



universität
wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

The Limbic® approach in scientific research:
Investigating the academic use of the Limbic® map in
conjunction with the perception of Austria as a brand

verfasst von / submitted by

Moritz Richter, BA

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien, 2021 / Vienna, 2021

Studienkennzahl lt. Studienblatt /
Degree programme code as it appears on
the student record sheet:

UA 066 915

Studienrichtung lt. Studienblatt /
Degree programme as it appears on
the student record sheet:

Masterstudium
Betriebswirtschaft/ Master Business Administration

Betreut von / Supervisor:

Univ.-Prof. Dr. Adamantios Diamantopoulos,
BA MSc D.Litt.

Acknowledgements

My special thanks go to my supervisor, Professor Adamantios Diamantopoulos, for his ongoing guidance and support during the development and writing phase of this thesis. I really appreciate his good nature and his laissez-faire approach. He has a great understanding of his students' learning and writing preferences and their self-transcendence during the process. It was my honour to be supervised by him.

Additionally, I would like to thank my family, girlfriend and friends, who actively supported me throughout my academic area of life even in the most stressful times. They are the peers who never let me down when in need. I am fortunate to have them in my life.

I would also like to thank the Chair of International Marketing of the University of Vienna. All the lectures that foster discussion and active participation while still using humour as a means of communication make the university a place where students come to enjoy learning, just as it should be.

Abstract

The purpose of this master's thesis is to test the Limbic® map, a multi-science model created to determine an individual's or a group's personality based on the three dimensions stimulation, dominance and balance. The thesis evaluates whether the map is a viable model for the prediction with regards to purchase intentions of Austrian products and other purchase influencing criteria such as the identification with the country as a brand and perceived value.

The first part takes a closer look at the conceptual foundations of the map and its individual items. Following this, the second part investigates the analytical function of the map by using a questionnaire to measure the assessment of Austria as a brand according to the consumer values of the Limbic® map. A principal component analysis creates dimensions that mirror the perception of the Austrian personality and the analysis model then measures the effects of the created dimensions on purchase behaviour. In the next step, the results are compared with the effects of the Stereotype Content Model (SCM) dimensions warmth and competence as well as demographic control variables. This is realised step-by-step, with checks for an improved explained variance and significant relationships.

The findings indicate that the Austrian dimensions result in additional explained variances over the control variable and SCM. The Limbic® model could successfully impact purchase intentions indirectly via consumer brand identification and perceived functional value. In addition, the scientific relevance of the SCM could be proven again highlighting that there is a direct effect on purchase intentions.

There is potential for the use of the Limbic® map under certain conditions. The interpretation of the consumer values can be different across cultures depending on where the sample is created. This might require pretesting or a sufficient understanding of the values in the specific context. The SCM offers a better comparability of groups because it has the same dimensions across applications. By contrast, using the Limbic® map offers flexibility and uniqueness with the opportunity to create one or several distinctive dimensions for the target sample.

Keywords: Limbic® map, Stereotype Content Model, self-stereotyping, personality, purchase intentions, identification with the country, map values

Table of Contents

Acknowledgements.....	I
Abstract.....	II
Table of Contents	III
List of Figures.....	V
List of Tables.....	VI
Abbreviations.....	VII
1 Introduction	1
1.1 Research Purpose	2
1.2 Structure of the Thesis	2
2 Review of Literature and Models	4
2.1 Limbic® Map	4
2.1.1 The Origin of Limbic®	4
2.1.2 The emotional systems of the Limbic® map	5
2.1.3 Consumer value selection for the Limbic® map.....	7
2.1.4 Self-stereotyping	8
2.1.5 A comparison of the Limbic® map to other models.....	9
2.1.6 The Limbic® map in a marketing framework.....	9
2.1.7 Hypothesis formulation	10
2.2 Purchase Related Variables.....	11
2.2.1 Purchase intentions.....	11
2.2.2 Purchase influence.....	11
2.2.3 Consumer brand identification with a country	12
2.2.4 Perceived value.....	13
2.3 Stereotype Content Model	14
2.3.1 The SCM in a marketing framework.....	14
2.4 Austria on the SCM, Austrians as consumers	15
2.5 Analysis Model.....	16
2.6 Relationships between Purchase-Related Variables	17
3 Methodology	18
4 Presentation and Analysis of the Results	20
4.1 Sampling Procedure, Frequencies and Descriptives	20
4.2 Variables.....	20
4.2.1 Outcome variables.....	20
4.2.2 Warmth and competence as additional predictors.....	21
4.2.3 Variables to control demographic criteria	22

4.3	Map Dimension Development.....	22
4.3.1	Limbic® map value purification	22
4.3.2	Individual value interpretation	23
4.3.3	Formation of Austrian groups	28
4.3.4	Reliability dimensions.....	29
4.4	Interpretation of Dimensions.....	29
4.5	Statistical Assumptions	31
4.5.1	Correlations	31
4.5.2	Multicollinearity.....	33
4.5.3	Autocorrelation.....	35
4.5.4	Homoscedasticity	35
4.5.5	Normality	36
4.5.6	Additional remarks.....	36
4.6	Results.....	37
4.6.1	Purchase intentions (P_Int)	37
4.6.2	Purchase influence (P_Infl).....	37
4.6.3	Consumer brand identification with Austria (CBI).....	38
4.6.4	Perceived functional value (PFV)	39
4.6.5	Perceived price value (PPV).....	40
4.6.6	Relationships between DVs	41
5	Discussion	43
5.1	Scientific Application of the Map.....	49
5.2	Managerial Implications	51
6	Conclusion and Limitations.....	54
7	References	56
8	Appendices	67
8.1	German Abstract	67
8.2	Questionnaire (German)	68
8.3	SPSS Outputs	73

List of Figures

Figure 1: Results from country perception measurement and clustering (Cuddy et al., 2009)	16
Figure 2: Relationship and hypothesis testing.....	17
Figure 3: Model of the relationships of the purchase variables and purchase intentions.....	17
Figure 4: Model layers of possible predictive factors	19
Figure 5: Dimensions drawn on the Limbic® map	31

List of Tables

Table 1: Frequencies of categorical variables	20
Table 2: Descriptives for control variables, sorted by variable type.....	20
Table 3: Reliability testing for the dependent variables.....	21
Table 4: Descriptives of the dependent variables.....	21
Table 5: Reliability testing for the SCM dimensions	21
Table 6: Descriptives for SCM composites.....	22
Table 7: Final items determined by the groups (German)	23
Table 8: Final items determined by the groups (English translation by the author)	23
Table 9: Results of scale reliability test.....	29
Table 10: Descriptives for Austrian dimensions	29
Table 11: Correlation Matrix.....	32
Table 12: Multicollinearity Diagnostics.....	34
Table 13: Autocollinearity Diagnostics.....	35
Table 14: Skewness scores of DVs before adjustment.....	36
Table 15: Skewness after adjustment	36
Table 16: Summary of results	41
Table 17: Results of inter-relationships and control variables	42

Abbreviations

AUT - Austria

CBI – consumer brand identification

COO – country-of-origin

DISC – dominance, influence

DV – dependent variable

HC - high-competence

HHC – high-high-competence

HW – high-warmth

IV – independent variable

LLW - low-low-warmth

LC - low-competence

LW - low-warmth

PCA – principal component analysis

PERVAL – perceived value

PFV – perceived functional value

P_Infl – purchase influence (in the analysis)

P_Int – purchase intentions

PPV – perceived price value

RVS – Rokeach Value Survey

SCM – Stereotype Content Model

SoMe – Social media

WOM – Word of mouth

1 Introduction

The Limbic® map is part of the Limbic® approach and was developed by the psychologist Hans Georg Häusel, PhD, who has questioned the concept of different models in the emotional, motivational and personality psychology (Häusel, 2011; Häusel.com, 2018). Limbic® is a model from the neurosciences and psychology based on the unconscious guidance of the limbic system of the brain, which is considered as main trigger of one's conscious actions. All actions are based on the activation of at least one of three dimensions: balance, dominance and stimulation. The aim of the Limbic® map model is to unify standards and approaches from different sciences to map the personality of a person or brand (Häusel, 2011, 2014, 2019). Although brand and customer mapping has been performed on the map (Gruppe Nymphenburg, 2020; Marketmind, 2020), no relationship to countries, cultures or purchase behaviour could be generated.

There are multiple influencing factors that determine the actual choice to purchase a brand and the desire to own it. Stereotypical prejudice is not limited to the perceptions of groups, countries or people but can also be found in categorizable brands and products (Diamantopoulos et al., 2017; Herz & Diamantopoulos, 2012; Liu & Johnson, 2005). Research has been able to identify a link between scores on dimensions defined by other models and brand localness/globalness as well as country of origin effects (Halkias et al., 2016). On the purchase level, there are hedonic and utilitarian properties of a product (Chattalas & Takada, 2013), the influence on purchase intentions using brand affect (Diamantopoulos et al., 2017) and consumer brand identification (Kolbl et al., 2018). Various models have tried to explain the differences between how people perceive countries, especially of those who are affected by these judgements (Samiee, 2010). This thesis focuses on the Limbic® map approach to investigate the abilities to explain purchase behaviour, also in comparison with other models. A widely used model in this context is the Stereotype Content Model (SCM) developed by Fiske et al. (2002). The SCM is a framework developed to measure the stereotypical prejudice of groups not belonging to a person's own perceived in-group based on two main dimensions, warmth and competence. Its validity and reliability have been proven in various studies including publications from the founding authors of the SCM (Cuddy et al., 2007). The SCM and the Limbic® map model both consist of fundamental dimensions, which make the SCM a suitable model to control the abilities of the Limbic® map.

1.1 Research Purpose

Limbic® is widely used by brands and businesses in a practical context. However, there is little to no application of the Limbic® map or other Limbic® approaches in academic research. Reflecting on this fact, this paper examines whether the Limbic® map can be applied with confidence in a scientific context by examining how the consumer values were assigned and what they explain. It investigates the effects of the dimensions created from a sample of Austrians describing their own country based on purchase-influencing factors. This contains purchase intentions, purchase influence, consumer brand identification, perceived value and the identification with Austria. The aim is to verify whether the Limbic® map is able to predict effects on purchase behaviour. To compare the effects of the results, sociodemographic criteria, explained using in control variables, and variables of the SCM are included into the analysis model.

The paper intends to raise awareness of the possible opportunities for an academic use of the Limbic® map. It investigates whether the map can be used in different academic contexts by answering the following questions:

I: How was the Limbic® map developed and how were its consumer values assigned?

II: Can the dimensions derived from a sample by using consumer values from the Limbic® map, predict purchase decisions better than socioeconomic and demographic attributes?

III: How will the dimensions of the Limbic® map approach predict in comparison to other models (SCM)?

1.2 Structure of the Thesis

The thesis opens with a review of the models it discusses. It introduces the concept of Limbic® and the creation of the associated map. The review shows the fundamental dimensions, the involvement of other fields of science and the interpretation of consumer values. In Addition, an explanation of the functionality of the map as well as its association with the personality of individuals and brands is included. Afterwards, the effects of stereotypes and the SCM are explained. A relationship between the SCM and the discipline of marketing is established while explaining the effects on purchase determining factors such as purchase intentions, purchase influence, perceived value, and consumer brand identification. Those relationships can also be

Introduction

found in previous studies. Before testing on those relationships, all hypotheses have to be formulated. This step is done within this chapter.

The empirical study investigates how the Limbic® map consumer values were collected and selected for the sample model. Afterwards, dimensions for Austria were created on the Limbic® map using a principal component analysis. The newly created dimensions were included in multiple regressions containing the purchase-related factors as dependent variables. The evaluation reveals what the individual consumer values and dimensions created from the sample represent. It assesses, if (one of) the newly created dimension(s) is/are able to predict purchase behaviour and if it/they explain(s) more noise compared to the control variables and the SCM dimensions warmth and competence.

The discussion concludes whether the Limbic® map and the consumer values it consists of can be used for scientific research without further reconsideration. It also includes a comparison of the findings of the empirical study with the experience based on the literature review. There are conflicting opinions on the possible meaning of relationships between the Austrian dimensions and purchase behaviour. The dimensions are set in relation to the SCM dimensions, which also attempt to explain purchase behaviour. The second section contains managerial implications.

Finally, the thesis concludes with a review of the findings in the discussion, possible limitations and a future outlook. The literature and detailed statistical findings can be found in the reference section and appendices.

2 Review of Literature and Models

2.1 Limbic® Map

2.1.1 The Origin of Limbic®

In 2011, Hans Georg Häusel aspired to develop a concept that connects neurobiology and brain sciences and can also unify motivational, personal and emotional psychology, a link that was missing at the time. The main goal of the Limbic® map was to develop a holistic model that summarises information from different personality models, can be easily applied and replicates and reflects the most important functions of the brain (Häusel, 2011, 2014, 2019).

The brain can be divided into the neocortex, the limbic system and the brain stem. The size of the neocortex is what distinguishes homo sapiens from all other species, as it enables humans to solve complex tasks, understand complicated issues and facilitates the use of language. The cognitive power of the neocortex has enabled all achievements humankind has made. However, the neocortex only functions as the executing part of the brain. While the motoric system, the memory and the sense centres are enablers of actions, the cause and the trigger of those needs to be identified. Those causes and triggers located in the limbic system (Häusel, 2011, 2019).

The limbic system is a more ancient part of the brain. The substantial focus of this system lies on the evaluation of impressions and the triggering of emotions. As part of the limbic system, the amygdala can assess new stimuli based on the information that is provided by the neocortex' systems. Information can be retrieved from current signals, but also from past learnings that are retrieved from the memory system of the neocortex. The interplay between the brain areas is facilitated by the better developed homo sapiens neocortex. Nonetheless, the triggering limbic system is fundamentally similar to that of other mammals (Häusel, 2019).

Decisions triggered by the limbic system takes place unconsciously and within four layers. The deepest layer stems from the biological instincts that remain unchanged, while the cultural layer accesses the cultural rules that were learnt during youth and childhood. The individual layer is based on the personality that was formed by experiences and actions from the past, while the situational layer is the actual perception of the current surroundings and the reaction to them (Häusel, 2019). Those impulses are affected by the unconscious behaviour guidance system, which has stored cultural experiences and rules. The system guides a person through life while

constantly connecting experiences and comparing them with the current situation without the individual recognising its presence (Bargh & Morsella, 2010; Häusel, 2011).

Häusel (2011, 2014, 2018, 2019) was able to summarise this information to find a model that answers questions from genetics, neurochemistry, neuroanatomy, psychology, psychiatry, evolutionary biology and sociology by showing that fundamental dimensions explain the perception of the stimuli of the environment and the behaviour triggered by the limbic system. Thus, the Limbic® map was created.

2.1.2 The emotional systems of the Limbic® map

One's personality, behaviour and reaction can be measured according to the three emotional systems: balance, dominance and stimulation. They all possess unique characteristics in the physical, social, cognitive and gnostic categories (Häusel, 2019).

Balance is the emotional system of persistence and conservation. It is the oldest limbic dimension and aims to avoid disruption through external stimuli. Balance is identified as supportive in occupations like paramedic and fire fighters in the physical category. It has a connection to friends and relatives as well as associations in the social category, to the formation of habits and the avoidance of complexity in the cognitive category and to the belief in the higher power or astrology in the gnostic category. Balance works as a stabiliser for social relationships; it helps separate friends and family from harmful enemies. Regarding the downside, the balance dimension is a strong barrier for change and innovation. In addition, people with a strong balance characterisation tend to thoughtlessly follow leaders (Häusel, 2019).

Dominance is the pursuit of power and influence. It can be a cause for conflict, but also progress. Dominant behaviour can be identified as fighting in the physical category, egoistic behaviour and striving for power in the social category, and assertiveness in the cognitive category. Suppression and prosecution of political and religious enemies are part of the gnostic layer. A dominant personality is an establisher of leadership and followership. Top level managers are believed to show high levels of dominance. However, a lack of emotional intelligence and yearning for control and power at all cost cannot only be harmful to persons in an individual's social surroundings, but can also result in the inability of an individual to question their own social misbehaviour (Häusel, 2019).

Stimulation is the driver of innovation and creativity. It is the evolutionary driver of change and improvement by attempting to do new things. This dimension demands deviations from one's habitual behaviour by generating feelings of lust and arousal and rewards positive outcomes with joy. Stimulation is satisfied with the consumption of stimulants belongs to the physical category. Individuality and differentiation from the mass satisfy the social need, while enjoying the theatre, art and culture satisfy the cognitive need. Stimulant personas prefer planning for the future on the gnostic level. A person with a high stimulation character can be the motivator for change and the entertainer for teams or other persons in the social surroundings. It must be mentioned that the stimulation system is highly sensitive to boredom, which means that social isolation and a lack of variety can result in apathy and psychic disorders (Häusel, 2019).

The Limbic® map consists of the fundamental emotional systems of balance, dominance, and stimulation, which are allocated as three extremes. Consequently, the map is split into three parts, whereby each part contains a set of consumer values.

Various definitions of these consumer values exist. "According to the literature, values are (a) concepts or beliefs, (b) about desirable end states or behaviours, (c) that transcend specific situations, (d) guide selection or evaluation of behaviour and events, and (e) are ordered by relative importance" (Bilsky & Schwartz, 1994, p. 551). They can be terminal, a goal to reach, or instrumental as a value to aim for an achievement. Values are considered as items through which persons refer to themselves or characterise other people. They are a core requirement to distinguish between groups and develop social behaviour (Bilsky & Schwartz, 1994). Values are standards of measuring our own behaviour and that of others. There are two different perspectives, the individual and the cultural one. The individual personality is shaped by motivational aims and instructions that guide the actions in an individual's life. Values are also transmitted via cultural members. Cultural values contain guidelines for collective life, that have to be internalised for the individual to remain a member of his or her society. As a result, only specific behaviour can be displayed, as differing actions might be a constraint to the established cultural values (Hofstede, 1983; Vauclair, 2009). These so-called consumer values form the three parts of the Limbic® map based on which sector they are allocated to. Two of the main dimensions can be activated at the same time, which leads to three mixed emotional systems: adventure/thrill, discipline/control, and fantasy/pleasure. Higher scores on certain consumer values of the map provide information on the characteristics of the dimensions that reveal the personality of the individual or group. Stronger characteristics in one or more of the

formed dimensions generate different personal or group properties and behaviour based on reward and punishment reactions of the brain (Häusel, 2011, 2019).

“Reward and punishment are incentives that tend to capture strong views of human nature” (Balliet et al., 2011, p.594). This idea reaches back to Skinner’s (1953) and Thorndike’s experiments (Stam & Kalmanovitch, 1998). Rewards and penalties are the main drivers for action, performance and learning. This is based on the rewarding system located in the nucleus accumbens, which enforces or prohibits future behaviour based on the positive or negative emotions as a result of reflecting on previous actions (Bodenmann & Shaer, 2006; Balliet et al., 2011). The main dimensions of the Limbic® map are closely tied to the reward penalty system of the brain. The main reaction for dominance is pride or anger, the one for stimulation is positive surprise or boredom and balance refers to safety or anxiety. An Individual’s personality has stronger or weaker forms of the dimensions, which can evoke different reactions for the same stimulus. Dominant types may welcome innovation, while balancing types may have a feeling of uncertainty (Häusel, 2019). The reaction is triggered in the form of hormones. In the case of balance it is cortisol, which triggers stress and anxiety when imbalances occur. Testosterone is the main hormone for dominance. It puts the body in a position of combat and aims for power and sexual dominance. A satisfied stimulation system will release dopamine, the hormone for motivation and joy. This is the final step of the transition from the emotional stimuli over the limbic evaluation process into a physical feedback (Häusel, 2011, 2019).

2.1.3 Consumer value selection for the Limbic® map

The allocation of the consumer values on the Limbic® map follows an implicit procedure which Häusel (2019) termed “Gedankenspiele” (mind games). Together with Gruppe Nymphenburg a variety of subjects were constructing the map unintentionally by assigning consumer values. In the first step, the values were clustered by asking the subjects to assign them in groups of 4. The second step encompassed the allocation on the map. Both experiments are cited in the following quotes:

“Experiment 1: I now give you four values: creativity, reliability, curiosity, quality. Two of these terms go particularly well together. Which are they? Without a doubt, you immediately feel what fits and what doesn't. Creativity is part of curiosity and reliability is part of quality” (Häusel, 2019, p.102).

Experiment 2: Now four additional values follow. Let these terms briefly work you (or better on your feelings): sensuality, reliability, precision, courage. Now classify these terms approximately in the Limbic® map where you think they are correct. In figure 2.5 (picture of final map) you can see where all the values have their place (Häusel, 2019, p.102).

The model was finalised using psychologists as a control group as they also possess a human brain working regularly. The model was identical except for minor interferences. It was proven that the Limbic® map shows a reflection of the brain, which is indistinguishable for the psychologists and all other subjects (Häusel, 2017, 2019). The implicit experiments have been repeated in different forms for other purposes like the measurement of Limbic® emotions by tracking body reactions, where Limbic® types, that have certain specifications on dimensions of the map, were created (Gruppe Nymphenburg, 2015).

2.1.4 Self-stereotyping

Autostereotyping/self-stereotyping is the process of an ingroup describing the attributes of the members of its own country, while heterostereotyping refers to the opposite, the description of members of other countries by an out-group (Hrebickova & Graf, 2014). The two terms autostereotyping and self-stereotyping are used synonymously. The self-categorisation theory (SCT) states that self-identification is a crucial factor for group formation and behaviour within a group. Identification happens as a consequence of categorisation. Categorisation is the process where persons reflect upon their own behaviour with the stereotypical characterisations of the ingroup. Moreover, the process of constructing one's own self-perception can function as a classification of individuals into groups (Hogg & Turner, 1987). SCT explains, that an individual cannot achieve self-categorisation without being connected to the reference group. The directionality of self-stereotyping comes from the respective group. The individual takes the stereotypical perception of the group and transfers it to herself or himself (Latrofa et al., 2010).

