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"The emotional influence of compassion and envy on the endowment effect"

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TABLE OF CONTENT

FOREWORD	5
ZUSAMMENFASSUNG	7
ABSTRACT	9
INTRODUCTION	11
The concept of loss aversion	13
Addressing emotional influences on the endowment effect	14
Extended framework: Position-Valence-Hypothesis	16
The emotions compassion and envy	17
Addressing hypotheses and expectations	18
METHOD	20
Participants and design	20
Material	20
Procedure	20
RESULTS	22
Manipulation check	22
Endowment Effect	23
Big-5 Personality Inventory	26
DISCUSSION	29
Addressing loss aversion and position-valence-hypothesis	29
Addressing possible methodical issues	31
General conclusion	33
REFERENCES	35
APPENDIX	39
A. Vollständiger deutscher Testablauf	39
I. Einleitung	39
II. Social Value Orientation - Instruktion	40
III. Social Value Orientation - Test	41
IV. BIG5-Persönlichkeitsinventar	44
VI. Emotionales Priming Text – Mitleid	45
VII. Emotionales Priming Fragen – Mitleid	46
VIII. Emotionales Priming Text – Neid	47
IX. Emotionales Priming Fragen – Neid	48
X. Emotionales Priming Text – Kontrolle	49

XI. Emotionales Priming Fragen – Kontrolle	50
XII. Emotionales Priming – Manipulation Check	51
XIII. Instruktion zur Transaktion – Buyer	52
XIV. Price Elicitation Scale – Buyer	53
XV. Instruktion zur Transaktion – Seller	54
XVI. Price Elicitation Scale – Seller	55
XVII. Demographische Daten	56
B. Complete English survey version	57
I. Introduction	57
II. Social Value Orientation - Instruction	58
III. Social Value Orientation – Test	59
IV. Big-5 personality inventory	62
V. Emotional priming text – Compassion	63
VI. Emotional priming questions – Compassion	64
VII. Emotional priming text – Envy	65
VIII. Emotional priming questions – Envy	66
IX. Emotional priming text – Control	67
X. Emotional priming questions – Control	68
XI. Emotional Priming - Manipulation Check	69
XII. Instruction transaction - Buyer	70
XIII. Price Elicitation Scale - Buyer	71
XIV. Instruction transaction - Seller	72
XV. Price Elicitation Scale - Seller	73
XVI. Demographics	74
C. Curriculum Vitae	75

FOREWORD

"So your emotional state really has a lot to do with what you're thinking and what you're paying attention to." (Daniel Kahneman)

How do people work in economic situations? When I learned about the basic economic model – and the assumption of *homo oeconomicus* – I remember being quite sceptical about it: How can it be that man is seen in such a mechanical, rational way – opposite to what we experience on daily basis? Is it really when making a purchase that I have ALL the market information, i.e. that I know every price of comparable goods all over the world? And that I ONLY make the decision on rational basis, leaving aside any emotion possibly involved? I – for myself – am not this *homo oeconomicus* at all and there are many different factors influencing my decisions in the store, non of them being rational. That insight, however, left me with a choice: Either I am the single exception to the rule, which would be flattering but utterly unlikely, or these assumptions are simply incorrect. I was understandably pleased when I learned about Kahneman & Tversky's *Prospect-Theory*, which basically originated from this very critical thought. Therefore, I am now glad being able to contribute a small (but nevertheless relevant) portion to understanding how people (truly) work in economic situations.

Thanks to Mag. Dr. Kogler for supervising me in the process of this paper. Also, I give thanks to the department of business and economic psychology at *Universität Wien*, with it's head Univ. – Prof. Dr. Kirchler. However, I especially have to appreciate the work of Kahneman and Tversky, the godfathers of economic psychology and my personal reasons for having chosen this path leading me to this paper, for your work made the long hours studying fundamentals of business psychology feel least tedious.

