlation Coefficient</td>
</tr>
<tr>
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<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NEGATIVEFEEL</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
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**. Correlation is significant at the 0.01 level (2-tailed).**
### H2 – Spearman correlation (general population sample)

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</tr>
</tbody>
</table>

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

### Appendix F: H3 – Kolmogorov-Smirnov normality test CBINDEX & GENDER

H3 – Kolmogorov-Smirnov normality test CBINDEX & GENDER (student sample)

#### Tests of Normality

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
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<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>CBINDEX Man</td>
<td>.123</td>
<td>68</td>
</tr>
<tr>
<td>Woman</td>
<td>.098</td>
<td>144</td>
</tr>
</tbody>
</table>

* Lilliefors Significance Correction

### Appendix G: H3 – Mann-Whitney U test CBINDEX and GENDER

H3 – Mann-Whitney U test CBINDEX and GENDER (student sample)

#### Ranks

<table>
<thead>
<tr>
<th>GENDER</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBINDEX Man</td>
<td>68</td>
<td>89.73</td>
<td>6101.50</td>
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<td>Woman</td>
<td>144</td>
<td>114.42</td>
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#### Test Statistics*

<table>
<thead>
<tr>
<th>CBINDEX</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3755.500</td>
<td>6101.500</td>
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* a. Grouping Variable: Gender
H3 – Mann-Whitney U test CBINDEX and GENDER (general population sample)

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<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBINDEX</td>
<td>Man</td>
<td>133</td>
<td>191.97</td>
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<td>Woman</td>
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Test Statistics*

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<th>CBINDEX</th>
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<td>Mann-Whitney U</td>
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<td>Wilcoxon W</td>
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<td>Asymp. Sig. (2-tailed)</td>
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a. Grouping Variable: Gender

Appendix H: H4 – Spearman correlation EDUCATION (general population sample)

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<td>Sig. (2-tailed)</td>
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<td>408</td>
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<tr>
<td>EDUCATION</td>
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<tr>
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Appendix I: H5 – Spearman correlation INCOME

H5 – Spearman correlation (student sample)

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<td>Sig. (2-tailed)</td>
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<tr>
<td>INCOME</td>
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H5 – Spearman correlation (general population sample)

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Appendix J: H6 – Spearman correlation POSITIVEFEEL
H6 – Spearman correlation (student sample)

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<td>Sig. (2-tailed)</td>
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<td>Sig. (2-tailed)</td>
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<td>.000</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

H6 – Spearman correlation (general population sample)

<table>
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<th>POSITIVEFEEL</th>
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**. Correlation is significant at the 0.01 level (2-tailed).

Appendix K: H7 – Spearman correlation ARGUE
H7 – Spearman correlation (student sample)

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**. Correlation is significant at the 0.01 level (2-tailed).
H7 – Spearman correlation (general population sample)

<table>
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<td>Correlation Coefficient</td>
</tr>
<tr>
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<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
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**. Correlation is significant at the 0.01 level (2-tailed).

Appendix L: H8 – Spearman correlation CARDOWE

H8 – Spearman correlation (student sample)

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<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
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<tr>
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H8 – Spearman correlation (general population sample)

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<td>Sig. (2-tailed)</td>
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Appendix M: H9 – Spearman correlation CLOTH_FR

H9 – Spearman correlation (student sample)

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<td>Sig. (2-tailed)</td>
<td>.</td>
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<tr>
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**. Correlation is significant at the 0.01 level (2-tailed).
H9 – Spearman correlation (general population sample)

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<td>Correlation Coefficient</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<td></td>
</tr>
<tr>
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Appendix N: H10 – Spearman correlation CLOTH_EUR

H10 – Spearman correlation (student sample)

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<th>CLOTH_EUR</th>
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<td>CBINDEX</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
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**. Correlation is significant at the 0.01 level (2-tailed).

H10 – Spearman correlation (general population sample)

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<th>CLOTH_EUR</th>
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<td>Correlation Coefficient</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
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<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLOTH_EUR</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

Appendix O: H11 – Spearman correlation INTERNET

H11 – Spearman correlation (student sample)

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<th>INTERNET</th>
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<td>CBINDEX</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>.868</td>
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H11 – Spearman correlation (general population sample)

<table>
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<th>INTERNET</th>
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<td>Spearman’s rho</td>
<td>CBINDEX</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
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<tr>
<td>INTERNET</td>
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Appendix P: H12 – Spearman correlation TV

H12 – Spearman correlation (student sample)

<table>
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<th>TV</th>
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<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
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<td>N</td>
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<tr>
<td>TV</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

H12 – Spearman correlation (general population sample)

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</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
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*. Correlation is significant at the 0.05 level (2-tailed).

Appendix Q: H13 – Spearman correlation CATALOGS

H13 – Spearman correlation (student sample)

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<th>CATALOGS</th>
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**. Correlation is significant at the 0.01 level (2-tailed).
**H13 – Spearman correlation (general population sample)**

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