Individuals go through the process of depersonalisation, in which a person's identity becomes indistinct from their own group, but differentiable from other groups. This is the transformation from an individual's personal identity to their social identity. Significant interactions were discovered between culture and its connection to the personal group. Cross-cultural differences are one of the main determinants when establishing in-group ties. The group ties are identified as indicators for self-stereotyping. During the process of self-stereotyping, certain group

behaviours such as prejudice, stereotyping, conformity, group polarization, group cohesiveness, crowd behaviour and leadership are developed (Rubin et al., 2016). Connections to the emic-etic approach can be established, where there can be either an explanation of a culture from the outside individual (etic) or from one's own group or culture (emic). This is the difference between the description of imported (etic) and internalised (emic) values (Cuddy et al., 2009).

In the following, the participants of the study describe Austria as a brand. Moreover, the sample selected only consists of people living in Austria. In contrast to the approaches of the SCM and Limbic® map, where an out-group performs a rating of dimensions of the models, the study presents a description of how Austrians perceive a brand. A self-stereotyping framework can be determined, as the Austrian participants are expected to have a social identity with the country Austria and therefore describe the identity of their own country.

2.1.5 A comparison of the Limbic® map to other models

A link of the Limbic® map dimensions and scientifically proven models has been established, with for example the NEO 5/OCEAN personality test developed by Costa and McCrae (McCrae et al., 2005) with the five dimensions openness, conscientiousness, extraversion, agreeableness and neuroticism. Similar links exist to the four-dimensional DISC model (Marston, 1928) with dominance, influence, steadiness, and conscientiousness and the Schwartz values (Schwartz, 1992) with the four dimensions openness to change, conservation, self-transcendence and self enhancement. No link with the SCM has been created yet. The master's thesis will take the SCM as a control model to verify whether the Limbic® map cannot only explain the same variance as the SCM, but can also improve the results by introducing the explanation power of a unified model from different sciences.

2.1.6 The Limbic® map in a marketing framework

One's own personality can be outlined on the map by using scorings of the individual values. Based on higher scores on certain values, a load can be derived, which reveals to what extent the dimension of one's personality is fulfilled. For example, a person who ranks high on the values power, honour, status, autonomy and fight, is likely to have a decidedly dominance personality (Häusel, 2011, 2019)

Just like one's own personality can be mapped, a load of a collective can be determined by showing a group's personality. On a macro level the same can be done with cultures or inhabitants of a country. One requirement is the homogeneity of a culture's values. Otherwise, the map is not able to represent the results of a culture's personality on a national level, which figures similarly to Hofstede's cultural dimensions (Häusel, 2011, 2019; Mazanec et al., 2015).

A similar approach is used by the agencies Gruppe Nymphenburg (2020) and Marketmind (2020), where the brand personality of German and Austrian brands was determined on the Limbic® map by using the values and lifestyle segmentation. The brand personality can be matched with the target group's personality to find possible overlaps and points of connection.

2.1.7 Hypothesis formulation

The fundamental aim of the analysis is the effect measurement of the Austrian dimensions created using the Limbic® map. The dependent variables within the hypotheses are based on the five purchase related variables that have been measured.

H1: The Austrian dimension created by using the Limbic® map will have an effect on purchase intentions.

H2: The Austrian dimension created by using the Limbic® map will have an effect on purchase influence.

H3: The Austrian dimension created by using the Limbic® map will have an effect on consumer brand identification with Austria.

H4: The Austrian dimension created by using the Limbic® map will have an effect on perceived functional value.

H5: The Austrian dimension created by using the Limbic® map will have an effect on perceived price value.

2.2 Purchase Related Variables

2.2.1 Purchase intentions

The behavioural intention to purchase is the degree to which one has developed conscious plans to perform or not perform some specified future purchase behaviour (Warshaw & Davis, 1985; Ivens et al., 2015). According to Spears and Singh (2004) there are hardly any standardisation and predefined scales when it comes to measuring purchase intentions. Nevertheless, the concept is widely used in academic research. Purchase intentions are described as personal actions or tendencies related to the brand. In some of the examined cases, purchase intentions and brand attitude are used as equal terms because of their strong correlation. The misleading fluctuation of the chosen scales and different foundations of the terms indicate that an equivalent use of the two concepts is not the correct approach. Purchase intentions (P_Int) set themselves apart from brand attitude by having an intention and not an attitude. The items of a variable measuring the P_Int should therefore imply the actual conscious plan leading to a purchase. Consequently, there is a link between brand attitude and purchase intentions, whereby the former is taken as an influencing predictor of the latter. Five items out of eleven for the P_Int are selected by using an exploratory analysis, resulting in the following criteria of question composition: definitely/never purchase, intend/not intend to buy, very high/low purchase interest, definitely not buy/buy, probably buy/not buy, recommending a semantic differential as scale option. For the survey, the questions were retrieved from Putrevu and Lord (1994), who used an adoption of the model by Lavidge and Steiner (1961) with a probability (“I will probably buy in the future”), an intention (“I will buy a product next time”) and a trying attempt (“I will definitely try products in the future”) question.

2.2.2 Purchase influence

Altruistic behaviour can influence a purchase decision. Matthes and Wonneberger (2014) discovered influencing factors for green consumerism, the tendency to buy products for the environment. Kimura et al. (2014) have shown that consumers tend to buy to satisfy the inner altruistic self, but also reflect on the possible positive consequences for the personal reputation as perceived by others. Barbarossa and De Pelsmacker (2014) tested the factors regarding their positive and negative influence on the purchase of environmentally friendly products. The responsibility for the ecological consequences of the product was found to be a positive

influencer of the purchase intentions of eco-friendly products. The inconvenience of purchasing an eco-friendly product was identified as a barrier of the purchase intentions and the purchase itself, whereby the inconvenience included feeling stressed when having to pay a higher price, a reduced variety of choice or the consumption of additional time. Similar effects of regionality versus variety, quality versus price, seasonality versus access to products, fast consumption versus enjoyment and short transport routes versus foreign products are consolidated within the variable purchase influence.

2.2.3 Consumer brand identification with a country

“Brands have the ability to embody, inform, and communicate desirable consumer identities” (Stokburger-Sauer et al., 2012, p.406). The idea that consumers buy brands as a reflection to themselves and comparison to other people is embodied in consumer brand identification (CBI). It helps them identify with their personal selection goods and services. CBI is the customer's psychological state of perceiving, feeling, and valuing his or her belonging to a brand and an important construct for purchase behaviour measurement (Kolbl et al., 2018; Lam et al., 2010; Stokburger-Sauer et al., 2012). Various drivers of CBI, such as the cognitive brand-self similarity, brand distinctiveness, and brand prestige as well as the more affect-based brand social benefits, brand warmth and memorable brand experiences have been identified (Stokburger-Sauer et al., 2012). A study from Chattalas et al. (2008) identified the effects of country-of-origin as part of CBI based on the product type, consumer expertise-, involvement-, and ethnocentrism effects as well as national- and country-specific stereotypes. More recent research has discovered three main drivers: the personality driver, which aims at the distinction of one's self concept from that of others and the signaling of the diversity in social situations, the lifestyle driver, which emphasises on the consumption decision influenced by personal interests and needs and the consumer values driver, which comes down to the principle of self-development, the unfolding of one's personal values' accomplishment (Sihvonen, 2019). As opposed to researching the country-of-origin (COO) effects, which test the effects of a product's COO on its product evaluations and purchase intentions (Roth & Diamantopoulos, 2009), the CBI investigated in this paper focuses on Austria as the brand. It examines the perception of the country's population, their purchase behaviour as well as their preferences. The effects of CBI on purchase intentions and through them to brand ownership have additionally been proven by Kolbl et al. (2018).

2.2.4 Perceived value

Perceived value is defined as the “consumer’s overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given” (Zeithaml, 1988, p.14). It can be considered as the trade-off between the value and the price that was paid, but also as the comparison of a product’s quality with its price (Sweeney and Soutar, 2001). In contrast to the objective quality, which is closely related to the superiority of a product’s attributes versus that of their competitive, the perceived value is a judgement about what the attributes and ingredients of a product can do for a person. This can differ from the actual, measurable value. As a result, perceived value is not identical across individuals or groups (Zeithaml, 1988). It is a construct that is a fundamental determinant of a brand’s success by impacting customer satisfaction, brand loyalty and brand repurchase (Eggert & Ulaga, 2002; Snoj et al., 2004).

Previous studies have examined utilitarian and hedonic product characteristics and their relationships (Chattalas & Takada, 2013; Chattalas et al., 2008). “Utilitarian products satisfy the practical and functional needs and more hedonic products satisfy sensory and symbolic needs” (Chattalas & Takada, 2013, p.91). Relationships can be drawn between perceived price value and utilitarianism, where the main aim is to get as much value as possible for a given price and perceived functional value for the hedonic expectation of a fulfilled value for a price.

Sweeney and Soutar (2001) state that the connection between perceived value and consumer choice reaches back to Sheth et al. (1991a, 1991b). Their research resulted in the development of a four-factor model that determines the perceived consumption value identified by using a principal component analysis. The PERVAL scale, the scale measuring perceived value, contains 19 items describing the emotional, social and functional value and summarises the main utility generated by a product. The emotional value category characterises the feelings and affection, while the social value category explains the reflection in one’s self-concept that a product generates. The functional value dimension is divided into price value for money, where the short-term and long-term costs are taken into consideration and performance/quality, where the perceived quality is weighed with the product’s performance.

2.3 Stereotype Content Model

The Stereotype Content Model (SCM) is a framework developed to present the description of out-groups in two fundamental, stereotypical dimensions, namely warmth and competence. This is based on the idea that people from one's own group, the in-group, want to know the possible harm of the intentions the out-groups. This is based on the probability of harm represented by the warmth dimension and the competence dimension, the capability to realise the intent. Out-groups are either perceived as a possible threat or benefit for an in-group and have a certain ability to achieve these intentions (Fiske et al., 2002; Cuddy et al., 2007). Another purpose of the stereotypical descriptions is the manifestation of hierarchies and the fight for resources. The forms of prejudice are consistent over the various application settings (Cuddy et al., 2009). Cuddy et al. (2009, p.3) state: "While the contents of specific societal stereotypes may differ between cultures, several principles that predict those contents remain intact across cultures". Stereotyping is also feasible for high competence and warmth groups as a high ranking in one dimension is often associated with a low score in another one, which is referred to as an ambivalent stereotype. The created groups can be allocated to four clusters, whereby most of the groups taken into consideration for the studies ranking higher in one of the two dimensions (Fiske et al., 2002; Lee & Fiske, 2006). Each dimension creates unique responses. High warmth and low competence prejudice can therefore generate a feeling of contempt but also pity. The opposite composition can result in the in-group feeling endangered, but it can also feel envy. The former is referred to as the paternalistic type, while the latter is called the envious type (Fiske et al, 2002). In addition, the extreme dimensions generate contempt as a reaction for groups that rank low and admiration for groups that rank high in both dimensions (Cuddy et al., 2008). With the help of the SCM and the BIAS map, it could be detected that the dimensions are not only linked to the emotions but also to behavioural responses. They can promote or harm the own group and occur in a passive or active form. Active behaviour was found to originate from warmth and passive behaviour from competence judgments, while each of the four dimensions pity, envy, contempt and admiration have unique behavioural consequences (Cuddy et al., 2007; 2008).

2.3.1 The SCM in a marketing framework

Prejudice based on stereotyping is not only related to descriptions of individuals or groups by other ones, but also to the items assigned to a stereotypical category. Stereotypical judgement

which is based on the SCM dimensions are congruent with the country-of-origin (COO) effects. Perceptions of a country and its people might also influence the assessment of the country's economy, welfare and industrial ability and consequently affects the product and brand performance (Halkias et al., 2016). COO effects are therefore seen as an influence on consumer production information and can deliver a distinct identification for product quality if a variety of other quality cues are embedded (Chattalas et al., 2008). Brand stereotypes represent consumers' beliefs about brands as intentional agents, and such beliefs can guide consumers' perceptions (e.g. brand evaluations), intentions (e.g. purchase intentions) and actual behaviour (e.g. brand ownership). In this context, "consumers tend to form relationships with brands in a similar fashion as they form with people" (Kolbl et al., 2018, p.614). The impact of the SCM dimensions on such purchase related factors has been measured in the past and is tested again as part in the course of the thesis.

Ivens et al. (2015) tested for the effects of the dimensions warmth and competence on the four emotions pity, envy, contempt and admiration and the effects of the emotions on brand attitude or behavioural intentions. The emotions envy and admiration had positive effects, while contempt and pity had negative ones. These findings pointed to negative effects when the groups' competence dimension is low. The impact of the SCM dimensions on purchase intentions has been inspected. The prediction has only been indirectly performed by using a preceding dependent variable (DV), like CBI in the case of Kolbl et al. (2018) and perceived brand localness/globalness as well as brand attitude in the case of Halkias et al. (2016). Taking purchase influence into consideration, Barbarosa and De Pelsmacker (2014) have tested for eco-friendly purchasing behaviour.

The relationship between the SCM dimensions and CBI has been investigated in various studies. Stokburger-Sauer et al. (2012). and Sihvonen (2019) have described brand warmth as one of the main drivers of CBI. In Kolbl et al. (2008), it was the warmth dimension that was the influencing variable of CBI. Positive significant impacts of CBI on affective brand commitment and word of mouth (WOM) were measured by Tuškej et al. (2013).

2.4 Austria on the SCM, Austrians as consumers

Study 1 in Cuddy et al. (2009) measured the rating of 15 EU states, including Austria, as perceived by respondents from seven EU countries, which were Belgium, France, Germany, the Netherlands, Portugal, Spain, and the UK. Attempts to avoid social desirability bias were

made. The presence of ambivalent stereotypes was proven and the three ambivalent clusters high-warmth/low-competence (HW-LC), low-warmth/high-competence (LW-HC) and high-high-competence/low-low-warmth (HHC-LLW) were created. Austria was categorised as a HC-LW country, which is why it is in the lower left area.

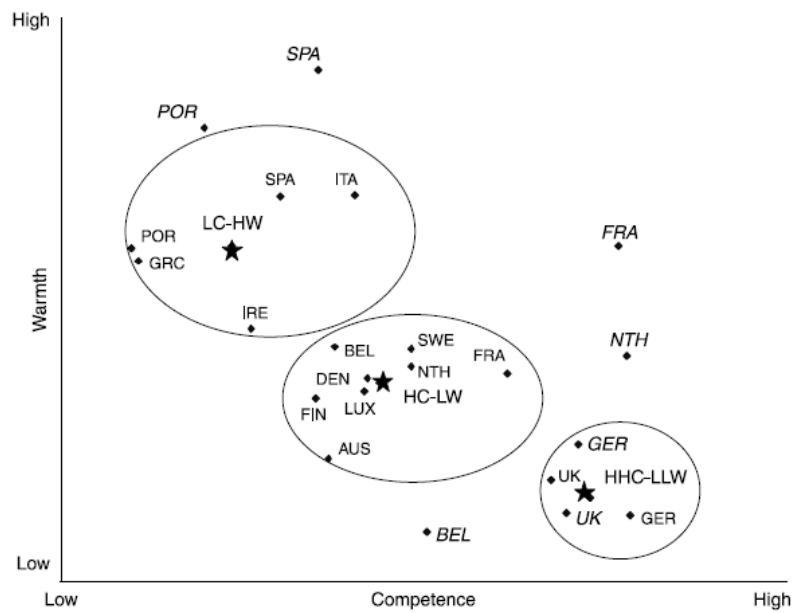


Figure 1: Results from country perception measurement and clustering (Cuddy et al., 2009)

Austria is considered to be a consumer country, where the price is an important determinant. However, a lot of importance is attached to brands communicating quality. Brand loyalty is dependent on the price-value relationship and the overall quality. In addition, purchasing from international firms is present. Nevertheless, there is a preference for local, sustainable and organic products (Santander, 2020).

2.5 Analysis Model

Five dependent variables are included in the final model: purchase intentions, purchase influence, consumer brand identification with Austria, perceived price value and perceived functional value. The dimensions created on the Limbic® map serves as independent variables for the hypothesis testing. Moreover, the SCM dimensions are included as additional independent variables to check for additional effects.

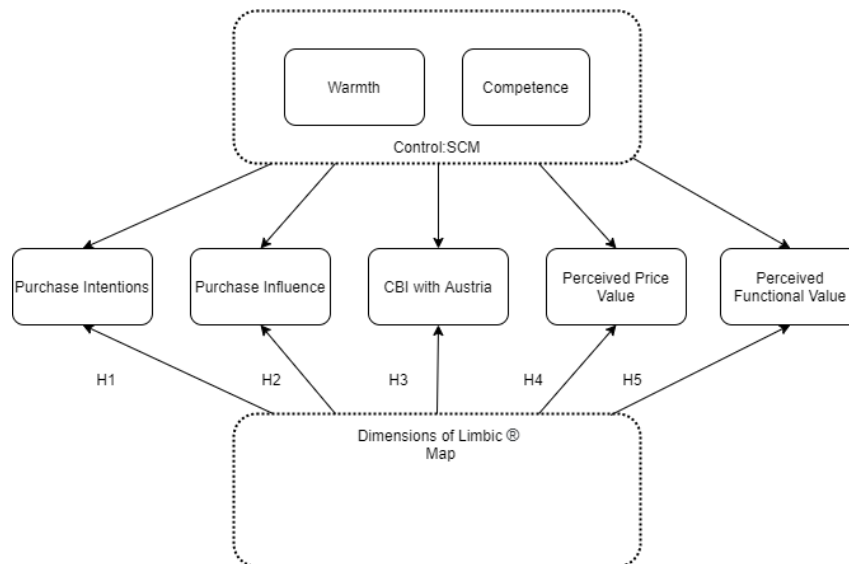


Figure 2: Relationship and hypothesis testing

2.6 Relationships between Purchase-Related Variables

The impact measurement of the control variables, the SCM and the Limbic® dimensions on the purchase influencing factors purchase influence, consumer brand identification for Austria, perceived functional value and perceived price value were included in the analysis. In addition, the relationship between these factors and purchase intentions was examined, taking the moderation of the control variables into consideration.

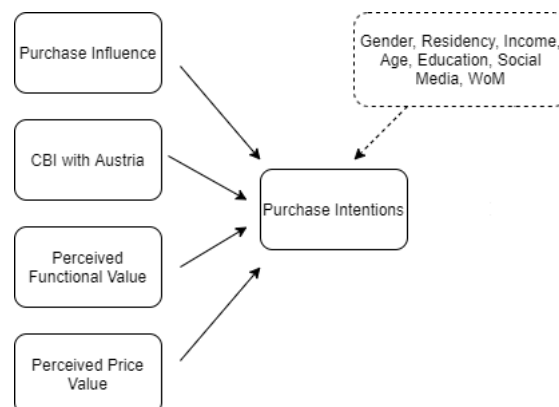


Figure 3: Model of the relationships of the purchase variables and purchase intentions

3 Methodology

For the measurement of the individual variables a survey was conducted. The questionnaire consisted of twelve questions and three main parts. It was supposed to measure data for Austria and Vienna. The first part is based on measuring purchase criteria. The survey includes an assessment on whether the participants possessed an Austrian or Viennese product, a perceived price comparison of the country of Austria and the city of Vienna and all purchase-related criteria such as the intention to purchase a product, the influencing factors, the identification with the country and the city as well as the perceived functional- and price value of the products coming from both regions. The questions are based on various established scales such as the scale by Putrevu and Lord (1994) for purchase influence and the PERVAL scale by Sweeney and Soutar (2001). The second part contains the self-stereotyping, where respondents state how they perceive Austria and Vienna when it comes to warmth and competence. Question nine forms the core part of the analysis. Using Likert scales, the respondents were asked to provide an implicit perception of Austria and Vienna by rating them on consumer values like for example nature, rebellion and order. The consumer values were collected from a selection of variables that are contained in the Limbic® map. Those consumer values were extracted and narrowed down by 25 students before. The third part assesses the demographic data containing age, gender, education level, income, nationality and residence. An evaluation of the social media skill level and word of mouth recommendation is also included.

The target sample size was 500, whereby each of 25 students had to acquire 20 respondents. The sampling method was a simple random sampling with one guidance criteria: It was recommended to include participants which that defined themselves as Austrians in the nationality variable and indicated that they have lived in Austria for at least for 5 years.

Before applying the statistical tools, the consumer values of the Limbic® map describing Austria are assessed. This contains a description of the variables and an evaluation of the possible use in the following analysis. Using a principal component analysis, a selection of those consumer variables can be transformed into factors, which are termed Austrian dimensions. Then, the Austrian dimensions are allocated on the map and their possible meaning is determined by using the Limbic® map a selection of usable Austrian dimensions can be performed. Afterwards, composites for these Austrian groups could be created. The Austrian dimensions that are finally selected will be used as predictors in multiple regressions.

Methodology

To check for the SCM, the questionnaire included metric scales to measure the individual scale items for the warmth and competence dimensions. Composites were created out of the scale items for the final dependent and independent variables. T-tests investigated the differences between the means across the two composites of the SCM.

With a variety of metric and Likert scales, the multiple regression was taken as the best possible option for the effect measurement on the individual composites. The process was repeated three times and additional variables were added. The first step included measuring the differences between groups separated by demographic and sociographic criteria. The predictive ability of the SCM was tested as an extension of all possible influences of the testing variables on the outcomes. Both the warmth and competence dimension are included as additional predictors in the regression. In the final phase, all dimensions created on the Limbic® map were added to the regression to find out if any of the relationships showed or lost impact on the outcomes. In a comparable approach, the layers of the Limbic® map dimensions were exchanged with the SCM dimensions, to verify whether the predictive power of the SCM exceeds that of the Limbic® map.