ZUSAMMENFASSUNG

Der Endowment Effekt beschreibt den Umstand, dass für ein und dasselbe Gut regelmäßig der minimale Verkaufspreis deutlich höher ausfällt als der der maximale Kaufpreis. Diese Studie untersucht die emotionalen Einflüsse auf den Endowment Effekt, im Genauen den Einfluss der Emotionen Mitleid und Neid. 120 Versuchsteilnehmer (60 weilblich) wurden in einem 3 (Mitleid, Neid, Kontrolle) x 2 (Käufer, Verkäufer) Zwischensubjektdesign getestet: Sowohl Mitleid als auch Neid schwächen den Endowment Effekt signifikant im Vergleich zu der Kontrollgruppe. Weiters wird mit der Positions-Valenz-Hypothese ein Rahmenmodell vorgeschlagen, auf welche Weise Emotionen auf Verlustaversion wirken, die die Evaluation ökonomischer Situationen maßgeblich beeinflusst. Der Fokus auf die eigene vs fremde *Position* sowie die relative *Valenz* der eigenen zur fremden Position könnten maßgebliche Einflussdimensionen von Emotionen darauf sein, wie stark Verlustaversion empfunden wird.

Schlüsselwörter: Endowment Effekt, Verlustaversion, Emotionales Priming, Social Value Orientation, Positions-Valenz-Hypothese

ABSTRACT

The endowment effect refers to the irrationality of minimum selling prices regularly exceeding maximum buying prices for the same respective object. This study intends to contribute to the understanding of emotional influences on the endowment effect, specifically compassion and envy. 120 participants (60 female) were tested in a 3 (compassion, envy, control) x 2 (buyer, seller) between-subject design, revealing that both emotions considerably weaken the strength of the endowment effect. Beyond, with the position-valence-hypothesis we suggest a new framework on how emotions influence loss aversion, and thus affect situational evaluation in economic decision-making. Specifically, emotions have an influence on the focus on either oneself or others (*position*) and the relative value of one's position (*valence*) and thus moderate loss aversion, which might determine the strength of the endowment effect.

Keywords: Endowment Effect, Loss Aversion, Emotional Priming, Social Value Orientation, Position-Valence-Hypothesis

INTRODUCTION

The endowment effect describes the fact that people often demand more money for an object when selling it than they would be willing to spend when acquiring the same object. It was first described by Thaler (1980) by illustrating Mr. R. and his willingness to trade wine bottles. While Mr. R. is willing to sell an old wine bottle for at least \$100 (hereafter willingness to accept [WTA]), he refuses to acquire the same bottle for more than \$35 (hereafter willingness to pay [WTP]). Thaler (1980) named the phenomenon of this wide gap between the WTA and the WTP for the same object endowment effect (Indeed, the endowment effect has become one famous example of systematic irrationalities in normative economic decision theory that cannot be explained by Subjective Expected Utility-Theory (Rabin, 2000; Schoemaker, 1982; also Tversky & Kahneman, 1986). In contrast, Kahneman and Tversky's (1979) prospect theory emphasizes the important role of the personal reference point in situational economic judgement. Depending on this reference point – which is adaptable to the current situation – gains and losses are assessed differently. In their explanation, the tendency of perceiving losses much more intensely as gains of the same amount – namely loss-aversion – is mainly responsible for people to demand more money in the seller role, i.e. when *losing* the object, than they would pay for the same object in the buyer role, i.e. when gaining the object (Tversky & Kahneman, 1991). Besides loss aversion as the standard explanation for the phenomenon, there are also alternative explanations why people in a seller role continuously demand more money for an object than people in a buyer role would be willing to pay for it. Some authors argue that rather than the bargaining role of selling a good, merely the status of ownership of the object is the main driver for loss aversion: For instance, Morewedge, Shu, Gilbert, and Wilson (2009) proposed a psychological explanation, in which they emphasised ownership status of the good – rather than the bargaining role of selling – as the main factor causing evaluation differences in the endowment effect. Specifically, they criticize that in many study designs the bargaining role is mostly confounded with ownership status of the object, for sellers mostly own the good, while buyers mostly lack ownership of the good. Thus, they argue, the seller role is by mistake accounted for causing loss aversion. Rather, ownership of the object causes people to evaluate the object higher and leads to higher selling prices when parting with the object – since chosen objects are associated with oneself, which fundamentally improves the evaluation of the object (cf. Gawronski, Bodenhausen, & Becker, 2007). In two experiments, the authors de-confounded ownership and the transaction role in a specific setting, in which

the seller group did not own the object, while the buyer group already owned the object. Thus the authors found that ownership triggers the endowment effect, while the mere transaction role could not. However, in most settings for studying the endowment effect – including the setting in this paper –, selling the object includes the status of ownership, while buying it precludes the status of ownership. Thus, loss aversion should occur in the selling group, whether triggered by status of ownership or transaction type.