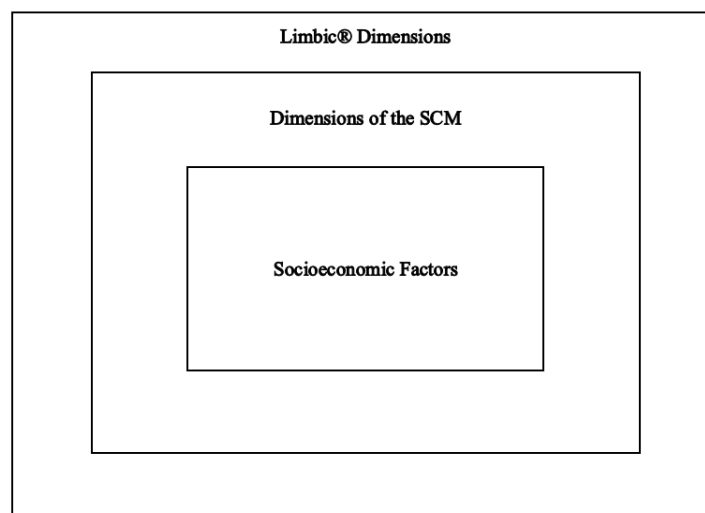


Figure 4: Model layers of possible predictive factors

4 Presentation and Analysis of the Results

4.1 Sampling Procedure, Frequencies and Descriptives

For a representative view of an in-group perspective and to match these criteria, all participants, who replied that they are not having an Austrian nationality, were filtered out. The filtering resulted in 383 out of 500 cases.

Variable					
Gender	45.2% Male	54.8% Female			
Residency	27.2% Rural	71.3% City	1.5% Missing		
Word of mouth	82.0% recommend	17.5% would not recc.	0.5% Missing		
Income (€ monthly)	21.4% <800	21.1% 800-1499	32.4% 1500-2500	20.1% 2500<	5.0% Missing
Education	3.9% compulsory	10.2% apprenticeship	34.2% A-level	49.9% Univ. Degree	1.8% Missing

Table 1: Frequencies of categorical variables

Variable	Mode	Median	Mean
Gender (0-Male/1 Female)	1		
Residency (0-Rural/1-City)	1		
Word of mouth (0-not recommend/1-recc.)	1		
Income (0-Low/4-High)	3	3	
Education (0-Compulsory/4-University)	4	4	
Age	25	30	35.781
Social media (Likert, 7 highly confident/0 not confident)	7	6	5.204

Table 2: Descriptives for control variables, sorted by variable type

4.2 Variables

4.2.1 Outcome variables

All outcome variables, except for brand ownership, are a composition of individual variables. The final compositions of the variables are called purchase intentions, purchase influence,

Presentation and Analysis of the Results

consumer brand identification with Austria, perceived functional value, and perceived price value are termed PURCHASE_INT, PURCHASE_INFL, IDENT_AUT, PFV, and PPV respectively. The number of items as well as the Crohnbach's alpha of the composites are provided in the following table. Brand ownership is the only outcome used that is measured by a single variable.

Composite	# of items	Crohnbach's α
P_INT	3	0.731
P_INFL	5	0.807
CBI_AUT	5	0.904
PFV	5	0.888
PPV	4	0.850

Table 3: Reliability testing for the dependent variables

Composite (Likert 1-7)	Mode	Median	Mean
P_INT	7	6.333	6.056
P_INFL	2.4	3	3.176
CBI_AUT	5.8	5.4	5.19
PFV	5.8	5.8	5.706
PPV	5	4.75	4.824

Table 4: Descriptives of the dependent variables

4.2.2 Warmth and competence as additional predictors

To compare the impacts of the newly created dimensions with the ones established with the SCM, two additional composite predictors were created. The elements of question eight can be connected to build composite variables for the two dimensions. The values warm, sincere, friendly, nice and good-natured were used for the warmth dimension and capable, efficient, competent, and intelligent for the competence dimension.

Composite	# of items	Crohnbach's α
AUT_WARMTH	5	0.876
AUT_COMPETENCE	4	0.816

Table 5: Reliability testing for the SCM dimensions

With the reliability score being acceptable compared to both dimensions, warmth and competence can be included for the sample.

Presentation and Analysis of the Results

A paired samples t-test for warmth and competence was performed. The results are significant and show differences between the means of two dimensions warmth and competence, whereby the competence dimension ranked significantly higher. This outcome is consistent with the classification in the high-competence/low-warmth cluster by Cuddy et al. (2009). Nonetheless, in the case of self-stereotyping, the admiration might also be a possibility, as the warmth dimension also ranked higher as the Likert scale center of 3.5.

<i>Composite</i>	<i>Mode</i>	<i>Median</i>	<i>Mean</i>	<i>t-value</i>
AUT_WARMTH	5	5	4.818	-7.750
AUT_COMPETENCE	5	5.25	5.249	

Table 6: Descriptives for SCM composites

4.2.3 Variables to control demographic criteria

The variables for the tests for the external effects that influence the outcomes were gender, nationality yes/no, the defined nationality, years living in Austria, residency, income, age, education, social media use and word of mouth (WOM) recommendation of Austrian products. The defined nationality and years living in Austria were excluded from the analysis, as they defined nationality is a string variable and there is a very high correlation of years living in Austria and age. This is reasonable, because participants who were born and in Austria and love there provided their age as a time range. The control variable nationality was excluded from all analyses of the Austrian groups as a result the process of filtering out non-Austrian participants from the sample. Therefore, the nationality control variable transforms into a variance-free variable.

4.3 Map Dimension Development

4.3.1 Limbic® map value purification

All 65 original values of the Limbic® map were listed and distributed to 25 students who were separated into five groups of five. Next, it was the groups' task to assign a score of 1 to 4 for the individual values based on the groups' overall opinion on how the values would fit for an Austrian describing Austria and Vienna, whereby 4 stood for perfect fit and 1 for absolutely

Presentation and Analysis of the Results

no fit. Based on the consistency of the scores across the 5 individual ratings, 33 final values could be extracted.

Geselligkeit	Geborgenheit	Sicherheit	Tradition	Verlässlichkeit
Natur	Qualität	Leistung	Sauberkeit	Effizienz
Fleiß	Gerechtigkeit	Ordnung	Hygiene	Erfolg
Macht	Status	Stolz	Autonomie	Ehre
Toleranz	Flexibilität	Träumen	Freiheit	Rebellion
Spontaneität	Impulsivität	Risikofreude	Individualismus	Spaß
Extravaganz	Kunst	Offenheit		

Table 7: Final items determined by the groups (German)

Sociability	Security	Safety	Tradition	Reliability
Nature/Naturalness	Quality	Performance	Cleanliness	Efficiency
Hard-working	Fairness	Order	Hygiene	Success
Power	Status	Pride	Autonomy	Honour
Tolerance	Flexibility	Dream	Freedom	Rebellion
Spontaneity	Impulsiveness	Risk-seeking	Individualism	Fun
Extravagance	Art	Openness		

Table 8: Final items determined by the groups (English translation by the author)

4.3.2 Individual value interpretation

The origin of the values on the Limbic® map is protected by the agencies to which the Limbic® concept was sold to. This subchapter attempts to classify the consumer values based on their nature. Emotions can be interpreted as accelerators of motivation, but they might also be interpreted as experiences. Cognitive values involve mental processing, which is closer to the action, as it evaluates all steps to reach a certain achievement (Liu et al., 2009). A third category was included in this chapter's analysis for values that do not fall under the other two categories. These descriptive values can characterise a person, an object or a state without clear tendencies towards emotions or cognitive processes.

To identify whether the values can be considered emotional, cognitive or descriptive and whether these values can be used for the Limbic® map, the 33 values were classified according to the Handbook of Marketing Scales (Brunner II, 2017). The categorisation is based on certain scales that have been established for scientific use in the past and a possible meaning of the values. There are potential explanations for the interpretation(s) of the values and their use on the Limbic® map.

Art and *quality* were found on the COO image scale in the attempt to refine the COO scale items. They can both be characterised as descriptive items. However, the word *artistic*, from

which the *art* is derived, is assigned to country attributes, while *quality* is a product attribute (Parameswaran & Pisharodi, 1994). Both items can still be used as interpretations when having two additional aspects in mind. *Art* is a description of a country's condition and character rather than a description of an emotion caused by a COO effect. Moreover, *quality* can have two meanings. On the one hand it refers to the quality of products, surroundings and the circumstances of a country, on the other hand it can denote the quality of life within a country. It is recommended to make distinctions prior to including the value on the map.

The term *autonomy* describes self-ruling individuals. "Consumers infer that a brand (or person) is autonomous when its behaviours diverge from the norm" (Warren & Campbell, 2014, p.543). Heterogeneity is implicit when describing the term. *Autonomy* can mean self-governance, another one interpersonal separation. Moreover, when defining a product as intelligent, the ability of the product to operate independently is one of the determining factors (Hmel & Pincus, 2002; Rijdsdijk et al., 2007). When used in the map, it can mean that the country is independent from the influences of other countries or that the individual can act independently and not suppressed by the state.

Efficiency is used in Voss et al. (2003) as part of a scale describing a utilitarian product as part of a hedonic/utilitarian item scale. Hedonic consumption is characterised by gratification and refers to the sensations from using the product, when sensory and symbolic needs are fulfilled. Utilitarian products satisfy practical and functional needs that are derived from the functional properties of the product itself (Chattalas & Takada, 2013; Voss et al., 2003). *Efficiency* can therefore be rather considered as a descriptive value than an emotional one. Moreover, the value might require specification, as it is supposed to describe the efficient mindset of the people living in the country. Still, the value is useful for the analysis, as links have been identified between the competence dimension and utilitarian product characteristics (Chattalas et al., 2008; Chattalas & Takada, 2013).

One scale was found that describes different factors which show an *extravagant* lifestyle. This happened in the context of corruption. However, behaviour such as investing in a certain lifestyle are factors that can impact the perception of people as *extravagant* (Akinfala et al., 2014). On the Limbic® map, *extravagance* can indicate that a country and its inhabitants are used to a certain lifestyle.

The idea of *flexibility* can be closely tied to autonomy and spontaneity. *Flexibility* can mean a wider variety of tools to manage a problem, the ability to adapt and a certain level of self-

confidence to deal with different situations (Martin & Rubin, 1995). On the map, the term is located closer to the balance dimension, while *spontaneity* and *autonomy* can be found in the dominance and stimulation area. This might imply that *spontaneity and autonomy* are perceived to be positive because of the ability to act freely, while flexibility may refer to the ability to avoid personal restrictions by being adaptive.

The Rokeach Value Survey (RVS) was established in the work “nature of human values” (Rokeach, 1973), and was meant to unify beliefs, attitudes, and values in a functionally integrated cognitive system. In this case, the term *belief* is the core indicator of one’s judgement and the possible affective reaction (Vinson et al., 1977). *Freedom* was identified as one of the terminal values and *clean* as one of the instrumental values. Both can be categorised as emotional, as *freedom* can evoke feelings of independence and *clean* can be regarded as a value to reach a certain emotional state (Rokeach, 1973).

Fun was identified in the List of Values, a value measurement instrument for consumer similarities and differences developed by Kahle and Kennedy (1988) and *funny* was found in hedonic versus utilitarian consumer attitudes by Voss et al. (2003) as the description of a hedonic product. The value can therefore not be identified as emotional or descriptive, but its use for consumer and product descriptions makes it an appropriate variable for the use in the Limbic® map model.

Rook and Fisher (1995, p.306) define *buying impulsiveness* as “the consumer’s tendency to buy spontaneously, unreflectively, immediately and kinetically”. The consumer value *impulsiveness* can therefore not only describe the affective act of buying but also the emotional drive to act. When used on the Limbic® map, it should explain impulsiveness as a form of not being bound to reconsideration before acting.

There are multiple interpretations of *honour*. The value can stand for one’s personal social responsibility. One’s own behaviour and the behaviour of others are perceived as honourable because they comply with a cultural norm. This was applied as a manipulation check for celebrities by Jin and Phua (2014). In addition, the term can include the feeling of being honoured when being included in a group or collective as part of one’s own self-concept (Xie et al., 2014). The consumer value is located in the dominance area of the map, which tends to explain social responsibility rather than the self-concept. However, in both cases, being honoured and feeling honoured can be an intensifier for one’s own self-esteem and power and fits in the dominance dimension.

Hygiene is a description of one's behaviour to increase or decrease the occurrence of infectious diseases. The behaviour to keep oneself and one's surroundings clean, results in the establishment of social norms such as restrictions for hospitals and food production (Stevenson et al., 2009). The value can be classified as descriptive. The target is to maintain a certain standard, which makes it a balance value.

The term *justice* was not measured directly. On the map, it can either refer to the description of the quality of a country's justice system or indicate whether the country's inhabitants perceive the treatment of people of different social classes by the government and other inhabitants to be close to equal. A similar scale that measures people's faith with regard to whether other counterparts get what they deserve, was developed by Lipkus (1991).

No scale could be found that contains the value *order*. Nevertheless, the value can be classified as descriptive, as relationships to the terms alignment and structure exist. *Order* also serves as an umbrella term for rankings, with *ordinal* being a scale rank. The value might correlate with surrounding terms and can be found in the discipline area. Discipline is a demanded standard for correct behaviour and performance (Onpulson Wirtschaftslexikon, 2009). It requires *order* to be fulfilled, which explains its central location in the area.

Power is described as the ability to influence another person or group (Brunner II, 2017, p.363). Wang and Wallendorf (2006) measured the *power* of brands as a signal of one's socioeconomic status. Wealth, power and status were used as three statements when measuring the desire for status (Dahling et al., 2009). Kim and Kramer (2015) regard *power* as the habit to control social relationships and form a relation to dominance. *Power* is assigned to the dominance area on the Limbic® map and therefore fits the usability criteria.

Pride was included in scales as a determinant of positive feelings attached to the item or being part of a group (e.g. I feel proud to use a product by...). Brands also have the ability to transfer the emotion of pride to a person (Bellezza & Keinan, 2014; Brunner II, 2017). *Pride* can be considered as an emotional value as the feelings of owning a product or belonging to a group can be considered dominant. Therefore, the consumer value is assigned to the dominance dimension and can therefore be interpreted as a fit on the map.

Kohn (1972, p.177) describes *rebellion* as „a correlated set of attitudes on such general socio-political as authority, social change, social differences, and social deviation.” *Rebellion* can be regarded as an affective act, as scales were used to measure *rebellion* as a disruptive act originating from authoritarian or anarchical political orientations and intending to influence the

political system of power. It can be classified as a dominance value, but more as an attitude and less as a feeling.

The values *reliable* and *successful* were found in Aaker's dimensions of brand personality (1997) as part of competence. The values can be classified as descriptive. However, the predictive validity of the mother dimension competence has been proven, also by the SCM.

Several scales for *risk-aversion* and *risk-seeking* exist, such as the one by DelVecchio and Smith (2005) for financial risk, the one by Laroche, Yang, McDougall and Bergeron (2005) for product purchase risk and the scale for personal risk by Kaplan et al. (1974). The value *risk-seeking* can be applied to a country's inhabitants' risk level, as risk-taking person will have similar levels in different situations where taking risks is required.

Security and *individuality* are not directly part of the scale but provide a hint by indicating emotionality. Individuality can be considered as part of freedom of expression and independence. Family security is mentioned as a value in the RVS. Moreover, *security* is part of Maslow's hierarchy of needs (Gabler Wirtschaftslexikon, 2018), which leads to the assumption that security has a greater importance than a common description. All consumer values can be recognised as part of the Limbic® map.

There is also a number of couple of scales that describe social interaction. *Sociability* was found in a scale from Fisher and Ma (2014) and serves to describe the empathy of children in need to non-related adults with desirable attributes of social competence. Another scale, which was first used by Puntoni, et al. (2015), measures the degree to which a person expresses the willingness to be friendly and develop a relationship with a particular person (Brunner II, 2017, p. 540). Although the value tends to be descriptive, it still characterises the perception of a country's people to be willing to rather get together with other people, which can be used as an indicator for behaviour.

Spontaneity has similar traits to *impulsiveness*. However, *impulsiveness* can be considered as an affective act, while *spontaneity* is rather a characterisation of a personality. Unger and Kernan (1983) included the latter in a scale for subjective experiences of leisure activities in the form of a feeling of taking part in non-routine activities.

The reason why emotional and cognitive variables are accepted in the map is that there is the existence of a relationship between emotion and cognition in the brain when actions are carried out and behaviour is established. The points of connection are information processing and

arousal. Emotional arousal is one of the main distinguishing factors for stimuli. As a result, the attention that is provided by a stimulus is the trigger of information processing, perception and memory, which links attention to cognition. Cognition and emotion have a causal relationship. Emotion is the process of creating meaning, which requires a closer evaluation of a visual stimulus. For example, emotional judgements are based on the learnt interpretation of facial expressions (Liu et al., 2009). Descriptive values are treated separately in the thesis, they are included when the perception of the value matches the definition of one of the three main or mixed dimensions to which they are allocated.

4.3.3 Formation of Austrian groups

A principal component analysis (PCA) was used to determine the relationships of the 33 variables provided in the survey. The PCAs main purpose is the reduction of multiple correlated variables to a smaller number of factors or principal components, which correlate with the factors they consist of (Hatzinger & Nagel, 2014).

The first analysis resulted in a Kaiser-Mayer-Olkin measure of .877 and shows a very high commonality with the remaining variables and the anti-image correlation values are acceptable. The overall MSA is $>.50$, which indicates that it was not necessary to exclude components upfront. A significant Bartlett's test of sphericity ($p < .001$) shows that the correlations among variables are not 0. Multicollinearity harms are present with a determinant of $(3.10 * 10^{-6})$, but are reduced to an adequate level in the rest of the analysis. Due to the sample that consists of more than 250 respondents, the minimum coefficient for assignment to a factor is .35. The rotation method is varimax, as it is the most common approach to create uncorrelated factors. For this reason, oblique methods are refused (Field, 2018).

For a large sample of >250 participants, the Kaiser's criterion was recommended for the factor selection. Only factors with an eigenvalue >1 were chosen as they explain more variance than the original variables (Field, 2018). The first output results in seven factors with an eigenvalue >1 accounting for 56.7% of variances. For the cross loadings a difference in loadings of $\pm .20$ was used, meaning that for differences $>.20$, the item was assigned to the factor that correlates with it to a higher degree. Cross-loaded items with a difference lower than .20 were removed due to their missing associations. All cross-loadings were checked and removed simultaneously before the next turn was executed. A total of four turns were necessary until the cross-loadings could be eliminated. The multicollinearity determinant improved to .002. The PCA results in

Presentation and Analysis of the Results

5 final factors, which were restructured into composites from the existing items and named after the colours used to mark them on the Limbic® map. In the final stage, the harms of multicollinearity were dissolved, which is represented by a determinant of 0.04 (Field, 2018).

4.3.4 Reliability dimensions

For the dimensions 1-3, Cronbach's alpha test advises against the exclusion of those dimensions, as it would reduce the score and would therefore decrease their fit. Field (2018) recommends scores $<.7$ to be reviewed and questioned. Low scores and a small number of individual values speak for an exclusion of dimension 4 and 5. An exclusion of one variable is not possible either as both dimensions only possess two variables.

<i>Composite</i>	<i># of items</i>	<i>Crohnbach's α</i>
DIMENSION 1_RED	6	.828
DIMENSION 2_YELLOW	5	.784
DIMENSION 3_GREEN	2	.706
DIMENSION 4_PURPLE	2	.672
DIMENSION5_ORANGE	2	.476

Table 9: Results of scale reliability test

<i>Composite (Likert 1-7)</i>	<i>Mode</i>	<i>Median</i>	<i>Mean</i>
DIMENSION 1_RED	2.83	3	2.999
DIMENSION 2_YELLOW	4	4	3.9
DIMENSION 3_GREEN	4.5	4.5	4.324
DIMENSION 4_PURPLE	3.5	3.5	3.698
DIMENSION5_ORANGE	4	4	4.025

Table 10: Descriptives for Austrian dimensions

4.4 Interpretation of Dimensions

All dimensions can be drawn on the Limbic® map. However, not all of them follow a clear structure.

Dimension 1 shows a clear picture. Most of the items point in the adventure direction, while only the consumer value power is closer to dominance. It might stand for the feelings of independence, freedom and power that Austria conveys to its inhabitants.

Presentation and Analysis of the Results

Dimension 2 is split into two parts, whereby the larger part is located in the balance/discipline area. Autonomy is allocated to the dominance area. However, autonomy is not clearly identifiable as dominance. This involves either interpretations of autonomy as working self-sufficiently or independent of restraints. The second interpretation hypothesises as a better fit. The dimension can represent the disciplined part of the Austrian personality, as a compliance with social norms, supported by values such as justice, order and reliability.

Dimension 3 is a balance dimension, with cleanliness and quality coming close to the balance extreme. Cleanliness is an instrumental value, a consumer value to reach and quality explains a standard that should be kept.

Dimension 4 is identifiable in the discipline area closer to the fundamental dominance dimension. Pride and honour fit well into the map. A missing accurate assignment to any of the dimensions and other missing values could have been the reason for a reliability score below the recommended limit of .7 (Field, 2018).

Dimension 5 does not show an actual fit, as fun is located closer to the stimulation dimension, while sociability is closer to balance. The values fun and sociability are both part of the mixed dimension fantasy/pleasure. Nevertheless, the dispersion of the two values, the closeness of each of the values to different main dimensions and missing additional values help allocate the created dimension closer to stimulation. Balance or fantasy/pleasure are supported by a low alpha score.