The endowment effect has also been found in the context of uncertain outcomes. Specifically, for experimental designs including lottery tickets, one alternative line of argumentation focuses on anticipated regret – rather than loss aversion – as the main trigger for the endowment effect (Bar-Hillel & Neter, 1996; Kahneman, Knetsch, & Thaler, 1991; Kogler, Kühberger, & Gilhofer, 2013). The authors find a general reluctance to trade endowed lottery tickets with alternative tickets (although bearing the same winning chance), even if they would receive additional money for the trade. Authors explain their findings with anticipated regret involved in the possible trade, which should be strongest in case the previously owned but traded ticket would win the lottery. Furthermore, a similar explanation refers to a separate form of loss aversion, i.e. the motivation to make a "good" deal, or to avoid making a "bad" deal in the transaction (Brown, 2005), resulting in sellers overestimating and buyers underestimating the object evaluation price.

For the last decades, the endowment effect has been widely studied in trading mugs or pencils (Kahneman, Knetsch, & Thaler, 1990;), wine bottles (Kahneman, Knetsch, & Thaler, 1991), also lottery tickets (Kogler, Kühberger, & Gilhofer, 2013), revealing clear results of a stable price gap even when trading objects of small value. Interestingly, it seems to make no difference regarding study results whether the transaction is conducted with real money involved, or only evaluated hypothetically (Kogler, Kühberger, & Gilhofer, 2013). However, experimental results appear to vary considerably depending on various experimental settings. Specifically, situational influences have a strong impact on the strength of the effect. For instance, locus of control and hedonic versus utilitarian priming were found to have distinct influences in the resulting WTPs/WTAs for an object (Sun, 2011). Additionally, research indicates that regulatory focus moderates the endowment effect in the way that subjects (when pursuing a goal) in promotion focus, i.e. focusing on success, achievement and advancement, - compared to subjects in prevention focus, i.e. focusing on rules, security and protection – show a significantly lower endowment effect (Liberman, Idson, Camacho, & Higgins, 1999). Also, motivational factors can have an influence: If transaction demand is high, participants show no endowment effect (Mandel, 2002). Furthermore, changes in

cognitive perspective were found to moderate the effect (Ariely, Huber, & Wertenbroch, 2005). However, subjects with great market experience show no price disparity (List, 2003), indicating that the effect stems from inexperience in new situations, which lead agents to act "irrationally". While there exist different explanations for different experimental settings the effect has been studied in, we focus on loss aversion as the underlying mechanism responsible for the endowment effect.

The concept of loss aversion

Loss aversion has been widely used to explain the strength of endowment effect studies (Van Dijk & Van Knippenberg, 1996; Kahneman, Knetsch, & Thaler, 1991; Tversky & Kahneman, 1990, 1991). In the process of loss aversion, people feel the loss of an object much stronger than the respective gain of obtaining the object is felt. In a bargain situation, the minimum price a seller demands is therefore considerably higher than the maximum price a buyer would pay, for the money acts as a substitution for the loss the seller feels. Thus, the selling group demanding overmuch money for the object is mainly held responsible for causing the price disparity (Kahneman, Knetsch, & Thaler, 1990). Furthermore, parting with the object (in the seller role) is subject to loss aversion, while parting with money (in the buyer role) does not lead to equivalent loss aversion (Novemsky & Kahneman, 2005), representing additional evidence for the endowment effect being caused mainly from the sellers' evaluation. Moreover, evidence for loss aversion also has been found in real-life markets like for instance the real estate housing market (Genesove & Mayer, 2001).

However, to understand what mechanisms underlie loss aversion in the context of the endowment effect, Shu and Peck (2011) built a comprehensive concept along previous theoretical frameworks (Ariely, Huber, & Wertenbroch, 2005; Brenner, Rottenstreich, Sood, & Bilgin, 2007; Novemsky & Kahneman, 2005), focusing on psychological ownership and affective reaction as two main influence factors to loss aversion mechanisms. While ownership determines whether the transaction is seen as a loss, affective reaction determines how great this loss is perceived.

Psychological ownership, for one, refers to the feeling that the object is "mine", which can be – but does not necessarily have to be – achieved through legal ownership (Ariely & Simonson, 2003). Ownership can also be build without actual endowment, including imaginative endowment (Carmon & Ariely, 2000) and option attachment (Carmon, Wertenbroch, & Zeelenberg, 2003). Psychological ownership increases with possession time, but can also be built instantly after receiving the object (Strahilevitz & Loewenstein, 1998). If

an object is perceived to be in one's possession, losing it hurts considerably more, for the reference point has already been shifted including the previous gain into the resulting valuation. Thus, in situations of looming losses, loss aversion is shown, if the respective object is already (psychologically) owned.

Secondly, affective reaction describes the feeling towards the object. Not only feelings toward the object, but also undirected mood have an impact on one's valuation. Changes in affective reaction towards the object can have such a great impact on loss aversion that in extreme cases it even reverses the endowment effect (i.e. significantly higher WTP than WTA) (Luce, Payne, & Bettman, 1999). Specifically, affective reactions influence on how big a loss is perceived, and thus how profoundly loss aversion is shown. Depending on how positively or negatively the object is framed, loss aversion may be perceived more or less intense (Brenner et al., 2007). However, specific emotions could have a great impact on psychological ownership of and affective reaction towards the object and thus should moderate loss aversion. Subsequently, a brief overview over literature concerning emotional influences on the endowment effect is provided.

Addressing emotional influences on the endowment effect

In the context of affective influences on the endowment effect, psychologists have already successfully manipulated participants' emotional experiences with various priming methods and measured its effects on the endowment effect. Doing so, current emotional states were found to have considerable effects on the participant's evaluation of the task and accordingly on the strength of the endowment effect. In this context, distinct emotions were activated and subsequently seller and buyer prices in test groups were compared to an (emotionally neutral) control group. However, the relevant literature reveals an unclear picture of how emotions influence the intensity of the displayed endowment effect and fails to provide a general framework for emotional influences on the endowment effect.

For instance, Lin, Chuang, Kao, and Kung (2005) find the endowment effect only for participants in positive mood (i.e. primed with happiness). In contrast, subjects in negative mood (i.e. primed with sadness) showed no endowment effect. They argue that the current mood directly influences object evaluation (*Emotion Congruency Model*; Innes-Ker & Niedenthal, 2002). Therefore, loss aversion is reduced in positive mood, and enhanced in negative mood, which is responsible for the changes in the endowment effect. However, the lack of a control group in this study makes comparisons between the two primed test groups invalid, since the strength of the induced priming cannot be measured sufficiently.

Contradictory results were found by Zhang and Fishbach (2005). They found no endowment effect in the positive mood condition, while the effect was stronger in the negative mood condition (compared to a control condition). The authors argue that anticipated emotional reactions impact the participant's choices. Hence, negative mood increases the perceived looming threat of negative outcomes, thus increasing loss aversion and thereby the endowment effect. In turn, positive mood decreases the perceived looming threat of negative outcomes, thus decreasing loss aversion and the endowment effect.

Obviously, merely categorizing negative and positive emotions seems to reveal contrasting and thus insufficient results. However, specifically distinct negative emotions have been studied in the context of the endowment effect: Lerner, Small, and Loewenstein (2004) revealed that emotions of the same valence have opposite effects on economic decisions. In an experiment, they examined the effects of disgust and sadness on the endowment effect. Disgust, for one, reduced both the buyer and seller prices and eliminated the endowment effect. Sadness, however, decreased the seller prices and increased the buyer prices and thus led to a "reverse" endowment effect. The authors argue that disgust naturally triggers the goal to expel, thus sellers and buyers decrease their prices. On the other side, sadness naturally triggers the goal to change one's circumstances, thus sellers decrease their prices, but buyers increase their prices. Also, Shu and Peck (2011) replicated these findings. Moreover, Martinez, Zeelenberg, and Rijsman (2011) studied the influence of regret and disappointment on the endowment effect. While regret weakened the endowment effect, disappointment led to a "reverse" endowment effect. They argue that regret triggers reparative actions, which makes seller prices fall and buyer prices rise.

However, all studies regarding emotional influences on the endowment effect fail to explicitly clarify the role of loss aversion in their explanations. Rather, they argue with the natural behavioural tendencies distinct emotions trigger, and subsequently draw parallels with trading behaviour in the emotion-induced conditions. The role of loss aversion, however, is crucial in this context for two reasons: (1) Loss aversion is a coherent explanation of the endowment effect and widely used in literature. (2) Various studies suggest that situational influences (e.g. *cognitive perspective*, Ariely, Huber, & Wertenbroch, 2005; *regulatory focus*, Liberman, Idson, Camacho, & Higgins, 1999; *locus of control*, Sun, 2011) modulate loss aversion. Thus, also emotional states should have direct influences on loss aversion. Reviewing literature, we postulate an extended framework on how emotions affect loss aversion and thus impact the endowment effect.