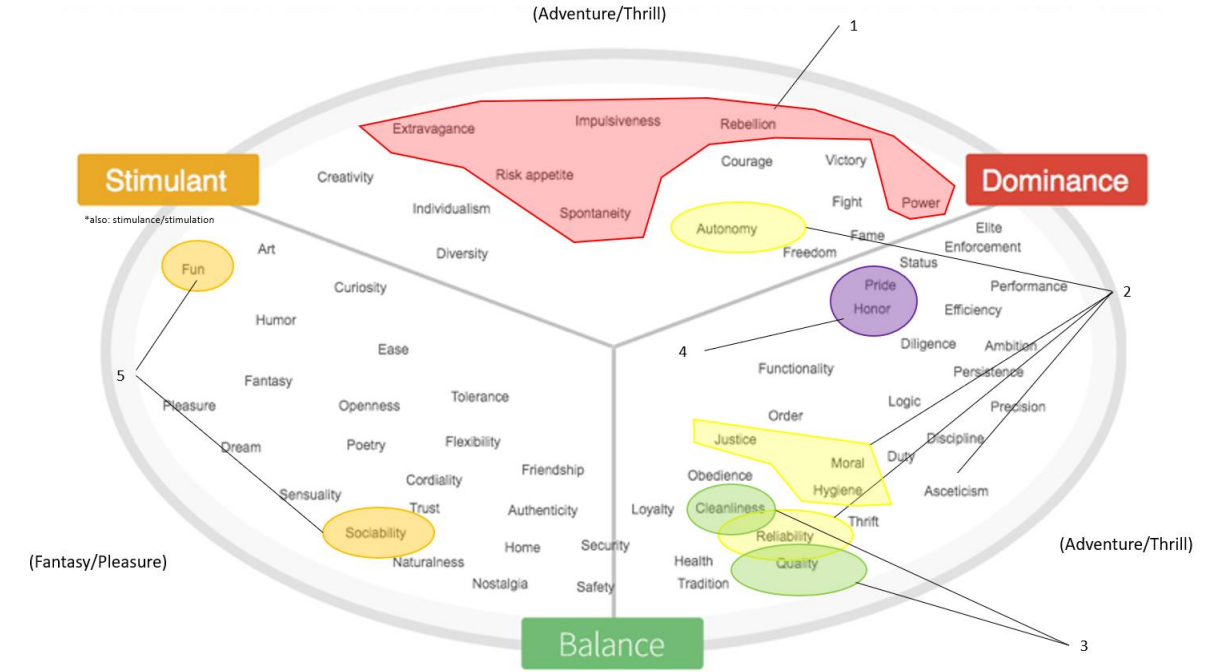


Figure 5: Dimensions drawn on the Limbic® map

Due to the missing interpretability of dimension 5 and the missing reliability of both dimension 4 and 5, the decision was made to exclude both dimension from the regression. Although dimension 4 has a Cronbach's alpha close to .7, dimension 1 and 2 seem to explain characteristics similar to those of dimension 4, which underlines the redundancy of dimension 4.

4.5 Statistical Assumptions

4.5.1 Correlations

The correlation matrix shows significant relationships between the dependent and independent variables. However, the effect sizes are acceptable, with no correlation being too strong ($r < .5$). Field (2018) recommends the acceptance of correlations which are not substantial ($r < .9$). The distinction of the three selected dimensions can be confirmed. Dimension 2 and 3 are significantly correlated, but with an acceptable weak correlation coefficient of $r < .3$. Similar correlations were identified between the Limbic® map and the SCM dimensions, which were also adequately low to accept all variables into the analysis.

Presentation and Analysis of the Results

Variable		Gender	Residency	Income	Age	Education	Social media	Word of mouth	Composite Warmth	Composite Competence	Dimension 1 Red	Dimension 2 Yellow	Dimension 3 Green
Gender	Pearson Correlation	.7											
	Sig. (2-tailed)												
Residency	Pearson Correlation	-.016	1										
	Sig. (2-tailed)	,763											
Income	Pearson Correlation	-.165**	-.118*	1									
	Sig. (2-tailed)	,002	,024										
Age	Pearson Correlation	-.016	-.347**	.472**	1								
	Sig. (2-tailed)	,754	,000	,000									
Education	Pearson Correlation	,014	.318**	,022	-.310**	1							
	Sig. (2-tailed)	,782	,000	,671	,000								
Social media	Pearson Correlation	,030	.257**	-.292**	-.587**	.230**	1						
	Sig. (2-tailed)	,557	,000	,000	,000	,000							
Word of mouth	Pearson Correlation	,083	,004	-.021	,017	-.107*	,096	1					
	Sig. (2-tailed)	,103	,943	,694	,743	,038	,062						
Composite Warmth	Pearson Correlation	-.039	-.311**	,081	.278**	-.238**	-.161**	,039	1				
	Sig. (2-tailed)	,446	,000	,122	,000	,000	,002	,443					
Composite Competence	Pearson Correlation	-.045	-.185**	,059	,096	-.072	,018	,045	.422**	1			
	Sig. (2-tailed)	,382	,000	,265	,061	,162	,724	,378	,000				
Dimension 1 Red	Pearson Correlation	,047	-.198**	,069	.197**	-.192**	-.055	,067	.322**	.203**	1		
	Sig. (2-tailed)	,360	,000	,192	,000	,000	,285	,194	,000	,000			
Dimension 2 Yellow	Pearson Correlation	-.096	-.201**	-.011	.133**	-.114*	-.002	,027	.294**	.370**	.116*	1	
	Sig. (2-tailed)	,061	,000	,832	,009	,028	,970	,593	,000	,000	,024		
Dimension 3 Green	Pearson Correlation	,075	-.008	-.068	-.093	,052	.107*	.142**	,048	.213**	-.032	.216**	1
	Sig. (2-tailed)	,143	,873	,194	,070	,313	,036	,005	,350	,000	,529	,000	

Table 11: Correlation Matrix

4.5.2 Multicollinearity

Multicollinearity is a strong correlation between two or more variables that may outweigh the other relationship. The correlation matrix, VIF scores and tolerance values were reviewed. The general guidelines for accepting the variables were met. The largest VIF score is not over 10, while the average VIF score is not substantially greater than 1 and the no tolerance below .2 was identified (Field, 2018).

Presentation and Analysis of the Results

	<i>Purchase Intentions</i>			<i>Purchase Influence</i>			<i>CBI for Austria</i>			<i>PFV</i>			<i>PPV</i>		
	Tolerance	VIF	Average VIF	Tolerance	VIF	Average VIF	Tolerance	VIF	Average VIF	Tolerance	VIF	Average VIF	Tolerance	VIF	Average VIF
Gender	.935	1.069	1.342	.936	1.068	1.343	.936	1.069	1.343	.937	1.067	1.343	.937	1.067	1.343
Residency	.784	1.276		.789	1.268		.785	1.247		.786	1.272		.786	1.272	
Income	.722	1.385		.723	1.382		.719	1.391		.720	1.389		.720	1.389	
Age	.484	2.066		.482	2.074		.482	2.076		.482	2.074		.482	2.074	
Education	.780	1.282		.779	1.284		.780	1.283		.780	1.282		.780	1.282	
Social media	.639	1.565		.632	1.581		.637	1.569		.636	1.571		.636	1.571	
Word of mouth	.945	1.058		.944	1.059		.944	1.059		.944	1.059		.944	1.059	
Composite Warmth	.697	1.435		.695	1.438		.697	1.435		.696	1.436		.696	1.436	
Composite Competence	.718	1.392		.720	1.389		.722	1.386		.719	1.391		.719	1.391	
Dimension 1 RED	.857	1.167		.857	1.166		.856	1.168		.856	1.168		.856	1.168	
Dimension 2 YELLOW	.789	1.267		.792	1.263		.791	1.264		.790	1.266		.790	1.266	
Dimension 3 GREEN	.876	1.142		.876	1.141		.879	1.138		.878	1.139		.878	1.139	

Table 12: Multicollinearity Diagnostics

4.5.3 Autocorrelation

Autocorrelation denotes the correlation of errors or deviations between observations. This can distort the β -estimates and makes the confidence interval and significance invalid. To avoid a possible harm by autocorrelation, a preliminary check with the Durbin Watson test was performed. Field (2018) recommends considering values lower than 1 and higher than 3 as critical, whereby 2 is the optimum. For all tests performed, no high autocorrelation was found, with no Durbin Watson test showing a result outside of the range.

<i>Independent Variable</i>	<i>Dependent Variable</i>	<i>Durbin Watson Score</i>
Control Variables	Purchase Intentions	1.913
Control Variables	Purchase Influence	1.904
Control Variables	CBI with Austria	1.799
Control Variables	PFV	1.882
Control Variables	PPV	1.805
Control Variables, SCM Dimensions	Purchase Intentions	1.909
Control Variables, SCM Dimensions	Purchase Influence	1.940
Control Variables, SCM Dimensions	CBI with Austria	1.766
Control Variables, SCM Dimensions	PFV	1.851
Control Variables, SCM Dimensions	PPV	1.930
Control Variables, SCM Dimensions, Limbic® Dimensions	Purchase Intentions	1.898
Control Variables, SCM Dimensions, Limbic® Dimensions	Purchase Influence	1.936
Control Variables, SCM Dimensions, Limbic® Dimensions	CBI with Austria	1.800
Control Variables, SCM Dimensions, Limbic® Dimensions	PFV	1.917
Control Variables, SCM Dimensions, Limbic® Dimensions	PPV	2.014

Table 13: Autocollinearity Diagnostics

4.5.4 Homoscedasticity

Homoscedasticity occurs when errors are the same across all independent variables. The variance in scores is similar to the values of other variables. Therefore, the variables should have a similar scatter (Issa & Nadal, 2011). To check for the level of homoscedasticity/heteroscedasticity, the standardised residuals were plotted against the standardised predicted outcomes of the models (ZRESID/ZPRED). No specific shape could be detected. This is in accordance with the recommendation of Field (2018), who proposed to assume homogeneity of variances and linearity for random arrays in the plots.

4.5.5 Normality

The normality of the residuals has been checked by using P-P plots and histograms. For the items, no critical deviations could be found except for the purchase influence and perceived functional value. The P-P plot resulted in an inconsistent overlap with the line and a left skew is visible in the histogram and identifiable in the skewness scores. Both variables are still taken into consideration. When analysing the results, it has to be considered that more extreme scores have been measured on the lower half of the mean.

<i>Independent Variable</i>	<i>Skewness</i>	<i>Std. error of skewness</i>
Purchase Intentions	-1.925	0.125
Purchase Influence	0.528	0.125
CBI with Austria	0.697	0.126
PFV	-1.192	0.125
PPV	-0.357	0.125

Table 14: Skewness scores of DVs before adjustment

Both variables, P_Int and PFV, have been transformed to reduce the negative skewness. They have been reversed, then log transformed and re-reversed. This resulted in improved normality in both cases. Additional attention was paid to the interpretation of the effect size, as a change in the independent variable results in a logarithmic change of the dependent variable (Htoon, 2020; Wuensch, 2017).

<i>Independent Variable</i>	<i>Skewness</i>	<i>Std. error of skewness</i>
Purchase Intentions	0.450	0.125
PFV	0.150	0.125

Table 15: Skewness after adjustment

4.5.6 Additional remarks

Brand ownership as nominal binary variable forms is an exception, where a logistic regression would have to be applied with its unique prerequisite assumptions. Hosmer and Lemeshow show the goodness of fit, the HIT ratio the classification accuracy. The VIF and tolerance scores are retrieved from multiple regressions (Field, 2018). In this case, an exclusion of non-Austrian participants for measuring tendencies to own an Austrian product in the future is not feasible. The reason is that 99.7% of the participants who are Austrian nationals have bought a product from Austria within the last twelve months. The missing variance results in the logistic regression not being usable. A similar pattern is visible when excluding any filters on

nationality, where only 2 of 500 participants did not own an Austrian product. With a mean of .996, the model proved heavily insignificant ($p=1.000$). Therefore, no testing on brand ownership was possible.

The method of variable inclusion was ENTER.

4.6 Results

4.6.1 Purchase intentions (P_Int)

The overall model was significant and explained 4.8% of variance ($p < .05, R^2 = .048, adj. R^2 = .028$). A significant impact of gender could be identified ($p_{gender} < .05, std. \beta_{gender} = .135$), showing a tendency of female respondents to rather take a product purchase of an Austrian product into consideration than the male counterpart.

When including the composite predictors for both SCM dimensions into the regression, the model for the relationships between the IVs and purchase intentions were significant, explaining 7.2% of the variance ($p < .005, R^2 = .072, adj. R^2 = .048$). In addition to gender ($p_{gender} < .05, std. \beta_{gender} = .134$), the competence dimension served as an additional predictor ($p_{competence} < .05, std. \beta_{competence} = .143$). Participants who ranked Austria higher on the competence dimensions have a higher probability to buy Austrian products in the future.

As a final step, the three Limbic® dimensions were added in the regressions one after the other. The model explaining the impact on purchase intentions did improve, explaining 7.7% of variance ($p < .01, R^2 = .077, adj. R^2 = .044$). No significant effects were found in addition to gender ($p_{gender} < .05, std. \beta_{gender} = .137$). The competence dimension lost significance. Therefore, **H1** can be rejected, with all dimensions having no significant impact.

4.6.2 Purchase influence (P_Infl)

The base line model with the control variables was significant, explaining 10.6% of the variance ($p = .000, R^2 = .106, adj. R^2 = .088$). There were impacts from multiple control variables, gender ($p_{gender} < .005, std. \beta_{gender} = -.162$), residency ($p_{residency} <$

Presentation and Analysis of the Results

.05, $std.\beta_{residency} = .113$), age ($p_{age} < .01, std.\beta_{age} = -.188$), education ($p_{education} < .05, std.\beta_{education} = -.140$) and word of mouth ($p_{WoM} < .05, std.\beta_{WoM} = -.127$).

The model explaining the effects on purchase influence remained significant, explaining a similar portion of variance with 10.6% ($p = .000, R^2 = .106, adj.R^2 = .083$). However, gender ($p_{gender} < .005, std.\beta_{gender} = -.163$), residency ($p_{residency} < .05, std.\beta_{residency} = .121$), age ($p_{age} < .05, std.\beta_{age} = -.172$), education ($p_{education} < .01, std.\beta_{education} = -.149$) and word of mouth ($p_{WoM} < .05, std.\beta_{WoM} = -.115$) were still significant with differing betas. The SCM dimensions were not significant.

When adding the Limbic® map dimensions, a significant model with slightly improved variance was created ($p = .000, R^2 = .110; adj.R^2 = .078$). The control variables gender ($p_{gender} < .005; std.\beta_{gender} = -.166$), residency ($p_{residency} < .05, std.\beta_{residency} = .117$), age ($p_{age} < .05; std.\beta_{age} = -.162$), education ($p_{education} < .01; std.\beta_{education} = -.156$), and WoM ($p_{WoM} < .05, std.\beta_{WoM} = -.120$) were significant. No effects were identified with the SCM or the Limbic® dimensions, leading to a rejection of **H2**.

4.6.3 Consumer brand identification with Austria (CBI)

A significant relation was found between the control variables and the consumer brand identification with Austria, explaining 18.5% of variance ($p = .000, R^2 = .185; adj.R^2 = .169$). The influencing factors were residency ($p_{residency} = .000, std.\beta_{residency} = -.225$), income ($p_{income} < .05, std.\beta_{income} = .129$), age ($p_{age} < .05, std.\beta_{age} = .176$), education ($p_{education} < .05, std.\beta_{education} = -.137$), social media ($p_{SoMe} < .05, std.\beta_{SoMe} = .146$) and word of mouth ($p_{WoM} < .05, std.\beta_{WoM} = .112$). Residency was found to have the highest impact. The personal identification with Austria has higher scores for participants living on the countryside, with higher age, higher income, lower education, higher familiarity with social media and a tendency to recommend via word of mouth.

The consumer brand identification model was significant with $p < .000$; explaining an improved variance of 25.8% ($p = .000, R^2 = .258; adj.R^2 = .238$). The warmth dimension was significant ($p_{warmth} = .000, std.\beta_{warmth} = .225$) when also considering the influence of gender ($p_{gender} < .05, std.\beta_{gender} = .109$), residency ($p_{residency} = .005, std.\beta_{residency} = -.149$), income ($p_{income} < .05, std.\beta_{income} = .135$), education ($p_{education} <$

Presentation and Analysis of the Results

.05, $std.\beta_{education} = -.116$), social media knowledge ($p_{SoMe} < .05, std.\beta_{SoMe} = .128$) and the tendency to make word of mouth recommendations ($p_{WoM} < .05, std.\beta_{WoM} = .138$).

The model with the Limbic® dimensions was significant and explained more variance than before ($p < .000, R^2 = .310; adj. R^2 = .285$). In addition to gender ($p_{gender} < .05; std.\beta_{gender} = .114$), residency ($p_{residency} < .05, std.\beta_{age} = -.123$), income ($p_{income} < .01; std.\beta_{income} = .148$), education ($p_{education} < .05; std.\beta_{education} = -.102$), WoM ($p_{WoM} < .05, std.\beta_{WoM} = .092$) and the warmth dimension of the SCM ($p_{warmth} = .000; std.\beta_{warmth} = .200$), significant effects were found with dimension 1 ($p_{1_red} < .01; std.\beta_{1_red} = .134$) and 2 ($p_{2_yellow} = .000; std.\beta_{2_yellow} = .194$), showing a support for **H3**.

4.6.4 Perceived functional value (PFV)

Significant effects were identifiable for the PFV model ($p < .005, R^2 = .058; adj. R^2 = .039$). PFV was influenced by the education variable only ($p_{education} < .005; std.\beta_{education} = -.184$), showing that higher educated participants have a worse perception of the quality of Austrian products compared to their lesser educated counterpart.

Significant effects were found with the model for PFV, explaining 17.1% of the variance ($p = .000, R^2 = .171; adj. R^2 = .149$), which is an improvement from the previous model. Education still significantly influenced PFV ($p_{education} < .005; std.\beta_{education} = -.162$). Both dimensions, warmth ($p_{warmth} < .005, std.\beta_{warmth} = .178$) and competence ($p_{competence} = .000; std.\beta_{competence} = .241$), were significant.

The same significance, but more explained variance, can be achieved by including all dimensions ($p = .000, R^2 = .265; adj. R^2 = .239$). The significant control variable was education ($p_{education} < .005; std.\beta_{education} = -.157$). Both dimensions of the SCM have shown effects ($p_{warmth} < .05; std.\beta_{warmth} = .126$; $p_{competence} < .05; std.\beta_{competence} = .126$). In addition, dimensions 2 ($p_{2_yellow} = .000; std.\beta_{2_yellow} = .196$), and 3 ($p_{3_green} = .000; std.\beta_{3_green} = .216$) were significant, thereby supporting **H4**.

4.6.5 Perceived price value (PPV)

Effects on the perceived price value model exist ($p = .005, R^2 = .058; adj. R^2 = .039$). For PPV, the effects came from income ($p_{income} < .05; std. \beta_{income} = -.147$) and education ($p_{education} < .05; std. \beta_{education} = -.137$), whereby higher educated and higher income participants care less about a price for value of Austrian products.

When including warmth and competence, there was also an improvement in the model significance and variance identifiable ($p = .000, R^2 = .183; adj. R^2 = .161$). Control variable effects were found with income ($p_{income} < .05; std. \beta_{income} = -.144$) and education ($p_{education} < .05; std. \beta_{education} = -.109$). Again, effects appeared on both dimensions ($p_{warmth} = .000; std. \beta_{warmth} = .265; p_{competence} < .005; std. \beta_{competence} = -.181$). However, stronger effects were visible with warmth.

When including the Limbic® dimensions in the model, the explained variance was extended ($p = .000, R^2 = .273; adj. R^2 = .247$). In addition to residency ($p_{residency} < .05; std. \beta_{residency} = .124$), income ($p_{income} < .05; std. \beta_{income} = -.136$) and the warmth dimension ($p_{warmth} = .001; std. \beta_{warmth} = .184$), dimension 1 ($p_{1red} = .000; std. \beta_{1red} = .251$) and 2 ($p_{2yellow} = .000; std. \beta_{2yellow} = .198$) of the Limbic® map were significant, supporting **H5**. Additionally, the competence dimension was insignificant within the extended model.

	<i>std.β</i>	<i>R²</i>	<i>Sig.</i>
(H1)			
Dimension 1 – Red → P_Int	.020		n.s.
Dimension 2 – Yellow → P_Int	.061	.077	n.s.
Dimension 3 – Green → P_Int	.026		n.s.
Warmth → P_Int	.021	.072	n.s.
Competence → P_Int	.143	.072	✓
(H2)			
Dimension 1 – Red → P_Infl	-.046		n.s.
Dimension 2 – Yellow → P_Infl	-.014	.110	n.s.
Dimension 3 – Green → P_Infl	.040		n.s.
Warmth → P_Infl	-.049	.106	n.s.
Competence → P_Infl	.064	.106	n.s.
(H3)			
Dimension 1 – Red → CBI	.134		✓

Presentation and Analysis of the Results

Dimension 2 – Yellow → CBI	.194	.310	✓
Dimension 3 – Green → CBI	.073		n.s.
Warmth → CBI	.255	.258	✓
Competence → CBI	.078	.258	n.s.
(H4)			
Dimension 1 – Red → PFV	.127		✓
Dimension 2 – Yellow → PFV	.196	.265	✓
Dimension 3 – Green → PFV	.216		✓
Warmth → PFV	.178	.171	✓
Competence → PFV	.241	.171	✓
(H5)			
Dimension 1 – Red → PPV	.251		✓
Dimension 2 – Yellow → PPV	.198	.273	✓
Dimension 3 – Green → PPV	.072		n.s.
Warmth → PPV	.265	.183	✓
Competence → PPV	.181	.183	✓

Table 16: Summary of results

4.6.6 Relationships between DVs

The models explaining the effects of purchase influence, CBI for Austria and perceived functional and perceived price value on purchase intentions were significant, explaining 17.5% of the variance ($p = .000$, $R^2 = .175$; $adj. R^2 = .148$). Significant effects were identified with P_Infl ($p_{P_Infl} = .000$; $std. \beta_{P_Infl} = -.257$), CBI for Austria ($p_{CBI} < .005$; $std. \beta_{CBI} = .174$) and PFV ($p_{PFV} = .001$; $std. \beta_{PFV} = .218$). No control variable was found to be a significant influencer of P_Int.

Presentation and Analysis of the Results

	<i>std.β</i>	<i>Sig.</i>
P_Infl → P_Int	-.257	✓
CBI → P_Int	.174	✓
PFV → P_Int	.218	✓
PPV → P_Int	-.084	n.s.
Gender → P_Int	.101	n.s.
Residency → P_Int	-.007	n.s.
Income → P_Int	-.063	n.s.
Age → P_Int	.065	n.s.
Education → P_Int	-.007	n.s.
Social media → P_Int	.073	n.s.
Word of mouth → P_Int	-.019	n.s.

Table 17: Results of inter-relationships and control variables

5 Discussion

In this section the Limbic® map and the meaning and accuracy of the individual values as well as the ones used in the sample are assessed. The readers have gained an understanding of the implicit item selection and allocation on the map and the meaning of the three fundamental dimensions. The opportunity to create individual dimensions by constructing factors from scorings of the individual values using a PCA can be detected (Häusel, 2011, 2018). The importance of the limbic system as the trigger of our behaviour, the core dimensions, the different personalities that can be formed on the map, as well as the reactions caused by hormones that are released according to reward and penalty have been discussed in all of Häusel's (2011, 2014, 2016, 2018, 2019) work. Similarly, links between the Limbic® map and various models such as the NEO5 (McCrae et al., 2005), DISC (Marston, 1928) and the Schwartz values (Häusel, 2019; Schwartz, 1992) have been established. The repeated application of the value assignment procedure, the in-detail explanation of the development by the founder and the connection to other models indicate that the fundamental Limbic® map model is applicable as an explanatory tool for personality- and brand mapping.

The process of the individual dimension creation was repeated during the analysis. 25 participants selected the 33 final values retrieved from 65 values of the Limbic® map. In this thesis, both the city of Vienna and the country of Austria were included in the survey. Only Austria has been selected as the target. Certain dimensions which form the Austrian personality as described by people from Austria in the process of self-stereotyping could be detected. Out of the provided values, three dimensions could be formed. Nevertheless, there are concerns relating to the accuracy of what the values, which were assigned by Häusel and his team, can convey. The values do not uniquely represent emotions, they might also be considered to be affective, causing reactions, or be descriptive. This diversity of possible interpretations is acceptable if the values could be found in other scales that have been developed and applied in research. However, in addition to the interpretative nature, the meaning of the individual value might be different across cultures and individuals. For example, efficiency and hygiene can be perceived analogically across cultures, but autonomy is not unique. On the one hand, Autonomy can be related to independence, meaning the freedom from external influences. Hofstede (2020) used indulgence and restraint in his model for the feeling of the suppression or gratification of basic human rights. On the other hand, autonomy can describe working without the need of interference, as described by Hmel and Pincus (2002) with regard that

Discussion

products work autonomously. Freedom can be characterized with similar imprecisions, either freedom as a basic right to acting independently to express one's character or the freedom that nature and mountains might provide for Austrians. Moreover, there are values which can be described differently depending on the individual. Order can mean alignment and structure, but it implies that suppression has to follow the order. Honour can be a patriotic trait: the honour to be in a group, or the feeling when you are honoured as a reward for a good performance. The inaccuracy of the values speaks against the use of the map without further assumptions and requires some form of ex-ante definition of the values customised for the sample and pre-testing.

The new dimensions formed on the Limbic® map are a representation of the perception of Austria to the extent to which the Austria personality can be described. Brand personalities have already been mapped and compared to the differences and similarities of the Limbic® map (Gruppe Nymphenburg, 2020; Marketmind, 2020). As stated in the literature review chapter, groups can also be described according to the SCM dimensions warmth and competence. This classification according to stereotypical prejudice not only refers to other persons and cultures, but also to brands and products from the described country (Fiske et al, 2002). Based on rankings on the two SCM dimensions, there might be differences in purchase behaviour, which results in the desire to own a brand that fulfills the specified criteria (Kolbl et al., 2018). Considering the case of the Limbic® map, prejudice can also be detected when using the Austrian dimension as a description of the main personality characteristics of Austria. As a result, there are relationships between these Limbic® dimensions and the caused reactions, which might explain certain purchase preferences and, as a result, the willingness to purchase products from Austria, which can satisfy the desire to own an Austrian product. The individual outcomes of the model were gradually reflected. The analysis investigated whether the extended model yielded better results than the control variables and the stereotype content model.

The next part of the discussion is devoted to a comparison of the Austrian dimensions of the Limbic® map with the SCM results to previews and the evaluation of possible new effects that were found by including the dimensions in the Limbic® map. It includes a discussion of what the dimensions can explain. The SCM was used as model of comparison that shows how the effects differ from one another or have similarities. Within the discussion, possible comparisons with other models and experiences from previous results are established to find possible explanations for the findings derived of the statistical analysis.

Discussion

The purchase influence composite variable was created to see whether differences can be found between groups in their preference for regionality versus variety, quality versus price, seasonality versus access to products, fast consumption versus enjoyment, short transport routes versus foreign products as well as the connection to the purchase consideration measured with the purchase intentions variable. Remarkably, none of the two models, the Limbic® map or the SCM, could identify groups that show a significant impact on the purchase influence. Nevertheless, the base model that includes control variables could identify more significant contrasts by using sociodemographic criteria. This tells us that the tendency to buy regional, seasonal and local products was higher for female participants, people from the countryside and higher educated participants with a higher age who are more open to recommend via WOM. Gender and age revealed the highest impact, followed by education, word of mouth and residency in quantitative order. The results of this thesis and previous research suggest that sociodemographic criteria, green certificates (e.g. Fair Trade, free of harmful products) found by Kimura et al. (2014) and antecedents like a green self-identity and purchase inconvenience identified by Barbarossa and Pelsmacker (2014) are stronger identifiers for purchase influence than the SCM or Limbic® map. Moreover, purchase influence was identified as a determinant for purchase intentions. The Austrian consumer tends to be conscious, as participants, who prefer regional, seasonal products with a short transport route, intend to buy Austrian products. This also speaks for products from Austria that focus on regionality, seasonality and quality rather than price and fast consumption.

CBI is the idea that “brands have the ability to embody, inform, and communicate desirable consumer identities” (Stokburger-Sauer et al., 2012, p.407). The variable CBI for Austria did not put a brand, but rather a country into focus. Brand identification takes place, as the selected participants performed self-stereotyping, measured the similarities between the group and oneself and the members of a group categorised their own group (Latrofa et al., 2010). The inclusion of the Limbic® map dimension proved to be beneficial as even more variance is explained compared to the SCM and two of the dimensions have shown a positive impact on CBI. The yellow dimension, which focuses on the discipline area showed a stronger effect compared to the red dimension located in the dominance-stimulation area of adventure. A possible reason for why the yellow dimension has the greatest effect on CBI is the similarity of the discipline-balance area to the Schwartz value *tradition*, which is part of the conservation area. The manifestation of traditional as a value might be connected with the personal attachment to a country's values. This serves as a possible explanation for why the participants

rated the traditional values of the Limbic® map higher and identify with Austria more strongly. The additional explanation power of the red, dominant area provides a possible reasoning that Austria can be identified as adventurous. By controlling with the SCM, the dimension warmth could be identified as an influencer of the participant's identification with Austria. With the support of warmth and more explained variance, the improved ability to provide insights into the unexplained noise was confirmed when including the SCM dimensions. The identification with Austria as a brand was stronger for participants who categorised Austrian citizens as quite warm, nice, friendly and warm-hearted. A similar result was discovered by Motsi and Park (2020), who identified a relationship between the warmth dimension and the country macro image, which is characterised as the "total of all descriptive, inferential, and informational beliefs one has about a particular country" (Martin & Eroglu, 1993, p.193). Similar to the SCM dimensions, COO effects can have an impact on brand perception. Diamantopoulos, Schlegelmilch, and Paliawadana (2011) present the indirect effects on purchase intentions by measuring the effects of the country image and the product category image on the brand image. This thesis has also found a direct impact of the identification with Austria on the intention to purchase Austrian products. In this case, Austria is the brand, that the brand image is related to. Based on the associated analysis, the present investigation could identify the direct effects of CBI on purchase intentions and indirect effects of the yellow and red dimension of the Limbic® map as well as the SCM dimension warmth on purchase intentions through CBI.

The analysis was able to present a relationship between the Limbic® map dimensions as well as the controlling SCM dimensions on the perceived functional value and perceived price value. Both perceived value variables were used as a reproduction of the description of perceived value, which explains the functional value of quality/performance in the case of PFV and the functional part of price value for money in PPV (Sweeney & Soutar, 2001). The model containing the three Austrian dimensions resulted in the most explained variance, whereby all dimensions had a significant impact on the PFV. This is not critical, as all three dimensions do not represent opposing personality traits. The weakest effect could be detected in dimension 1, which was supposed to mimic the adventurous personality trait. The impact on brand quality perception improved with higher ranking dimensions closer to the balance area. A possible explanation for why the balance dimension was quality was found by one of the determining consumer values. In the case of perceived price value, the opposite results were detected. The strongest effects were measured with dimension 1, with declining effects of dimension 2 and no significant effects connected to dimension 3. Adding to these results, the perceived

Discussion

performance and quality of a product was recognised as an influencing value for customer satisfaction. Furthermore, assumptions regarding the preference of hedonic product characteristics by more dominant, adventure seeking personalities and the preference of utilitarian characteristics by disciplined balance types could be observed (Chattalas & Takada, 2013). This corresponds with the general assumption that products that sell adventure are less price sensitive than products that sell quality, cleanliness and performance. The perceived value, which is considered to be cognitive, resulted in higher scores on customer satisfaction, which causes affective reactions such as brand repurchase. This fosters the disregard of competing brands and word-of-mouth recommendation (Eggert & Ulaga, 2002). In comparison with the SCM, a possible relation between dominance/adventure as well as the warmth dimension and the balance/discipline area and competence dimension occurred. This means that the participants ranked Austria high in the areas of competence and warmth, in the form of an admiration of Austria and having trust in the quality and performance of Austrian products. Those who ranked Austria high on the competence and warmth dimension have a positive perception of the reliability, the quality and the promised value. The competence dimension possessed a higher influence than the warmth dimension. Comparable results were found when measuring the impact of the SCM dimensions on the perceived price value. However, in the case of this price-value relationship, the warmth dimension played a bigger role. Chattalas and Takada (2013) have measured comparable effects. Countries whose inhabitants were perceived higher in warmth were assumed to have more hedonic product characteristics and countries whose people were perceived to be competent were thought to have more utilitarian ones. These SCM country perceptions were also found to influence hedonic (in the case of warmth) and utilitarian (in the case of competence) COO characteristics. Regarding the analysis, warmth takes on a stronger role when considering the value for a price relationship, relating to hedonic characteristics measured by the PPV. Competence has a stronger influence on the rather utilitarian quality/performance decision measured by the PFV. For both variables, the PFV and the PPV, a lower education level resulted in a higher score, and in the case of the PPV, there were additional effects from income with lower income participants ranking the PPV higher. This shows a tendency of low education, low income Austrians to assume that Austrian products possess a good quality and price/quality ratio.

Purchase intention plays a subordinate role compared to the other DVs. The conscious decision to consider a purchase is the trigger for the actual possession of a brand or product (Spears & Singh, 2004). In addition, a link between purchase intentions and brand ownership, the actual

Discussion

possession of the brand, was tested by Kolbl et al. (2018). The model including the Austrian dimensions represented the most explained variance. However, none of these dimensions showed significant effects. The yellow dimension, pointing to the disciplined personality area, possessed the highest effect size. In addition to the effect of the SCM dimensions on purchase intentions through other predictors such as CBI (Kolbl et al., 2018) and brand affect (Diamantopolous et al., 2017), the thesis identified a direct relationship between the competence dimension and purchase intentions, whereby respondents who rated Austria higher on the competence scale also have a greater tendency to acquire products from the country in the future. The support of competence as a predictor aligns with high rankings on the competence dimension evoking the emotions of jealousy and envy. Groups with a higher competence- and low warmth rankings are perceived to pursue a high status (Cuddy et al., 2008). Positive indirect effects of competence on attitude towards a brand to purchase intentions have been discovered (Spears & Singh, 2004). Envy and admiration were found to be a positive influencer of behavioural intentions towards a brand, whereby admiration has a higher effect size, still requiring a high score on the competence dimension (Ivens et al., 2015).

Therefore, the Limbic® map dimensions for Austrian self-stereotypes have shown no impact on purchase intentions, but indirect effects came from purchase influence, consumer brand identification for Austria and the perceived functional value. Consequently, the statistical analysis has found indirect results from the three dimensions on purchase intentions. The impact could be identified for Austria, with the adventurous dimension 1 and the disciplined dimension 2 affecting the identification with the country. It follows, that the higher CBI positively influenced purchase intentions of a brand coming from the country. Higher scores on all dimensions impacted the PFV, the quality perception delivered by Austrian products, whereby the green dimensions had the largest effects. This impact on a good product evaluation and thereby on the purchase consideration of Austrian products was the strongest across all effects measured on purchase intentions. Considering all of the three measured dimensions, an assumption regarding the relationship between the Limbic® map dimensions and the SCM dimensions can be modelled. In all cases where dimension 1 and 2 showed a significant impact, the model also presented significant impacts of the warmth dimension. The positive correlation between the two dimensions and warmth as well as the non-existent correlation of the third, green dimension, supports this hypothesis. In addition., a connection between dimension 3 and competence might be possible as the effect size on the PFV was highest within the competence and green dimension. However, all dimensions were positively correlated with competence

whereby the yellow dimension had the largest size. As a consequence of the unexplained voice by this thesis' model, this theory cannot be confirmed.

5.1 Scientific Application of the Map

Various aspects support the use of the map. First of all, the development of the map reaches back to the nineties and has been frequently refined. Connections between different scientific disciplines have been established within this process. Moreover, there is detailed research on how the process of the limbic system from the stimulus to the reaction is caused by neurotransmitters. The three fundamental and three mixed dimensions have been explained, just like their process of mapping personality and behaviour that is caused by specifications of this personality (Häusel, 2011, 2014, 2016, 2018, 2019). Nevertheless, a lack of the explained variability and possible weaknesses can be detected in the secondary research. Neither of the studies that have used the Limbic® map for brand or personality mapping have questioned the existing model or criticised the creation process and background knowledge. Consequently, all changes and adaptations to the Limbic® map model and its values were made by its creator, Hans-Georg Häusel.

When using the predefined values for the Limbic® map, the PCA was able to create dimensions. It was possible to explain a part of the Austrian personality with the created dimensions. Nevertheless, concerns about the reliability of the perception of the values across cultures exist. This difference in interpretation lowers the validity of the model for target groups that come from different cultures and consumer groups as some might assign the values to other spots on the map. However, most of the values match the definition of the dimensions where they are located at. The uncertainty of the value interpretation did not prevent the opportunity to create dimensions with a PCA, but it might reduce the individual item fit and lower the Cronbach's alpha score.

When comparing the new model to the ability of the SCM and the control variables to explain noise, the created Austrian dimensions were able to improve the explained variances for all models. Despite the fact that none of the created Austrian dimensions seemed to directly affect purchase intentions in comparison to the competence dimension, indirect effects on the variable were found. There were, however, direct impacts on CBI for Austria and the PFV.

The author Antoine de Saint-Exupéry stated that perfection is finally attained not when there is no longer anything to add, but when there is no longer anything to take away (Wikiquote,

2020). The stereotype content model fulfils these requirements. It is questionable if the Limbic® map model is needed as an additional tool for the comparison of (consumer) groups and the effects on purchase behaviour and criteria. The similarities between the Austrian dimension 1 and 2 and the warmth dimension support this assumption. The Limbic® map is showing other advantages than simplicity and comparability by offering flexibility and uniqueness. The Limbic® map is best used in an explorative way. One can use it as a tool to find the where culture, brands or individuals stand on the map and compare how the differences on the three main dimensions dominance, balance and stimulation or mixed dimensions adventure/thrill, discipline/control and fantasy/pleasure for different cultures are characterised. For this case, Häusel (2019) has shown that the Limbic® map is indeed less complex than other models from neurosciences, making it a simple tool which contains research from a variety of scientific fields.

To summarise, both the SCM and Limbic® map were able to explain variance above the demographic criteria measured by the control variables alone. When it comes to a comparison between the models, similarities persist. This depends on the research purpose. The SCM is able to measure groups according to two dimensions based on how they are perceived by stereotypical prejudice for the classifying group (Fiske et al., 2002). The model can differentiate between the groups according to the two dimensions and investigate how purchase behaviour, brand perception and buying intentions might differ across them. The Limbic® map, by contrast, is able to explain the personality of a group or brand. The map is rather a stereotypical prejudice regarding which dimensions a consumer group, or in the case of this paper, a country's culture fulfils. Based on the perceived rank on one of the created groups, estimations can be made based on the purchase behaviour. The advantage of the Limbic® map is the individuality and flexibility that is offered across the sample that is being measured. It is possible to construct other dimensions to measure purchase behaviour not only for Austria, but also for other cultures. Additionally, opportunities for comparisons between out-group prejudice and self-stereotyping exist. However, the model lacks sufficient unity across applications, as different dimensions are created for every group or brand on which the model is applied. If a researcher wants to compare the behaviour of two different countries, she or he might end up with completely different dimensions. The SCM is a better fit for group comparisons, because the dimensions are consistent, the ranking differs and it offers comparability. The Limbic® map, in contrast, does not classify groups according to rankings on two dimensions, it is rather a multidimensional model that maps personalities. In the case

of the SCM, the four behaviours admiration, pity, contempt and envy are caused as a reaction of the classification of the group (Cuddy et al., 2007). Although the Limbic® map possesses six extremes, the three fundamental and the three mixed dimensions, a groups personality will fulfill multiple categories, which will require typification tailored to the results (Häusel, 2019). An example would be Austria as a group, which was in the envious reaction area (Cuddy et al., 2009) and in the admiration area for self-stereotyping as a result of the analysis. On the Limbic® map, there were (at least) three dimensions for the personality measurement created for Austrian self-stereotypes.

5.2 Managerial Implications

The Limbic® map is most frequently used for the comparison of the own brand personality with that of competitors. When performing the mapping process, one can collect the core values by measuring how participants perceive a brand and create a consistent image. Based on the dimensions that have been discovered, a manager has multiple opportunities. He or she can perform the same implicit procedure with the target group(s) and map them. If a difference occurs between how the brand is perceived as compared to the target group, a manager can decide to adapt the communication strategy or reevaluate it to the right consumer group. Regarding the communication strategy, various options are available. High stimulation types are sensitive to scarcity and can be attracted to affect-buying when the advertisement shows that a product's or services' stock is limited. Dominant personalities seek discounts to get the best values and balance types prefer references and recommendations (Marketmind, personal communication, March 11th, 2019).

In addition to mapping a brand, one can estimate the characteristics of the company and its core customers. On a strategic level, the vision and mission of a company can either fit with its customers' characteristics or be adopted so they are fulfilled. There is also the option to adopt the vision to a target characteristic that is desired. For example, if the competitor's consumer groups are located in the balance area, a manager can decide to change the company's vision. With a hazardous strategy, she or he will target similar consumer values for the company like safety and tradition. When opting for a defensive strategy, consumer values in another area of the Limbic® map like stimulation or dominance but also adventure/thrill should be included in the own company's vision.

Discussion

Managers can look at current and future trends like sustainability, digitalisation and urbanisation and check which consumer values can be connected to these trends. Based on the ratings on the consumer values, one can compare these values with the own brand or company. For example, comparable consumer values for sustainability can be nature, reliability and hygiene, which are all located in the balance area of the Limbic® map. If the characteristics of the target customers of a brand, estimated by using the Limbic® map approach, lie in the dominance or stimulation area, opting for sustainability would not be the correct approach. The company would be better off aiming for performance, innovation and digitalisation. They might be connected to consumer values like status, efficiency in the case of performance and creativity and curiosity in case of innovation and digitalisation.

When it comes to making a decision to internationalise, it is advantageous to know the culture and personality of the targeted country in advance (Hollensen, 2017). In addition to the established models like high/low context, Hofstede's cultural dimensions and secondary research, the company has the opportunity to map the culture on the Limbic® map and see if the brand personality is different from its own country. In addition to this thesis, a connection to the identification with the country and perceived brand value can be established, which might be included in the decision analysis. Moreover, managers can forgo the use of Hofstede's cultural dimensions and use the Limbic® map as golden standard for comparing cultural personalities. They can compare the characteristics of the dominance, stimulation and balance of the target countries and decide to use the advertising or internationalisation strategy. Countries with a high dominance score might require a more aggressive, risk-seeking internationalization strategy such as merger and acquisition or the formation of a subsidiary compared to those with a high balance score. The latter will be more ready to accept an assimilative, risk-averse strategy that slowly introduces the brand. The Uppsala model matches this internationalisation strategy (Hollensen, 2017). Stimulant countries will seek innovation, action and presence and uncommon advertising and internationalisation strategies will definitely find a place.

The heterogeneity of a team can influence its performance positively and negatively. This was discovered when using the NEO 5 model (Mohammed & Angell, 2003). People manager, that are responsible for a team, use personality tools like the NEO 5 to identify the composition of their teams and the personality of individual employees. The DISC model from Marston (1928) follows a similar approach. Instead of only clustering the personalities of one's own team on a four-colour scheme, a manager can assess the Limbic® map dimensions to find out about the

Discussion

nature of the team's composition. Employees with a high dominance personality seek performance and power. They will accept every challenge but lack emotional intelligence. A stimulant personality is characterised by a high degree of high creativity and will think out of the box, but lacks consistency and order. Balance types are harmonisers, which are helpful and empathic but also sensitive and will not be able to manage conflicts (Häusel, 2019).

6 Conclusion and Limitations

Despite the constraints that were identified, the Limbic® map is a tool that can be used for scientific research. Nonetheless, there are some concerns that must be assessed before taking the use of the Limbic® map into consideration. The consumer values, which form the essential elements of the three dimensions balance, dominance and stimulation, cannot be reliably interpreted across all languages and cultures. A substitution of the terms or a fundamental explanation are probable. Moreover, the Limbic® map is neither an extension nor an improvement of the SCM, but another approach to provide detailed insights into the personality of a group or brand. The map, however, is not equally applicable across samples from different cultures. As a result, an adaptation of the location or the actual use of one or more of these values is required. This missing comparability makes the Limbic® map an unstandardised tool that is able to find the fundamental dimensions for a single culture and its buying behaviour, but unable to compare the personality of multiple cultures.

The research potential the Limbic® map offers is not only an opportunity but also its greatest weakness. When it comes to primary research, there is only one mentioned author, Hans-Georg Häusel. The development process of the map and its relationships are profoundly explained, and the map is dealt with in works by other scientists and authors as well. However, they all mentioned Häusel as a reference, excluding any additional findings except for the industry applied (e.g. brands from the building sector) (Trübestein, 2012; Enser-Laaber & Oppermann, 2015). Therefore, limited questioning is available regarding the Limbic® map and its values.

The concept of Limbic®, including the Limbic® map, was sold to Gruppe Nymphenburg as a registered trademark with all rights belonging to the agency. This hindered the acquisition of information on the process of brand and customer personality mapping and the basic selection of the values. Attempts have been made to gather information by contacting Hans-Georg Häusel and both agencies, Gruppe Nymphenburg and Marketmind. Although the contacted persons responded, any further information was refused.