Extended framework: Position-Valence-Hypothesis

We see that emotional states significantly influence how subjects evaluate objects. Emotional influences can even reverse the endowment effect - that is that sellers show significant lower prices than buyers. Changes in the price gap between the seller-group and the buyer-group correspond with changes in situational loss aversion, which determine how negatively the loss of an object is perceived. This loss aversion is determined by whether and how far the reference point is shifted when evaluating the situation (cf. Tversky & Kahneman, 1991; Zhang & Fishbach, 2005). The further the reference point is shifted including the respective object into one's perceived possession, the stronger loss-aversion is shown when parting with the object. We propose that emotional states modulate this shifting process in distinct ways. Literature reveals that emotional attachment processes towards the object modulate the intensity of perceived loss aversion (Shu & Peck, 2011; Strahilevitz & Loewenstein, 1998). We look at these processes in more detail and find distinct influential dimensions; that are 1) focus on own person/situation vs. on another, external person/situation, and 2) (relative) valence of the own position (compared to an outside reference). Specifically, general emotional states can be distinguished whether the focus lies on the own person or situation, or rather on another object or person, away from the own person or situation. Subsequently, we estimate that emotions that put the focus on the own person should lead to a greater shift of reference point and thus stronger loss aversion, since they should accentuate the current personal status and make gains and losses more likely evaluated. Conversely, emotions that put the focus on another person or object – in any case away from the own person or situation – should lead to a smaller (or no) shift of reference point and thus weaker loss aversion, since they should make current personal status and thus gain and loss evaluation less likely.

Secondly, the relative valence of the personal position compared to a reference point induced by the distinct emotion could further modulate the strength of the perceived loss aversion. Specifically, if the emotion induces the own position to be relatively better off than the reference point, loss aversion should be stronger. In reverse, if the emotion induces the own position to be relatively worse off than the reference point, loss aversion should be smaller.

To test our hypothesis, we used the emotions compassion and envy, for their distinct effects on the endowment effect were expected to reveal valuable insights about emotion as a loss aversion-moderator.

The emotions compassion and envy

In the experiment, we aim to test the effect of the two emotions compassion and envy on the endowment effect. In the context of the endowment effect, these emotions have previously never been observed, however both qualify to provide interesting extensional insights on how exactly emotions and loss aversion are linked. Both emotions refer to a perceived inequality. Compassion can be seen as a fortunate inequality, and envy as an unfortunate inequality. Both emotions also were found to cause dislike. For instance is a person's utility at a certain income considerably lower when other referenced individuals have lower or higher income (Loewenstein, Thompson, & Bazerman, 1989).

Compassion refers to "distinct appraisal processes attuned to undeserved suffering, distinct signaling behavior related to caregiving patterns of touch, posture, and vocalization, and a phenomenological experience and physiological response that orients the individual to social approach" (Goetz, Keltner, & Simon-Thomas, 2010, p. 351). While literature argues whether compassion is an emotion or rather a distinct affective state, we concentrate especially on the effects compassion causes in the respective person experiencing it. Being associated with empathic distress, i.e. the result of empathic observation of perceived suffering, compassion is strongly associated with sadness and love (Shaver, Schwartz, Kirson, & O'connor, 1987). In an evolutionary approach, compassion is explained as a necessary trigger for helping behaviour in families and societies (Batson, Lishner, Cook, & Sawyer, 2005). People who feel compassion concentrate on the external source eliciting the emotion and depending on whether helping behaviour follows, love – or sadness, respectively - are stronger elicited. Moreover, envy is defined as "an unpleasant, often painful emotion characterized by feelings of inferiority, hostility, and resentment (...)" (Smith & Kim, 2007, p. 46). It arises when one compares unfavourably with others, and can be found along many cultures (Schoeck, 1969). Probably the most important reason for envy to be elicited is social comparison, indicating that the envied person succeeded and oneself failed, thus marking that the other person is superior to oneself (Collins, 1996). Specifically, studies found out that envy also has considerable cognitive consequences, for subjects in envy priming evaluate an envied person more thoroughly and with more attention compared to neutral subjects (Hill, DelPriore, & Vaughan, 2011).

Hence, these two emotions qualify for testing the position-valence-hypothesis: While compassion shifts the situational focus on the person eliciting compassion, envy shifts the focus on the envied person. Moreover, while the person eliciting compassion is regularly

worse off¹ than oneself, which leads to a relative personal superiority (positive relative valence), in case of envy oneself is comparably worse off¹, which induces a personal inferiority (negative relative valence).