There are some transmitted dimensions which come from primary instincts as described by Häusel (2011, 2019) on the map: hunt, fight, bond, care, play as well as male and female sexuality. These central instinct dimensions have not been represented separately in research. A possible reason is that these instinctual dimensions represent core values from the past which are equal across the human species homo sapiens (Häusel, 2019). The actual value selection

Conclusion and Limitations

took place in one week and was carried out by 25 individuals. More participants could have improved the picture. Furthermore, the narrowing down of variables can result in one of the three main dimensions being underrepresented. The creation a survey consisting of all variables is recommended. Self-stereotyping was applied, where no depiction of Austria by an out-group took place. Furthermore, there is no direct measurement of the country-of-origin effects. Similar effects were tested investigating the relationship between the identification with Austria, influenced by the SCM and Limbic® dimensions, and the intentions to buy products from Austria. There is potential for the mapping of countries with different cultures and the measurement of the COO effects by non-country users in the process of actual stereotyping, not self-stereotyping. Other variables that have been included in models containing the SCM like the willingness to pay and perceived brand globalness/localness, have also not been applied to the Limbic® map. The statistical data proved to be insufficient when testing for the actual ownership of Austrian products, the variable brand ownership did not have enough variance to deliver valid and reliable results, warmth and competence were correlated and the control variables age and times/years living in Austria were identical for a high proportion of the sample. Furthermore, participants born in Austria shared a similar amount of living time. The strong correlation of the two variables spoke against the using them both.

Aside from the limitations that emerged during this research project, the Limbic® map's benefits clearly outweigh, indicating that there is a positive outlook for its future use. However, more frequent and a higher number of scientific publications are necessary, as this may help researchers understand possible links and cues for the standardisation of its use compared to established models. Moreover, one may find hidden weaknesses of the Limbic® map that have not been discovered yet.

7 References

- Aaker, J. L. (1997). Dimensions of Brand Personality. *SSRN Electronic Journal*, 347–355. <https://doi.org/10.2139/ssrn.945432>
- Akinfala, F. F., Akinbode, G. A., & Ayodeji, F. (2014). Extravagant Life Style Assessment Scale (ELAS): Development and Validation. *International Journal of Business and Management*, 9(9), 213–222. <https://doi.org/10.5539/ijbm.v9n9p213>
- Balliet, D., Mulder, L. B., & Van Lange, P. A. M. (2011). Reward, punishment, and cooperation: A meta-analysis. *Psychological Bulletin*, 137(4), 594–615. <https://doi.org/10.1037/a0023489>
- Barbarossa, C., & De Pelsmacker, P. (2014). Positive and Negative Antecedents of Purchasing Eco-friendly Products: A Comparison Between Green and Non-green Consumers. *Journal of Business Ethics*, 134(2), 229–247. <https://doi.org/10.1007/s10551-014-2425-z>
- Bargh, J. A., & Morsella, E. (2010). Unconscious behavioral guidance systems. In C. R. Agnew, D. E. Carlston, W. G. Graziano, & J. R. Kelly (Eds.), *Then a miracle occurs: Focusing on behavior in social psychological theory and research* (pp. 89–118). Oxford University Press.
- Bellezza, S., & Keinan, A. (2014). Brand Tourists: How Non-Core Users Enhance the Brand Image by Eliciting Pride. *Journal of Consumer Research*, 41(2), 397–417. <https://doi.org/10.1086/676679>
- Bilsky, W., & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, 8(3), 163–181. <https://doi.org/10.1002/per.2410080303>
- Bodenmann, G., & Shaer, M. (2006). *Operante Konditionierung*. Stuttgart: Georg Thieme Verlag KG. <https://doi.org/10.1055/s-2006-931525>
- Brunner II, G. C. (2017). *Marketing Scales Handbook: Multi-Item Measures for Consumer Insight Research* (9th ed.). Ipswich, Mass.: EBSCO Publishing.

References

- Chattalas, M., Kramer, T., & Takada, H. (2008). The impact of national stereotypes on the country of origin effect. *International Marketing Review*, 25(1), 54–74.
<https://doi.org/10.1108/02651330810851881>
- Chattalas, M., & Takada, H. (2013). Warm versus competent countries: National stereotyping effects on expectations of hedonic versus utilitarian product properties. *Place Branding and Public Diplomacy*, 9(2), 88–97. <https://doi.org/10.1057/pb.2013.5>
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, 92(4), 631–648.
<https://doi.org/10.1037/0022-3514.92.4.631>
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map. *Advances in Experimental Social Psychology*, 61–149. [https://doi.org/10.1016/s0065-2601\(07\)00002-0](https://doi.org/10.1016/s0065-2601(07)00002-0)
- Cuddy, A. J. C., Fiske, S. T., Kwan, V. S. Y., Glick, P., Demoulin, S., Leyens, J.-P., Bond, M. H., Croizet, J.-C., Ellemers, N., Sleebos, E., Htun, T. T., Kim, H.-J., Maio, G., Perry, J., Petkova, K., Todorov, V., Rodríguez-Bailón, R., Morales, E., Moya, M., ... Ziegler, R. (2009). Stereotype content model across cultures: Towards universal similarities and some differences. *British Journal of Social Psychology*, 48(1), 1–33.
<https://doi.org/10.1348/014466608x314935>
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The Development and Validation of a New Machiavellianism Scale. *Journal of Management*, 35(2), 219–257.
<https://doi.org/10.1177/0149206308318618>
- DelVecchio, D., & Smith, D. C. (2005). Brand-Extension Price Premiums: The Effects of Perceived Fit and Extension Product Category Risk. *Journal of the Academy of Marketing Science*, 33(2), 184–196. <https://doi.org/10.1177/0092070304269753>
- Diamantopoulos, A., Schlegelmilch, B., & Palihawadana, D. (2011). The relationship between country-of-origin image and brand image as drivers of purchase intentions. *International Marketing Review*, 28(5), 508–524.
<https://doi.org/10.1108/02651331111167624>

References

- Diamantopoulos, A., Florack, A., Halkias, G., & Palcu, J. (2017). Explicit versus implicit country stereotypes as predictors of product preferences: Insights from the stereotype content model. *Journal of International Business Studies*, 48(8), 1023–1036. <https://doi.org/10.1057/s41267-017-0085-9>
- Eggert, A., & Ulaga, W. (2002). Customer perceived value: a substitute for satisfaction in business markets? *Journal of Business & Industrial Marketing*, 17(2/3), 107–118. <https://doi.org/10.1108/08858620210419754>
- Enser-Laaber, H., & Oppermann, E. (2015). *Emotionale Verkaufsintelligenz: Mit Achtsamkeit und Werteorientierung besser verkaufen*. Springer Gabler. <https://doi.org/10.1007/978-3-658-05672-8>
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications.
- Fisher, R. J., & Ma, Y. (2014). The Price of Being Beautiful: Negative Effects of Attractiveness on Empathy for Children in Need. *Journal of Consumer Research*, 41(2), 436–450. <https://doi.org/10.1086/676967>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. <https://doi.org/10.1037/0022-3514.82.6.878>
- Gabler Wirtschaftslexikon. (2018, February 14). *Bedürfnishierarchie*. <https://wirtschaftslexikon.gabler.de/definition/beduerfnishierarchie-31397>
- Gruppe Nymphenburg. (2015, June 24). *Emotions and Limbic® Lighting - Gruppe Nymphenburg* [Video]. YouTube. <https://www.youtube.com/watch?v=m8OKvGnrkDo&t=61s>
- Gruppe Nymphenburg. (2020). *Limbic® Map*. Nymphenburg. <https://www.nymphenburg.de/limbic-map.html>

References

- Halkias, G., Davvetas, V., & Diamantopoulos, A. (2016). The interplay between country stereotypes and perceived brand globalness/localness as drivers of brand preference. *Journal of Business Research*, 69(9), 3621–3628. <https://doi.org/10.1016/j.jbusres.2016.03.022>
- Hatzinger, R., & Nagel, H. (2014). *Statistik mit SPSS: Fallbeispiele und Methoden* (2., aktualisierte Auflage. ed.). Munich, Germany: Pearson Studium.
- Häusel, H. G. (2011). *Die wissenschaftliche Fundierung des Limbic® Ansatzes* (Vol. 1). Gruppe Nymphenburg. https://www.haeusel.com/wp-content/uploads/2016/03/wiss_fundierung_limbic_ansatz.pdf
- Häusel, H. G. (2014). *Neuromarketing* (Vol. 3). Freiburg: Haufe.
- Häusel, H. G. (2016). *Brain View* (4th ed.). Haufe.
- Häusel.com (2018, December 10). *Neuromarketing | Hirnforschung*. Hans-Georg Häusel. <https://www.haeusel.com/>
- Häusel, H. G. (2019). *Think Limbic!* (Vol. 6). Freiburg: Haufe.
- Herz, M. F., & Diamantopoulos, A. (2012). Activation of country stereotypes: automaticity, consonance, and impact. *Journal of the Academy of Marketing Science*, 41(4), 400–417. <https://doi.org/10.1007/s11747-012-0318-1>
- Hmel, B. A., & Pincus, A. L. (2002). The Meaning of Autonomy: On and Beyond the Interpersonal Circumplex. *Journal of Personality*, 70(3), 277–310. <https://doi.org/10.1111/1467-6494.05006>
- Hofstede, G. (1983). Culture's Consequences: International Differences in Work Related Values. *Organization Studies*, 4(4), 390–391. <https://doi.org/10.1177/017084068300400409>
- Hofstede, G. (2020, September 3). *Hofstede Insights*. Hofstede Insights. <https://www.hofstede-insights.com/>
- Hogg, M. A., & Turner, J. C. (1987). Intergroup behaviour, self-stereotyping and the salience of social categories. *British Journal of Social Psychology*, 26(4), 325–340. <https://doi.org/10.1111/j.2044-8309.1987.tb00795.x>
- Hollensen, S. (2017). *Global Marketing* (7th ed.). Pearson.

References

- Hrebickova, M., & Graf, S. (2014). Accuracy of National Stereotypes in Central Europe: Outgroups Are Not Better than Ingroup in Considering Personality Traits of Real People. *European Journal of Personality*, 28(1), 60–72. <https://doi.org/10.1002/per.1904>
- Htoon, K. S. (2020, March 4). *Log Transformation: Purpose and Interpretation*. Medium. <https://medium.com/@kyawsawhtoon/log-transformation-purpose-and-interpretation-9444b4b049c9>
- Issa, M.-A., & Nadal, K. L. (2011). Homoscedasticity. *Encyclopedia of Child Behavior and Development*, 752. https://doi.org/10.1007/978-0-387-79061-9_1382
- Ivens, B. S., Leischnig, A., Muller, B., & Valta, K. (2015). On the Role of Brand Stereotypes in Shaping Consumer Response toward Brands: An Empirical Examination of Direct and Mediating Effects of Warmth and Competence. *Psychology & Marketing*, 32(8), 808–820. <https://doi.org/10.1002/mar.20820>
- Jin, S.-A. A., & Phua, J. (2014). Following Celebrities' Tweets About Brands: The Impact of Twitter-Based Electronic Word-of-Mouth on Consumers' Source Credibility Perception, Buying Intention, and Social Identification With Celebrities. *Journal of Advertising*, 43(2), 181–195. <https://doi.org/10.1080/00913367.2013.827606>
- Kahle, L. R., & Kennedy, P. (1988). Using the List of Values (LOV) to Understand Consumers. *Journal of Services Marketing*, 2(4), 49–56. <https://doi.org/10.1108/eb024742>
- Kaplan, L. B., Szybillo, G. J., & Jacoby, J. (1974). Components of perceived risk in product purchase: A cross-validation. *Journal of Applied Psychology*, 59(3), 287–291. <https://doi.org/10.1037/h0036657>
- Kervyn, N., Fiske, S. T., & Yzerbyt, V. Y. (2013). Integrating the stereotype content model (warmth and competence) and the Osgood semantic differential (evaluation, potency, and activity). *European Journal of Social Psychology*, 43(7), 673–681. <https://doi.org/10.1002/ejsp.1978>
- Kim, H. C., & Kramer, T. (2015). Do Materialists Prefer the “Brand-as-Servant”? The Interactive Effect of Anthropomorphized Brand Roles and Materialism on Consumer Responses. *Journal of Consumer Research*, 42(2), 284–299. <https://doi.org/10.1093/jcr/ucv015>

References

- Kimura, A., Mukawa, N., Yuasa, M., Masuda, T., Yamamoto, M., Oka, T., & Wada, Y. (2014). Clerk agent promotes consumers' ethical purchase intention in unmanned purchase environment. *Computers in Human Behavior*, 33, 1–7. <https://doi.org/10.1016/j.chb.2013.12.022>
- Kohn, P. M. (1972). The Authoritarianism-Rebellion Scale: A Balanced F Scale with Left-Wing Reversals. *Sociometry*, 35(1), 176. <https://doi.org/10.2307/2786557>
- Kolbl, Ž., Arslanagic-Kalajdzic, M., & Diamantopoulos, A. (2018). Stereotyping global brands: Is warmth more important than competence? *Journal of Business Research*, 104, 614–621. <https://doi.org/10.1016/j.jbusres.2018.12.060>
- Lam, S. K., Ahearne, M., Hu, Y., & Schillewaert, N. (2010). Resistance to Brand Switching when a Radically New Brand is Introduced: A Social Identity Theory Perspective. *Journal of Marketing*, 74(6), 128–146. <https://doi.org/10.1509/jmkg.74.6.128>
- Laroche, M., Yang, Z., McDougall, G. H. G., & Bergeron, J. (2005). Internet versus bricks-and-mortar retailers: An investigation into intangibility and its consequences. *Journal of Retailing*, 81(4), 251–267. <https://doi.org/10.1016/j.jretai.2004.11.002>
- Latrofa, M., Vaes, J., Cadinu, M., & Carnaghi, A. (2010). The Cognitive Representation of Self-Stereotyping. *Personality and Social Psychology Bulletin*, 36(7), 911–922. <https://doi.org/10.1177/0146167210373907>
- Lavidge, R. J., & Steiner, G. A. (1961). A Model for Predictive Measurements of Advertising Effectiveness. *Journal of Marketing*, 25(6), 59. <https://doi.org/10.2307/1248516>
- Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the Stereotype Content Model. *International Journal of Intercultural Relations*, 30(6), 751–768. <https://doi.org/10.1016/j.ijintrel.2006.06.005>
- Lipkus, I. (1991). The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences*, 12(11), 1171–1178. [https://doi.org/10.1016/0191-8869\(91\)90081-1](https://doi.org/10.1016/0191-8869(91)90081-1)

References

- Liu, Y., Fu, Q., & Fu, X. (2009). The interaction between cognition and emotion. *Chinese Science Bulletin*, 54(22), 4102–4116. <https://doi.org/10.1007/s11434-009-0632-2>
- Liu, S. S., & Johnson, K. F. (2005). The Automatic Country-of-Origin Effects on Brand Judgements. *Journal of Advertising*, 34(1), 87–97. <https://doi.org/10.1080/00913367.2005.10639183>
- Marketmind, 2019. *Limbic(R) Map: A Short Introduction*.
- Marketmind. (2020). *Marketmind*. Marketmind.at. <https://www.marketmind.at/start/>
- Marston, W. M. (1928). *Emotions Of Normal People*. Andesite Press.
- Martin, I. M., & Eroglu, S. (1993). Measuring a multi-dimensional construct: Country image. *Journal of Business Research*, 28(3), 191–210. [https://doi.org/10.1016/0148-2963\(93\)90047-S](https://doi.org/10.1016/0148-2963(93)90047-S)
- Martin, M. M., & Rubin, R. B. (1995). A New Measure of Cognitive Flexibility. *Psychological Reports*, 76(2), 623–626. <https://doi.org/10.2466/pr0.1995.76.2.623>
- Matthes, J., & Wonneberger, A. (2014). The Skeptical Green Consumer Revisited: Testing the Relationship Between Green Consumerism and Skepticism Toward Advertising. *Journal of Advertising*, 43(2), 115–127. <https://doi.org/10.1080/00913367.2013.834804>
- Mazanec, J. A., Crotts, J. C., Gursoy, D., & Lu, L. (2015). Homogeneity versus heterogeneity of cultural values: An item-response theoretical approach applying Hofstede's cultural dimensions in a single nation. *Tourism Management*, 48, 299–304. <https://doi.org/10.1016/j.tourman.2014.11.011>
- McCrae, R. R., Costa, Jr., P. T., & Martin, T. A. (2005). The NEO–PI–3: A More Readable Revised NEO Personality Inventory. *Journal of Personality Assessment*, 84(3), 261–270. https://doi.org/10.1207/s15327752jpa8403_05
- Mohammed, S., & Angell, L. C. (2003). Personality Heterogeneity in Teams. *Small Group Research*, 34(6), 651–677. <https://doi.org/10.1177/1046496403257228>

References

- Motsi, T., & Park, J. E. (2020). National Stereotypes as Antecedents of Country-of-Origin Image: The Role of the Stereotype Content Model. *Journal of International Consumer Marketing*, 32(2), 115–127. <https://doi.org/10.1080/08961530.2019.1653241>
- Onpulson Wirtschaftslexikon. (2009, August 12). *Definition: Disziplin*. Onpulson. <https://www.onpulson.de/lexikon/disziplin/>
- Parameswaran, R., & Pisharodi, R. M. (1994). Facets of Country of Origin Image: An Empirical Assessment. *Journal of Advertising*, 23(1), 43–56. <https://doi.org/10.1080/00913367.1994.10673430>
- Puntoni, S., de Hooze, I. E., & Verbeke, W. J. M. I. (2015). Advertising-Induced Embarrassment. *Journal of Advertising*, 44(1), 71–79. <https://doi.org/10.1080/00913367.2014.935899>
- Putrevu, S., & Lord, K. R. (1994). Comparative and Noncomparative Advertising: Attitudinal Effects under Cognitive and Affective Involvement Conditions. *Journal of Advertising*, 23(2), 77–91. <https://doi.org/10.1080/00913367.1994.10673443>
- Rijsdijk, S. A., Hultink, E. J., & Diamantopoulos, A. (2007). Product intelligence: its conceptualization, measurement and impact on consumer satisfaction. *Journal of the Academy of Marketing Science*, 35(3), 340–356. <https://doi.org/10.1007/s11747-007-0040-6>
- Rokeach, M. (1973). *The Nature of Human Values*. Amsterdam University Press.
- Rook, D., & Fisher, R. (1995). Normative Influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22(3), 305–313. Retrieved July 15, 2020, from www.jstor.org/stable/2489616
- Roth, K. P., & Diamantopoulos, A. (2009). Advancing the country image construct. *Journal of Business Research*, 62(7), 726–740. <https://doi.org/10.1016/j.jbusres.2008.05.014>
- Rubin, M., Milanov, M., & Paolini, S. (2016). Uncovering the diverse cultural bases of social identity: Ingroup ties predict self-stereotyping among individualists but not among collectivists. *Asian Journal of Social Psychology*, 19(3), 225–234. <https://doi.org/10.1111/ajsp.12137>

References

- Samiee, S. (2010). Advancing the country image construct — A commentary essay. *Journal of Business Research*, 63(4), 442–445. <https://doi.org/10.1016/j.jbusres.2008.12.012>
- Santander. (2020, September). *Austria: Reaching the Consumer*. Santander Trade. <https://santandertrade.com/en/portal/analyse-markets/austria/reaching-the-consumers>
- Schwartz, S. H. (1992). Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991a). *Consumption Values and Market Choices*. South-Western Publ. Co.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991b). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. [https://doi.org/10.1016/0148-2963\(91\)90050-8](https://doi.org/10.1016/0148-2963(91)90050-8)
- Sihvonen, J. (2019). Understanding the drivers of consumer–brand identification. *Journal of Brand Management*, 26(5), 583–594. <https://doi.org/10.1057/s41262-018-00149-z>
- Skinner, B. F. (1953). *Science of Human Behavior* (1st ed.) New York: MacMillan.
- Snoj, B., Pisnik Korda, A., & Mumel, D. (2004). The relationships among perceived quality, perceived risk and perceived product value. *Journal of Product & Brand Management*, 13(3), 156–167. <https://doi.org/10.1108/10610420410538050>
- Spears, N., & Singh, S. N. (2004). Measuring Attitude toward the Brand and Purchase Intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53–66. <https://doi.org/10.1080/10641734.2004.10505164>
- Stam, H. J., & Kalmanovitch, T. (1998). E. L. Thorndike and the origins of animal psychology: On the nature of the animal in psychology. *American Psychologist*, 53(10), 1135–1144. <https://doi.org/10.1037/0003-066x.53.10.1135>
- Stevenson, R. J., Case, T. I., Hodgson, D., Porzig-Drummond, R., Barouei, J., & Oaten, M. J. (2009). A scale for measuring hygiene behavior: Development, reliability and validity.

References

American Journal of Infection Control, 37(7), 557–564.

<https://doi.org/10.1016/j.ajic.2009.01.003>

Stokburger-Sauer, N., Ratneshwar, S., & Sen, S. (2012). Drivers of consumer–brand identification. *International Journal of Research in Marketing*, 29(4), 406–418.

<https://doi.org/10.1016/j.ijresmar.2012.06.001>

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/s0022-4359\(01\)00041-0](https://doi.org/10.1016/s0022-4359(01)00041-0)

Trübstein, M. (2012). *Praxishandbuch Immobilieninvestments: Anlagevehikel, Märkte, Strategien in Deutschland und Österreich (German Edition)* (2012th ed.). Gabler Verlag.

Tuškej, U., Golob, U., & Podnar, K. (2013). The role of consumer–brand identification in building brand relationships. *Journal of Business Research*, 66(1), 53–59.

<https://doi.org/10.1016/j.jbusres.2011.07.022>

Unger, L., & Kernan, J. (1983). On the Meaning of Leisure: An Investigation of Some Determinants of the Subjective Experience. *Journal of Consumer Research*, 9(4), 381–392. Retrieved July 16, 2020, from www.jstor.org/stable/2488788

Vauclair, C.-M. (2009). Measuring cultural values at the individual-level: considering morality in cross-cultural value research. *RAM. Revista de Administração Mackenzie*, 10(3), 60–83. <https://doi.org/10.1590/s1678-69712009000300005>

Vinson, D. E., Munson, J. M., & Nakanishi, M. (1977). An Investigation of the Rokeach Value Survey For Consumer Research Applications. *Advances in Consumer Research*, 4, 247–252. <https://www.acrwebsite.org/volumes/9362/volumes/v04/NA-04>

Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude. *Journal of Marketing Research*, 40(3), 310–320. <https://doi.org/10.1509/jmkr.40.3.310.19238>

Walsh, G., Shiu, E., & Hassan, L. M. (2014). Replicating, validating, and reducing the length of the consumer perceived value scale. *Journal of Business Research*, 67(3), 260–267. <https://doi.org/10.1016/j.jbusres.2013.05.012>

References

Wang, J. & Wallendorf, M. (2006). Materialism, Status Signaling, and Product Satisfaction. *Journal of the Academy of Marketing Science*, 34(4), 494–505.

<https://doi.org/10.1177/0092070306289291>

Warren, C., & Campbell, M. C. (2014). What Makes Things Cool? How Autonomy Influences Perceived Coolness. *Journal of Consumer Research*, 41(2), 543–563.

<https://doi.org/10.1086/676680>

Warshaw, P. R., & Davis, F. D. (1985). Disentangling behavioral intention and behavioral expectation. *Journal of Experimental Social Psychology*, 21(3), 213–228.

[https://doi.org/10.1016/0022-1031\(85\)90017-4](https://doi.org/10.1016/0022-1031(85)90017-4)

Wikiquote. (2020a, January 27). *Antoine de Saint Exupéry*.

https://en.wikiquote.org/wiki/Antoine_de_Saint_Exup%C3%A9ry

Wuensch, K. L. (2017, November). *Transforming to Reduce Negative Skewness*.

[Http://Core.Ecu.Edu/Psyc/Wuenschk/Klw.Htm](http://Core.Ecu.Edu/Psyc/Wuenschk/Klw.Htm).

<http://core.ecu.edu/psyc/wuenschk/StatHelp/NegSkew.pdf>

Xie, C., Bagozzi, R. P., & Grønhaug, K. (2014). The role of moral emotions and individual differences in consumer responses to corporate green and non-green actions. *Journal of the Academy of Marketing Science*, 43(3), 333–356. <https://doi.org/10.1007/s11747-014-0394-5>

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2.

<https://doi.org/10.2307/1251446>

8 Appendices

8.1 German Abstract

Ziel der Masterarbeit ist es, die Limbic® Map zu testen, ein Multiscience-Modell, welches entwickelt wurde, um die Persönlichkeit von Individuen und Gruppen auf der Basis von drei Dimensionen, Stimulanz, Balance und Dominanz, zu messen. Die Masterarbeit wird überprüfen, ob die Limbic® Map ein geeignetes Model zur Vorhersage von Kaufabsichten und anderen Einflusskriterien, wie beispielsweise die Identifikation mit dem eigenen Land und dem wahrgenommenen Wert, ist. Als Vergleichsmodel dient das Stereotype Content Model (SCM).

Im ersten Teil wird auf die Basis des Limbic® Konzepts und jene der einzelnen Werte eingegangen. Der zweite Teil überprüft die analytische Funktion der Limbic® Map anhand eines Fragebogens. Hier wird Österreich als Marke anhand der Werte der Limbic® Map bewertet. Mit Hilfe einer Hauptkomponentenanalyse werden Dimensionen geschaffen, welche die Wahrnehmung der österreichischen Persönlichkeit widerspiegeln sollen. In das Model für die Messung von Auswirkungen auf das Kaufverhalten werden schrittweise die Kontrollvariablen, die beiden Dimensionen Wärme und Kompetenz des SCM und die österreichischen Dimensionen inkludiert. Bei jedem Schritt werde die Verbesserte erklärte Varianz und signifikante Verhältnisse geprüft.

Die Ergebnisse zeigen, dass die österreichischen Dimensionen mehr Varianz erklärt als die Kontrollvariablen und mehr als die Variablen des SCM. Jene österreichischen Dimensionen wirken sich indirekt auf die Kaufabsichten über die Einflussfaktoren Identifikation mit dem Land und wahrgenommener funktionaler Wert aus. Darüber hinaus wurde die wissenschaftliche Relevanz des SCM erneut nachgewiesen und auch direkte Auswirkungen auf Kaufabsichten von österreichischen Produkten gemessen.

Es besteht Potential für die Verwendung der Limbic® Map unter bestimmten Voraussetzungen. Die Interpretation der Werte kann sich bei Anwendung in verschiedenen Kulturen unterscheiden, weshalb dies ein ausreichendes Verständnis der Werte je nach Kontext erfordert. Das SCM bietet eine bessere Vergleichbarkeit von Gruppen über verschiedene Anwendungen, da anhand zweier standardisierter Dimensionen gemessen wird. Die Verwendung der Limbic® Map hingegen bietet Flexibilität und Einzigartigkeit mit der

Möglichkeit, eine oder mehr einzigartige Dimensionen aus der gewünschten Stichprobe zu erstellen.

Keywords: *Limbic® Map, Stereotype Content Model, Selbst-stereotypisierung, Persönlichkeit, Kaufabsichten, Identifikation mit dem Land, Werte der Karte*

8.2 Questionnaire (German)

Die nachfolgende Studie wird vom Lehrstuhl für Internationales Marketing der Universität Wien durchgeführt. Wir sind vor allem an Ihrer persönlichen Meinung interessiert. Das Ausfüllen des Fragebogens wird 10-15 Minuten Ihrer Zeit in Anspruch nehmen. Bitte beachten Sie:

- Es ist wichtig, dass Sie sich die Fragen genau durchlesen und den Angaben genau folgen.
- Es gibt keine falschen oder richtigen Antworten. Wir sind nur an Ihrer persönlichen Meinung interessiert.
- Es gibt kein Zeitlimit für diesen Fragebogen. Bitte nehmen Sie sich Zeit beim Ausfüllen.
- Dieser Fragebogen ist anonym. Alle angegebenen Informationen werden streng vertraulich behandelt.

Vielen Dank für Ihre Teilnahme!

1. Haben Sie in den letzten 12 Monaten Produkte aus Österreich persönlich gekauft?

- ☐ Ja ☐ Nein

2. Haben Sie in den letzten 12 Monaten Produkte aus Wien persönlich gekauft?

- ☐ Ja ☐ Nein

3. In welchem Ausmaß identifizieren Sie sich persönlich mit Österreich und Wien?

Bitte kreuzen Sie die entsprechende Nummer auf einer Skala von: 1 = "stimme überhaupt nicht zu" bis 7 = "stimme voll und ganz zu" an. Bitte tun Sie dies **separat für die beiden Kategorien** „Österreich“ und „Wien“.

Österreich

1 2 3 4 5 6 7

Ich empfinde ein starkes Zugehörigkeitsgefühl zu

Wien

1 2 3 4 5 6 7

Appendices

1 2 3 4 5 6 7	Ich identifiziere mich stark mit ...	1 2 3 4 5 6 7
1 2 3 4 5 6 7	... verkörpert das, woran ich glaube.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	... ist wie ein Teil von mir.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	... hat eine große persönliche Bedeutung für mich.	1 2 3 4 5 6 7

4. In welchem Ausmaß stimmen Sie zu bzw. nicht zu, dass Produkte aus Österreich und Wien folgende Eigenschaften haben?

Bitte kreuzen Sie die entsprechende Nummer auf einer Skala von: 1 = "stimme überhaupt nicht zu" bis 7 = "stimme voll und ganz zu" an. Bitte tun Sie dies **separat für die beiden Kategorien** „Österreich“ und „Wien“.

Österreich		Wien
1 2 3 4 5 6 7	Produkte aus ... haben eine konsistente Qualität.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... sind gut gemacht.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... haben einen akzeptablen Qualitätsstandard.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... halten ihre Versprechungen.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... erbringen eine zuverlässige Leistung.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... haben einen vernünftigen Preis.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... haben ein gutes Preis-Leistungs-Verhältnis	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... sind für ihren Preis gute Produkte.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Produkte aus ... sind preiswert.	1 2 3 4 5 6 7

5. Wie hoch denken Sie ist der allgemeine Preisunterschied zwischen Produkten aus Wien und Produkten aus Österreich?

Bitte wählen Sie eine Aussage und bewerten Sie diese mit einer Angabe nach % auf einer Skala von 1% bis 100%.

Produkte aus Wien sind **günstiger** und zwar um ca.

_____ %

oder

Produkte aus Wien sind **teurer** und zwar um ca.

_____ %

6. Was beeinflusst Ihre Entscheidung beim Kauf von Produkten stärker?

Appendices

Bitte kreuzen Sie die entsprechende Nummer an.

hohe Qualität	1 2 3 4 5 6 7	günstige Preise
Genuss	1 2 3 4 5 6 7	Schnelligkeit
regionale Herkunft	1 2 3 4 5 6 7	Vielfalt / große Auswahl auch an internationalen Produkten
Saisonalität	1 2 3 4 5 6 7	Produkte jederzeit zur Verfügung zu haben
kurze Transportwege	1 2 3 4 5 6 7	große Auswahl, z.B. auch an ausländischen Produkten

7. In welchem Ausmaß stimmen Sie den folgenden Aussagen zu bzw. nicht zu:

Bitte kreuzen Sie die entsprechende Nummer auf einer Skala von: 1 = "stimme überhaupt nicht zu" bis 7 = "stimme voll und ganz zu" an. Bitte tun Sie **dies separat für die beiden Kategorien** „Österreich“ und „Wien“.

Österreich		Wien
1 2 3 4 5 6 7	Es ist sehr wahrscheinlich, dass ich Produkte aus ... in der Zukunft kaufen werde.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Ich werde das nächste Mal Produkte aus ... kaufen, wenn ich ein Produkt brauche.	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Ich werde definitiv Produkte aus ... in der Zukunft ausprobieren.	1 2 3 4 5 6 7

8. Ich glaube, die meisten Menschen in Österreich sehen Österreich als:

Bitte kreuzen Sie die entsprechende Nummer an.

nicht warm	1 2 3 4 5 6 7	warm
nicht fähig	1 2 3 4 5 6 7	fähig
nicht herzlich	1 2 3 4 5 6 7	herzlich
nicht effizient	1 2 3 4 5 6 7	effizient
nicht kompetent	1 2 3 4 5 6 7	kompetent
nicht freundlich	1 2 3 4 5 6 7	freundlich

Appendices

nicht nett	1 2 3 4 5 6 7	nett
nicht intelligent	1 2 3 4 5 6 7	intelligent
nicht gutmütig	1 2 3 4 5 6 7	gutmütig

9. Bewerten Sie die nachfolgenden Begriffe ganz spontan und aus dem Bauch heraus – ohne viel zu überlegen.

Bitte kreuzen Sie die entsprechende Nummer auf einer Skala von: 1 = "trifft überhaupt nicht zu" bis 5 = "trifft vollkommen zu" an. Bitte tun Sie dies **separat für die beiden Kategorien** „Österreich“ und „Wien“.

Zutreffend auf: Österreich

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

Geselligkeit

Leistung

Qualität

Macht

Träumen

Freiheit

Risikofreude

Geborgenheit

Rebellion

Status

Fleiß

Spaß

Sicherheit

Sauberkeit

Stolz

Toleranz

Spontaneität

Extravaganz

Tradition

Effizienz

Zutreffend auf: Wien

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

1 2 3 4 5 6 7

Appendices

1 2 3 4 5 6 7	Ehre	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Flexibilität	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Impulsivität	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Kunst	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Verlässlichkeit	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Gerechtigkeit	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Autonomie	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Ordnung	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Hygiene	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Erfolg	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Individualismus	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Offenheit	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Natur	1 2 3 4 5 6 7

10. Ich glaube, die meisten Menschen in Österreich sehen Wien als:

Bitte kreuzen Sie die entsprechende Nummer an.

nicht kompetent	1 2 3 4 5 6 7	kompetent
nicht fähig	1 2 3 4 5 6 7	fähig
nicht intelligent	1 2 3 4 5 6 7	intelligent
nicht effizient	1 2 3 4 5 6 7	effizient
nicht warm	1 2 3 4 5 6 7	warm
nicht freundlich	1 2 3 4 5 6 7	freundlich
nicht nett	1 2 3 4 5 6 7	nett
nicht gutmütig	1 2 3 4 5 6 7	Gutmütig
nicht herzlich	1 2 3 4 5 6 7	Herzlich

11. Demographische Informationen

Geschlecht	☐ Weiblich	☐ Männlich
Nationalität	☐ Österreich	☐ Andere: _____

Appendices

In Österreich wohne ich schon _____ Jahre

Nationalität ☐ Stadt ☐ Ländlicher Raum

persönliches Einkommen (€/Monat) ☐ weniger als 800 ☐ 800-1499 ☐ 1500-2500
☐ mehr als 2500

Alter _____ Jahre

Höchste abgeschlossene Ausbildung ☐ Pflichtschule ☐ Lehrabschluss ☐ Matura
☐ Universität/FH

12. Soziodemographische Information

Wie vertraut sind Sie mit den sozialen Medien (Facebook, Instagram, ...)?

	Überhaupt nicht vertraut				Vollkommen vertraut		
	1	2	3	4	5	6	7

13. Sind Sie persönlich jemand, der gerne Produkte oder Dienstleistungen an Freunde, Familie oder Bekannte weiterempfiehlt?

☐ Ja ☐ Nein

8.3 SPSS Outputs

Principal Component Analysis (after reduction of cross-loadings)

Correlation
Matrix^a

a. Determinant = ,004

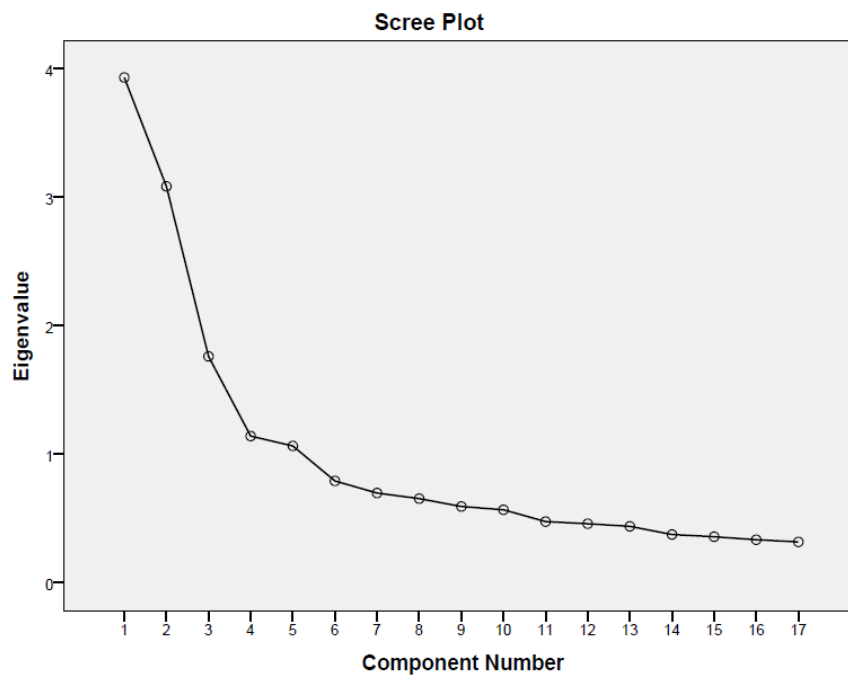
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.804
Bartlett's Test of Sphericity	Approx. Chi-Square	2068.365
	df	136
	Sig.	.000

Appendices

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.932	23.132	23.132	3.932	23.132	23.132	3.459	20.347	20.347
2	3.084	18.141	41.273	3.084	18.141	41.273	2.743	16.136	36.483
3	1.759	10.348	51.621	1.759	10.348	51.621	1.869	10.993	47.476
4	1.139	6.697	58.319	1.139	6.697	58.319	1.497	8.807	56.283
5	1.062	6.246	64.564	1.062	6.246	64.564	1.408	8.281	64.564
6	.789	4.641	69.205						
7	.695	4.087	73.292						
8	.651	3.831	77.124						
9	.590	3.471	80.594						
10	.564	3.320	83.914						
11	.472	2.779	86.693						
12	.456	2.681	89.373						
13	.435	2.561	91.934						
14	.372	2.186	94.120						
15	.354	2.085	96.206						
16	.331	1.948	98.153						
17	.314	1.847	100.000						

Extraction Method: Principal Component Analysis.



Appendices

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
Austria: Geselligkeit					.816
Austria: Verlässlichkeit		.645	.311		
Austria: Qualität			.833		
Austria: Sauberkeit			.834		
Austria: Gerechtigkeit		.650			
Austria: Ordnung		.828			
Austria: Hygiene		.777			
Austria: Macht	.668		.348		
Austria: Stolz			.334	.801	
Austria: Autonomie	.361	.681			
Austria: Ehre				.853	
Austria: Rebellion	.806				
Austria: Spontaneität	.655				
Austria: Impulsivität	.676				
Austria: Risikofreude	.783				
Austria: Spaß					.706
Austria: Extravaganz	.745				

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

T-test

Warmth and competence

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Composite Warmth	4.8153	380	1.12420	.05767
Composite Competence	5.2553	380	.90584	.04647

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Composite Warmth & Composite Competence	380	.422	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Composite Warmth - Composite Competence	-.44000	1.10676	.05678	-.55163	-.32837	-7.750	379	.000

Multiple Linear Regression

Control Variables: Purchase Intentions

Appendices

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.219 ^a	.048	.028	.17740	.048	2.467	7	344	.018	1.913

a. Predictors: (Constant), Word of mouth, Income, Education, Gender, Residency, Social media, Age

b. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.543	7	.078	2.467	.018 ^b
	Residual	10.826	344	.031		
	Total	11.369	351			

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

b. Predictors: (Constant), Word of mouth, Income, Education, Gender, Residency, Social media, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.517	.076		6.783	.000	.367	.667					
	Gender	.049	.019	.135	2.516	.012	.011	.087	.145	.134	.132	.955	1.047
	Residency	-.039	.023	-.099	-1.712	.088	-.085	.006	-.114	-.092	-.090	.835	1.198
	Income	-.007	.010	-.042	-.673	.501	-.028	.014	-.024	-.036	-.035	.727	1.376
	Age	.001	.001	.119	1.606	.109	.000	.003	.081	.086	.085	.504	1.985
	Education	-.004	.013	-.018	-.304	.761	-.030	.022	-.064	-.016	-.016	.800	1.250
	Social media	.010	.007	.095	1.465	.144	-.003	.022	.020	.079	.077	.658	1.519
	Word of mouth	.022	.025	.047	.884	.377	-.027	.071	.068	.048	.047	.967	1.034

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

Control Variables: Purchase Influence

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.326 ^a	.106	.088	1.14047	.106	5.826	7	344	.000	1.904

a. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

b. Dependent Variable: Composite Purchase Influence

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.044	7	7.578	5.826	.000 ^b
	Residual	447.427	344	1.301		
	Total	500.471	351			

a. Dependent Variable: Composite Purchase Influence

b. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.279	.492		8.702	.000	3.312	5.246					
	Gender	-.388	.125	-.162	-3.109	.002	-.634	-.143	-.183	-.165	-.158	.957	1.045
	Residency	.301	.148	.113	2.035	.043	.010	.592	.138	.109	.104	.840	1.191
	Income	.079	.067	.070	1.174	.241	-.053	.211	-.025	.063	.060	.728	1.373
	Age	-.015	.006	-.188	-2.614	.009	-.027	-.004	-.185	-.140	-.133	.502	1.990
	Education	-.211	.086	-.140	-2.460	.014	-.380	-.042	-.025	-.131	-.125	.799	1.251
	Social media	.046	.042	.069	1.095	.274	-.037	.128	.136	.059	.056	.651	1.537
	Word of mouth	-.386	.158	-.127	-2.439	.015	-.698	-.075	-.117	-.130	-.124	.964	1.037

a. Dependent Variable: Composite Purchase Influence

Appendices

Control Variables: CBI for Austria

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.430 ^a	.185	.169	1.20024	.185	11.110	7	342	.000	1.799

a. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

b. Dependent Variable: Composite Customer Identification with Austria

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112.039	7	16.006	11.110	.000 ^b
	Residual	492.680	342	1.441		
	Total	604.719	349			

a. Dependent Variable: Composite Customer Identification with Austria

b. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.466	.516		8.648	.000	3.450	5.482					
	Gender	.244	.132	.092	1.848	.065	-.016	.503	.070	.099	.090	.956	1.046
	Residency	-.656	.155	-.225	-4.220	.000	-.962	-.350	-.305	-.222	-.206	.837	1.195
	Income	.160	.071	.129	2.256	.025	.020	.299	.179	.121	.110	.724	1.382
	Age	.015	.006	.176	2.556	.011	.004	.027	.270	.137	.125	.502	1.993
	Education	-.228	.090	-.137	-2.518	.012	-.406	-.050	-.235	-.135	-.123	.800	1.250
	Social media	.107	.044	.146	2.429	.016	.020	.194	-.061	.130	.119	.655	1.526
	Word of mouth	.376	.167	.112	2.253	.025	.048	.704	.144	.121	.110	.964	1.037

a. Dependent Variable: Composite Customer Identification with Austria

Control Variables: Perceived Functional Value

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.241 ^a	.058	.039	.16065	.058	3.027	7	344	.004	1.882

a. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

b. Dependent Variable: RE_REFLECTED_Log10_PFV

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.547	7	.078	3.027	.004 ^b
	Residual	8.878	344	.026		
	Total	9.425	351			

a. Dependent Variable: RE_REFLECTED_Log10_PFV

b. Predictors: (Constant), Word of mouth, Age, Gender, Residency, Education, Income, Social media