Addressing hypotheses and expectations

In the present experiment, we aim to test the effects of compassion and envy on the endowment effect. We expect compassion to weaken the endowment effect (*hypothesis 1*), for it shifts the cognitive focus onto the pitied person and thus increases the (relative) valence of the own position. Consequently, the reference point is shifted, which in turn should decrease perceived loss aversion. Furthermore, we also expect envy to weaken the endowment effect compared to the control group (*hypothesis 2*), for it shifts the cognitive focus onto the person envied, which hence induces personal inferiority and thus drops the (relative) valence of the own position. Therefore, the reference point should be shifted and loss aversion decreased.

To examine the differences in personal perception of fairness, particularly the concern people have for others and the value people give to other's utility compared to the own utility, we test participant's Social Value Orientation (SVO), using Murphy, Ackermann, and Handgraaf's (2011) method. Social Value Orientation refers to the different motivations and goals subjects show when having to allocate resources among themselves and others. Specifically, four distinct SVO-types have been examined: a person can maximize the difference between the personal and other person's outcome (competitive type), maximize the personal outcome, while not considering the other person's outcome (*individualistic type*), minimize the difference between the personal and other outcome or maximize the joint payoffs (prosocial type), or maximize the outcome of the other person (altruistic type). The respective SVO-types are said to indicate how much value one regards towards personal utility versus the other subject's utility (cf. Van Lange, 1999). Literature reveals that these distinct types change shown endowment effects, specifically that *competitives* and individualists show stronger effects than prosocials (Lin & Lin, 2006). That finding again can be explained by loss aversion, for *competitives* and *individualists* appreciate the personal outcome relatively more and thus should feel more loss aversion when facing a reduction in personal utility, which directly affects the strength of the endowment effect. Therefore,

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worse off referring to the distinct situational evaluation category, e.g. wealth when seeing a poor/rich person, health when seeing an ill/healthy person, etc.

competitives and individualists should show significant higher endowment effects than prosocials and also be affected relatively stronger by the emotional induction (hypothesis 3).

Finally, we include an exploratory part in our experiment, for we initially examine subjects' personality, using Rammstedt and John's (2007) Big Five Personality Inventory. Due to the fact that the endowment effect is seen mainly as a situational phenomenon, personality aspects should not influence its outcome. However, some personality dimensions, e.g. Neuroticism or Conscientiousness, might influence the endowment effect or interact with the emotional priming. Hence, to gain a better understanding to the underlying principles, examining differentiated personality profile of participants could answer potential questions occurring in the interpretation of the study's results later on.

METHOD

Study participants had to complete a series of four tasks and surveys. Two crucial manipulations were applied: Firstly, the participants were emotionally primed with either envy or compassion, or they were not emotionally primed (control group). Participants assigned to the three different groups had to read a short text about a situation in which the respective emotion was prevalent (control group: informative text) and subsequently they had to answer three related questions. Secondly, participants were divided in two transaction groups (*buyer*, *seller*), and while the buyer group had the chance to buy a USB-device (2GB data volume), the seller group had the chance to sell the – previously owned – USB-device.

Participants and design

120 participants (60 female, 60 male; mean age 24.40 years, s = 6.01) took part in the study. As a participation incentive they obtained up to \in 10 or the USB-device determined by a random draw considering their personal evaluation of the USB-device. The subjects were recruited in various universities of Vienna and surrounding coffee shops. Participants were randomly assigned to the cells composing a 3 (emotional priming: compassion, envy, control/neutral) x 2 (transaction role: buyer, seller) between-subject design.

Material

The surveys were completed in paper-pencil-format. As the object of interest, a black unbranded USB-device with a data volume of 2GB was used. The data volume was visibly indicated on the device.

Procedure

The study consisted of 4 consecutive, allegedly independent tasks and surveys. Before starting, participants were informed about the procedure and the fact that the participation fee depended exclusively on the last section of the study. The participants assigned to the seller groups were handed the USB-device before starting the surveys. The detailed testing series can be found in the *Appendix*.

In the first survey, participants' Social Value Orientation was measured. The method for measuring SVO by Murphy, Ackermann, & Handgraaf (2011) was used, in which they had to mark 15 tasks, which concerned distributing (fictional) points between themselves and another unknown person.

Next, participants' personality profile was tested using Rammstedt and John's (2007) Big Five Personality Inventory, which required subjects to evaluate their own personality in 11 items on a scale from 1 (*disagree strongly*) to 5 (*agree strongly*). We used the original German translation provided by the paper's authors.

Subsequently the emotional priming was adapted. Participants had to read a short text and subsequently write down answers to three related questions. A combination of an external and biographical priming method was chosen in order to achieve a stronger emotional influence. Participants in the *compassion* condition read an interior monologue about the speaker's experiences with an old homeless woman and his/her emotions towards her. The first question asked to imagine being in the speaker's situation and write down the feelings and attitudes involved. The second question asked to name and explain 3 to 5 different situations, in which they personally felt compassion. The third question asked to take the one situation that caused the strongest compassion and explain it further. Likewise, participants in the *envy* condition had to read an interior monologue about a speaker's discomposure how unfair her parents treat her compared to her little sister. The following questions resembled the one's asked in the compassion group, only that the envy (instead of compassion) was the emotion enquired. Participants in the *control* condition had to read an informative text about a biological issue, which we took from Wikipedia.com². The first question asked to write down a summary of the text. The second question asked to list preferred outdoor activities. The third question asked to take the most preferred activity and explain it further.

After completing the reading and writing task, participants were asked to indicate how they were feeling at that moment - i.e. the manipulation check - in form of a list of 9 different emotions (including compassion and envy) which were evaluated on a scale from 0 ("no intensity") to 7 ("strong intensity").

Finally, participant's willingness to buy or sell the USB-device, respectively, was measured. In the buyer-group, the USB-device was presented to the participants and subsequently asked how much money they would spend to acquire it, using a price elicitation scale from \in 0.50 to \in 10.00 (steps of \in 0.50). The final selling price was determined by random draw (using a 20-sided die), which determined whether subjects received the device or the drawn price.

Participants in the seller group, however, have already been endowed with the USB-device and thus had the chance to sell the device, using a price elicitation scale (from € 10.00

² The text concerned with the structures and types of leaves including the processes of photosynthesis and transpiration. It resembled the two priming texts regarding length and reading difficulty.

to \in 0.50 (in \in 0.50 increments). The final buyer price was randomly drawn (using a 20-sided die), which determined whether subjects retained the device or sold it and received the respective amount of money.

Both the buyer and seller groups were told that it was in their best interest to indicate what the USB-device was truly worth to them. All payments were instantly settled in Euros (€). After the transaction, participants were asked to indicate their demographic information, i.e. age, sex, educational level, and study subject. Finally, subjects had the chance to indicate questions and comments. The whole study lasted for approximately 30 minutes.

RESULTS

Manipulation check

The intended effect of emotional priming can be observed: Participants under compassion priming indicate to feel more compassion than the other groups ($M_{Comp.} = 4.03$; $M_{Envy} = 1.33$; $M_{Ctrl.} = 0.78$; F(2,117) = 28.98, p < .001, $\eta^2 = .33$). Also, sadness scores are higher under compassion priming ($M_{Comp.} = 4.15$; $M_{Envy} = 1.90$; $M_{Ctrl.} = 0.88$; F(2,117) = 30.75, p < .001, $\eta^2 = .35$). Participants under envy priming feel more envy than the other two groups ($M_{Comp.} = 0.73$; $M_{Envy} = 1.50$; $M_{Ctrl.} = 0.60$; F(2,117) = 3.44, p < .05, $\eta^2 = .06$). Furthermore, participants in the control group have the highest scores for happiness and interest within the group. While between the two treatment groups no significant effect for happiness can be found ($M_{Comp.} = 3.30$; $M_{Envy} = 3.40$; $M_{Ctrl.} = 4.00$; F(2,117) = 1.38, p = .26, $\eta^2 = .02$), the control condition feels more interested than the two treatment groups ($M_{Comp.} = 4.03$; $M_{Envy} = 4.13$; $M_{Ctrl.} = 5.73$; F(2,117) = 3.41, p < .05, $\eta^2 = .06$).

After inspecting the results of the manipulation check, envy priming does not seem to work as good as expected. However, it seems feasible that subjects in the envy condition do not honestly indicate their activated situational envy, since this emotion is not socially accepted, i.e. one does not easily admit to feel envious. In contrast, compassion scores (in the compassion group) are much higher, indicating that subjects more likely admitted to feel compassion than to feel envy. Hence, to find out if the manipulation check in the envy group does not reveal the expected results due to social desirability, subjects priming notes were furtherly inspected. Thus, two unrelated interraters categorized the prevalent emotions that are mainly addressed in the subjects' written notes. For subjects indicating low emotional reaction, a highly emotional written involvement would suggest the results of the manipulation check to be inaccurate and the respective emotion to be nevertheless activated.