Appendices

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.656	.069		9.500	.000	.520	.792					
	Gender	-.014	.018	-.043	-.807	.420	-.049	.020	-.043	-.043	-.042	.957	1.045
	Residency	-.032	.021	-.087	-1.523	.129	-.073	.009	-.101	-.082	-.080	.837	1.195
	Income	-.001	.009	-.007	-.110	.913	-.020	.018	-.047	-.006	-.006	.725	1.380
	Age	-.001	.001	-.072	-.977	.329	-.002	.001	-.026	-.053	-.051	.502	1.992
	Education	-.038	.012	-.184	-3.153	.002	-.062	-.014	-.183	-.168	-.165	.800	1.250
	Social media	.006	.006	.071	1.103	.271	-.005	.018	.059	.059	.058	.655	1.526
	Word of mouth	.031	.022	.075	1.404	.161	-.013	.075	.096	.075	.073	.964	1.037

a. Dependent Variable: RE_REFLECTED_Log10_PFV

Control Variables: Perceived Price Value

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.240 ^a	.058	.039	.99800	.058	3.002	7	343	.005	1.805

a. Predictors: (Constant), Word of mouth, Income, Education, Gender, Residency, Social media, Age

b. Dependent Variable: Composite Perceived Price Value

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.932	7	2.990	3.002	.005 ^b
	Residual	341.629	343	.996		
	Total	362.561	350			

a. Dependent Variable: Composite Perceived Price Value

b. Predictors: (Constant), Word of mouth, Income, Education, Gender, Residency, Social media, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.089	.429		11.859	.000	4.245	5.933					
	Gender	.146	.109	.072	1.336	.183	-.069	.361	.087	.072	.070	.958	1.043
	Residency	.007	.130	.003	.052	.958	-.249	.262	-.051	.003	.003	.834	1.199
	Income	-.140	.059	-.147	-2.381	.018	-.257	-.024	-.116	-.127	-.125	.725	1.380
	Age	.009	.005	.139	1.881	.061	.000	.019	.070	.101	.099	.501	1.997
	Education	-.176	.075	-.137	-2.344	.020	-.324	-.028	-.166	-.126	-.123	.800	1.250
	Social media	.041	.037	.072	1.119	.264	-.031	.113	.012	.060	.059	.655	1.526
	Word of mouth	.067	.139	.025	.478	.633	-.208	.341	.053	.026	.025	.966	1.035

a. Dependent Variable: Composite Perceived Price Value

Control Variables, Warmth, Competence: Purchase Intentions

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.269 ^a	.072	.048	.17475	.072	2.941	9	339	.002	1.909

a. Predictors: (Constant), Composite Competence, Social media, Gender, Word of mouth, Education, Income, Residency, Composite Warmth, Age

b. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

Appendices

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.808	9	.090	2.941	.002 ^b
	Residual	10.353	339	.031		
	Total	11.161	348			

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

b. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.360	.095		3.797	.000	.173	.546					
	Gender	.048	.019	.134	2.503	.013	.010	.086	.138	.135	.131	.954	1.048
	Residency	-.032	.023	-.079	-1.352	.177	-.078	.014	-.129	-.073	-.071	.794	1.259
	Income	-.007	.010	-.041	-.665	.507	-.027	.014	-.013	-.036	-.035	.727	1.376
	Age	.001	.001	.111	1.492	.137	.000	.003	.095	.081	.078	.493	2.029
	Education	-.003	.013	-.012	-.203	.839	-.029	.023	-.066	-.011	-.011	.790	1.265
	Social media	.008	.006	.079	1.225	.222	-.005	.021	.015	.066	.064	.649	1.540
	Word of mouth	.021	.025	.045	.853	.394	-.027	.069	.070	.046	.045	.968	1.033
	Composite Warmth	.003	.010	.021	.344	.731	-.016	.022	.118	.019	.018	.739	1.354
	Composite Competence	.028	.011	.143	2.448	.015	.005	.050	.175	.132	.128	.806	1.241

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

Control Variables, Warmth, Competence: Purchase Influence

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.326 ^a	.106	.083	1.13511	.106	4.483	9	339	.000	1.940

a. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

b. Dependent Variable: Composite Purchase Influence

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.990	9	5.777	4.483	.000 ^b
	Residual	436.795	339	1.288		
	Total	488.785	348			

a. Dependent Variable: Composite Purchase Influence

b. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.071	.617		6.602	.000	2.858	5.284					
	Gender	-.389	.125	-.163	-3.110	.002	-.635	-.143	-.185	-.167	-.160	.956	1.046
	Residency	.322	.152	.121	2.114	.035	.022	.621	.142	.114	.109	.799	1.252
	Income	.066	.067	.059	.985	.325	-.066	.199	-.027	.053	.051	.728	1.373
	Age	-.014	.006	-.172	-2.346	.020	-.025	-.002	-.177	-.126	-.120	.491	2.037
	Education	-.222	.086	-.149	-2.576	.010	-.391	-.052	-.033	-.139	-.132	.790	1.267
	Social media	.042	.042	.064	1.000	.318	-.041	.125	.134	.054	.051	.642	1.557
	Word of mouth	-.350	.159	-.115	-2.206	.028	-.662	-.038	-.103	-.119	-.113	.966	1.035
	Composite Warmth	-.048	.062	-.047	-.778	.437	-.171	.074	-.070	-.042	-.040	.737	1.357
	Composite Competence	.082	.073	.064	1.120	.263	-.062	.227	.021	.061	.058	.807	1.239

a. Dependent Variable: Composite Purchase Influence

Appendices

Control Variables, Warmth, Competence: CBI for Austria

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.508 ^a	.258	.238	1.14956	.258	13.034	9	337	.000	1.766

a. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

b. Dependent Variable: Composite Customer Identification with Austria

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	155.021	9	17.225	13.034	.000 ^b
	Residual	445.341	337	1.321		
	Total	600.362	346			

a. Dependent Variable: Composite Customer Identification with Austria

b. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.409	.626		3.849	.000	1.178	3.641					
	Gender	.289	.127	.109	2.273	.024	.039	.538	.078	.123	.107	.955	1.047
	Residency	-.438	.154	-.149	-2.842	.005	-.740	-.135	-.298	-.153	-.133	.795	1.258
	Income	.168	.068	.135	2.455	.015	.033	.302	.172	.133	.115	.724	1.382
	Age	.010	.006	.114	1.708	.089	-.002	.022	.265	.093	.080	.491	2.038
	Education	-.191	.087	-.116	-2.192	.029	-.363	-.020	-.237	-.119	-.103	.791	1.265
	Social media	.094	.043	.128	2.203	.028	.010	.177	-.058	.119	.103	.647	1.545
	Word of mouth	.365	.161	.108	2.270	.024	.049	.681	.148	.123	.107	.966	1.035
	Composite Warmth	.294	.063	.255	4.667	.000	.170	.418	.378	.246	.219	.739	1.353
	Composite Competence	.111	.075	.078	1.487	.138	-.036	.258	.245	.081	.070	.807	1.239

a. Dependent Variable: Composite Customer Identification with Austria

Control Variables, Warmth, Competence: Perceived Functional Value

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.414 ^a	.171	.149	.15116	.171	7.770	9	339	.000	1.851

a. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

b. Dependent Variable: RE_REFLECTED_Log10_PFV

Appendices

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.598	9	.178	7.770	.000 ^b
	Residual	7.745	339	.023		
	Total	9.343	348			

a. Dependent Variable: RE_REFLECTED_Log10_PFV

b. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.318	.082		3.877	.000	.157	.479					
	Gender	-.011	.017	-.034	-.667	.505	-.044	.022	-.050	-.036	-.033	.956	1.046
	Residency	-.007	.020	-.019	-.344	.731	-.047	.033	-.113	-.019	-.017	.797	1.255
	Income	.000	.009	.002	.033	.973	-.017	.018	-.039	.002	.002	.725	1.380
	Age	-.001	.001	-.137	-1.939	.053	-.003	.000	-.024	-.105	-.096	.491	2.036
	Education	-.033	.011	-.162	-2.918	.004	-.056	-.011	-.182	-.157	-.144	.790	1.265
	Social media	.003	.006	.036	.587	.558	-.008	.014	.058	.032	.029	.647	1.546
	Word of mouth	.024	.021	.057	1.133	.258	-.018	.066	.088	.061	.056	.966	1.036
	Composite Warmth	.026	.008	.178	3.099	.002	.009	.042	.283	.166	.153	.738	1.355
	Composite Competence	.043	.010	.241	4.369	.000	.024	.062	.320	.231	.216	.805	1.242

a. Dependent Variable: RE_REFLECTED_Log10_PFV

Control Variables, Warmth, Competence: Perceived Price Value

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.428 ^a	.183	.161	.93303	.183	8.444	9	339	.000	1.930

a. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

b. Dependent Variable: Composite Perceived Price Value

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.160	9	7.351	8.444	.000 ^b
	Residual	295.116	339	.871		
	Total	361.276	348			

a. Dependent Variable: Composite Perceived Price Value

b. Predictors: (Constant), Composite Competence, Social media , Gender, Word of mouth, Education, Income, Residency , Composite Warmth, Age

Appendices

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	2.926	.506		5.780	.000	1.930	3.922					
Gender	.179	.103	.087	1.742	.082	-.023	.381	.087	.094	.086	.956	1.046
Residency	.205	.125	.090	1.645	.101	-.040	.451	-.050	.089	.081	.797	1.255
Income	-.138	.055	-.144	-2.495	.013	-.247	-.029	-.121	-.134	-.122	.725	1.380
Age	.004	.005	.061	.868	.386	-.005	.014	.067	.047	.043	.491	2.036
Education	-.140	.071	-.109	-1.981	.048	-.279	-.001	-.164	-.107	-.097	.790	1.265
Social media	.020	.034	.036	.582	.561	-.048	.088	.010	.032	.029	.647	1.546
Word of mouth	.035	.130	.013	.266	.790	-.222	.291	.051	.014	.013	.966	1.036
Composite Warmth	.237	.051	.265	4.646	.000	.137	.338	.337	.245	.228	.738	1.355
Composite Competence	.200	.060	.181	3.304	.001	.081	.319	.277	.177	.162	.805	1.242

a. Dependent Variable: Composite Perceived Price Value

Control Variables, Warmth, Competence, Limbic® Dimensions: Purchase Intentions

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.277 ^a	.077	.044	.17513	.077	2.325	12	336	.007	1.898

a. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

b. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.856	12	.071	2.325	.007 ^b
	Residual	10.305	336	.031		
	Total	11.161	348			

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

b. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

Appendices

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.288	.114		2.524	.012	.064	.513					
	Gender	.049	.019	.137	2.529	.012	.011	.088	.138	.137	.133	.935	1.069
	Residency	-.029	.024	-.072	-1.216	.225	-.075	.018	-.129	-.066	-.064	.784	1.276
	Income	-.006	.010	-.036	-.585	.559	-.027	.014	-.013	-.032	-.031	.722	1.385
	Age	.001	.001	.105	1.391	.165	-.001	.003	.095	.076	.073	.484	2.066
	Education	-.002	.013	-.011	-.178	.859	-.029	.024	-.066	-.010	-.009	.780	1.282
	Social media	.007	.007	.070	1.071	.285	-.006	.020	.015	.058	.056	.639	1.565
	Word of mouth	.019	.025	.040	.744	.458	-.030	.067	.070	.041	.039	.945	1.058
	Composite Warmth	.001	.010	.009	.139	.889	-.018	.021	.118	.008	.007	.697	1.435
	Composite Competence	.023	.012	.118	1.901	.058	-.001	.046	.175	.103	.100	.718	1.392
	DIMENSION1_RED	.005	.013	.020	.361	.718	-.021	.031	.088	.020	.019	.857	1.167
	DIMENSION2_YELLOW	.017	.016	.061	1.032	.303	-.015	.049	.132	.056	.054	.789	1.267
	DIMENSION3_GREEN	.007	.015	.026	.460	.646	-.023	.037	.079	.025	.024	.876	1.142

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

Control Variables, Warmth, Competence, Limbic® Dimensions: Purchase Influence

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.331 ^a	.110	.078	1.13796	.110	3.454	12	336	.000	1.936

a. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

b. Dependent Variable: Composite Purchase Influence

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.680	12	4.473	3.454	.000 ^b
	Residual	435.105	336	1.295		
	Total	488.785	348			

a. Dependent Variable: Composite Purchase Influence

b. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.037	.744		5.424	.000	2.573	5.501					
	Gender	-.394	.127	-.166	-3.114	.002	-.643	-.145	-.185	-.167	-.160	.936	1.068
	Residency	.311	.153	.117	2.026	.044	.009	.613	.142	.110	.104	.789	1.268
	Income	.068	.068	.061	1.004	.316	-.065	.201	-.027	.055	.052	.723	1.382
	Age	-.013	.006	-.162	-2.182	.030	-.025	-.001	-.177	-.118	-.112	.482	2.074
	Education	-.233	.087	-.156	-2.678	.008	-.404	-.062	-.033	-.145	-.138	.779	1.284
	Social media	.045	.043	.068	1.051	.294	-.039	.128	.134	.057	.054	.632	1.581
	Word of mouth	-.364	.161	-.120	-2.259	.024	-.680	-.047	-.103	-.122	-.116	.944	1.059
	Composite Warmth	-.035	.064	-.034	-.552	.581	-.162	.091	-.070	-.030	-.028	.695	1.438
	Composite Competence	.081	.078	.063	1.035	.301	-.073	.234	.021	.056	.053	.720	1.389
	DIMENSION1_RED	-.072	.087	-.046	-.834	.405	-.242	.098	-.077	-.045	-.043	.857	1.166
	DIMENSION2_YELLOW	-.026	.106	-.014	-.245	.806	-.234	.182	-.009	-.013	-.013	.792	1.263
	DIMENSION3_GREEN	.071	.098	.040	.724	.470	-.122	.263	.035	.039	.037	.876	1.141

a. Dependent Variable: Composite Purchase Influence

Control Variables, Warmth, Competence, Limbic® Dimensions: CBI for Austria

Appendices

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.557 ^a	.310	.285	1.11351	.310	12.517	12	334	.000	1.800

a. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

b. Dependent Variable: Composite Customer Identification with Austria

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.235	12	15.520	12.517	.000 ^b
	Residual	414.127	334	1.240		
	Total	600.362	346			

a. Dependent Variable: Composite Customer Identification with Austria

b. Predictors: (Constant), DIMENSION3_GREEN, Residency, Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media, Composite Competence, Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.563	.731		.771	.441	-.874	2.001					
	Gender	.303	.124	.114	2.436	.015	.058	.547	.078	.132	.111	.936	1.069
	Residency	-.359	.150	-.123	-2.391	.017	-.654	-.064	-.298	-.130	-.109	.785	1.274
	Income	.183	.066	.148	2.753	.006	.052	.313	.172	.149	.125	.719	1.391
	Age	.008	.006	.086	1.313	.190	-.004	.019	.265	.072	.060	.482	2.076
	Education	-.169	.085	-.102	-1.981	.048	-.336	-.001	-.237	-.108	-.090	.780	1.283
	Social media	.069	.042	.094	1.651	.100	-.013	.150	-.058	.090	.075	.637	1.569
	Word of mouth	.311	.158	.092	1.973	.049	.001	.621	.148	.107	.090	.944	1.059
	Composite Warmth	.230	.063	.200	3.670	.000	.107	.354	.378	.197	.167	.697	1.435
	Composite Competence	-.006	.077	-.004	-.076	.939	-.156	.145	.245	-.004	-.003	.722	1.386
	DIMENSION1_RED	.232	.085	.134	2.734	.007	.065	.399	.289	.148	.124	.856	1.168
	DIMENSION2_YELLOW	.394	.104	.194	3.798	.000	.190	.598	.319	.203	.173	.791	1.264
	DIMENSION3_GREEN	.143	.096	.073	1.497	.135	-.045	.332	.122	.082	.068	.879	1.138

a. Dependent Variable: Composite Customer Identification with Austria

Control Variables, Warmth, Competence, Limbic® Dimensions: Perceived Functional Value

Appendices

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.515 ^a	.265	.239	.14294	.265	10.106	12	336	.000	1.917

a. Predictors: (Constant), DIMENSION3_GREEN, Residency , Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media , Composite Competence, Composite Warmth, Age

b. Dependent Variable: RE_REFLECTED_Log10_PFV

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.478	12	.206	10.106	.000 ^b
	Residual	6.865	336	.020		
	Total	9.343	348			

a. Dependent Variable: RE_REFLECTED_Log10_PFV

b. Predictors: (Constant), DIMENSION3_GREEN, Residency , Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media , Composite Competence, Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.022	.093		-.238	.812	-.206	.161					
	Gender	-.012	.016	-.037	-.771	.441	-.044	.019	-.050	-.042	-.036	.937	1.067
	Residency	.003	.019	.008	.156	.876	-.035	.041	-.113	.009	.007	.786	1.272
	Income	.003	.009	.018	.327	.744	-.014	.020	-.039	.018	.015	.720	1.389
	Age	-.002	.001	-.153	-2.278	.023	-.003	.000	-.024	-.123	-.107	.482	2.074
	Education	-.032	.011	-.157	-2.973	.003	-.054	-.011	-.182	-.160	-.139	.780	1.282
	Social media	-.001	.005	-.007	-.111	.911	-.011	.010	.058	-.006	-.005	.636	1.571
	Word of mouth	.009	.020	.020	.423	.672	-.031	.048	.088	.023	.020	.944	1.059
	Composite Warmth	.018	.008	.126	2.254	.025	.002	.034	.283	.122	.105	.696	1.436
	Composite Competence	.022	.010	.126	2.284	.023	.003	.042	.320	.124	.107	.719	1.391
	DIMENSION1_RED	.027	.011	.127	2.510	.013	.006	.049	.207	.136	.117	.856	1.168
	DIMENSION2_YELLOW	.050	.013	.196	3.734	.000	.024	.076	.339	.200	.175	.790	1.266
	DIMENSION3_GREEN	.053	.012	.216	4.334	.000	.029	.077	.289	.230	.203	.878	1.139

a. Dependent Variable: RE_REFLECTED_Log10_PFV

Control Variables, Warmth, Competence, Limbic® Dimensions: Perceived Price Value

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.522 ^a	.273	.247	.88423	.273	10.506	12	336	.000	2.014

a. Predictors: (Constant), DIMENSION3_GREEN, Residency , Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media , Composite Competence, Composite Warmth, Age

b. Dependent Variable: Composite Perceived Price Value

Appendices

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98.568	12	8.214	10.506	.000 ^b
	Residual	262.708	336	.782		
	Total	361.276	348			

a. Dependent Variable: Composite Perceived Price Value

b. Predictors: (Constant), DIMENSION3_GREEN, Residency , Gender, Word of mouth, DIMENSION1_RED, Income, DIMENSION2_YELLOW, Education, Social media , Composite Competence, Composite Warmth, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.210	.578		2.094	.037	.074	2.346					
	Gender	.182	.098	.089	1.855	.065	-.011	.376	.087	.101	.086	.937	1.067
	Residency	.282	.119	.124	2.369	.018	.048	.516	-.050	.128	.110	.786	1.272
	Income	-.130	.053	-.136	-2.474	.014	-.234	-.027	-.121	-.134	-.115	.720	1.389
	Age	.001	.005	.019	.277	.782	-.008	.010	.067	.015	.013	.482	2.074
	Education	-.107	.068	-.083	-1.578	.116	-.239	.026	-.164	-.086	-.073	.780	1.282
	Social media	-.007	.033	-.012	-.200	.841	-.071	.058	.010	-.011	-.009	.636	1.571
	Word of mouth	-.014	.125	-.005	-.110	.913	-.260	.232	.051	-.006	-.005	.944	1.059
	Composite Warmth	.165	.050	.184	3.305	.001	.067	.263	.337	.177	.154	.696	1.436
	Composite Competence	.098	.061	.088	1.613	.108	-.021	.217	.277	.088	.075	.719	1.391
	DIMENSION1_RED	.336	.067	.251	4.994	.000	.204	.468	.333	.263	.232	.856	1.168
	DIMENSION2_YELLOW	.311	.082	.198	3.776	.000	.149	.473	.304	.202	.176	.790	1.266
	DIMENSION3_GREEN	.110	.076	.072	1.446	.149	-.040	.259	.139	.079	.067	.878	1.139

a. Dependent Variable: Composite Perceived Price Value

Purchase Influence, CBI, PFV, PPV: Purchase Intentions

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.419 ^a	.175	.148	.16661	.175	6.467	11	335	.000	2.012

a. Predictors: (Constant), Word of mouth, Income, RE_REFLECTED_Log10_PFV, Composite Purchase Influence, Education, Gender, Residency , Social media , Composite Customer Identification with Austria, Composite Perceived Price Value, Age

b. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.975	11	.180	6.467	.000 ^b
	Residual	9.300	335	.028		
	Total	11.274	346			

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED

b. Predictors: (Constant), Word of mouth, Income, RE_REFLECTED_Log10_PFV, Composite Purchase Influence, Education, Gender, Residency , Social media , Composite Customer Identification with Austria, Composite Perceived Price Value, Age

Appendices

Coefficients ^a												
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.503	.095		5.304	.000	.316	.689					
Composite Purchase Influence	-.039	.008	-.257	-4.873	.000	-.055	-.023	-.271	-.257	-.242	.889	1.125
Composite Customer Identification with Austria	.024	.008	.174	2.872	.004	.007	.040	.257	.155	.142	.671	1.490
RE_REFLECTED_Log10_P FV	.240	.071	.218	3.366	.001	.100	.381	.228	.181	.167	.587	1.702
Composite Perceived Price Value	-.015	.011	-.084	-1.308	.192	-.037	.008	.148	-.071	-.065	.592	1.688
Gender	.036	.019	.101	1.936	.054	-.001	.074	.152	.105	.096	.911	1.098
Residency	-.003	.023	-.007	-.128	.898	-.047	.042	-.117	-.007	-.006	.774	1.292
Income	-.011	.010	-.063	-1.061	.290	-.031	.009	-.028	-.058	-.053	.692	1.446
Age	.001	.001	.065	.901	.368	-.001	.003	.080	.049	.045	.472	2.118
Education	-.002	.013	-.007	-.125	.900	-.027	.024	-.065	-.007	-.006	.759	1.317
Social media	.007	.006	.073	1.172	.242	-.005	.020	.018	.064	.058	.642	1.559
Word of mouth	-.009	.024	-.019	-.379	.705	-.056	.038	.063	-.021	-.019	.938	1.066

a. Dependent Variable: Log10_PURCHASE_INT_RE_REFLECTED