Thus, an interrater reliability analysis using Cohen's Kappa statistic was performed to determine consistency among raters: The interrater reliability among the two raters is found to be $\kappa = 0.90$ (95% CI, .827 to .965), p < .001. Also, both ratings highly correspond to the subjects' priming categorization, with $\kappa = 0.87$ (95% CI, .795 to .947), p < .001 for interrater 1, and $\kappa = 0.97$ (95% CI, .939 to 1.000), p < .001 for interrater 2. The outstanding corresponding of the two objective interratings with the subjects' priming categorization indicates that the priming method worked for envy and compassion, and that in the neutral control group no emotions were elicited.

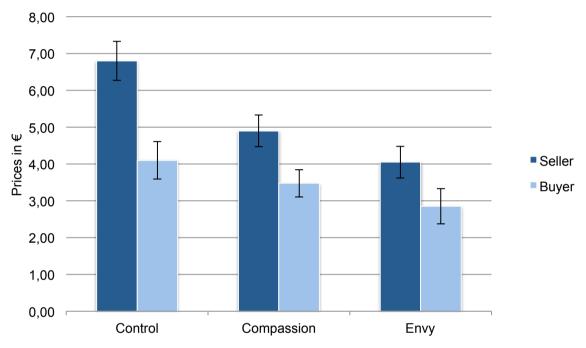


Figure 1: Mean monetary prices and standard errors of the transaction roles (seller, buyer) compared within the 3 priming groups (control, compassion, envy).

Endowment Effect

Mean selling and buying prices for the three groups are shown in *figure 1*. To illustrate the effect of emotional priming and the transaction type on the price level, a two factorial ANOVA was conducted. Both main effects are significant: Firstly, the seller prices are significantly higher than buyer prices $(F(1,114) = 22.27, p < .001, \eta^2 = .16)$, revealing a strong endowment effect. Furtherly, emotional priming causes significant differences regarding prices in the three factor levels $(F(1,114) = 9.64, p < .001, \eta^2 = .15)$. The LSD (Least Significant Difference)-post hoc test shows that the control condition significantly differs from the compassion condition (p < .01) and from the envy condition (p < .001), however, compassion condition does not significantly differ from the envy condition (p = .11). The interaction between the transaction type and priming condition did not turn out to

be of significance (F(2, 114) = 1.54, p = .22, $\eta^2 = .03$). Results indicate that the endowment effect (i.e. seller prices significantly higher than buyer prices) is prevalent in all the three conditions, however, compared to the control condition, the effect was considerable weaker in compassion and envy condition.

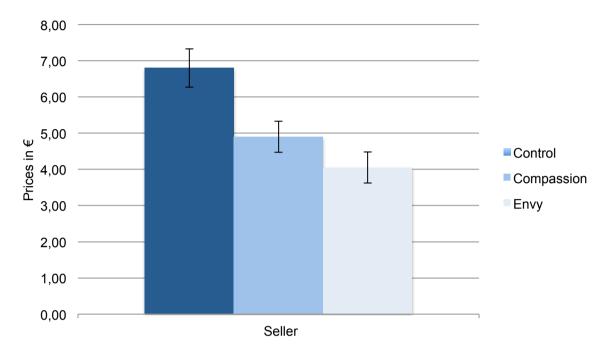


Figure 2: Mean monetary prices and standard errors of seller condition compared between the 3 priming conditions (control, compassion, envy).

Next, we analysed the chosen prices within the transaction roles, using a one-way ANOVA for each transaction condition (seller, buyer): Within the seller condition, the prices reveal to differ significantly (F(2,57) = 9.21, p < .001, $\eta^2 = .24$). Specifically, control group selling prices significantly exceeded compassion group selling prices ($M_{Ctrl} = 6.80$ vs. $M_{Envy} = 4.05$; p < .001). Mean prices are illustrated in *figure 2*.

Conversely, in buying condition the respective mean prices do not differ between the groups (F(2,57) = 1.87, p = .16, $\eta^2 = .06$). This comparison indicates that the endowment effects within the groups can be mainly ascribed to the level of the selling prices. Emotional priming therefore reduced the level of the selling prices within the test groups, while not affecting the level of the buying prices, causing the main effects to weaken considerably. The results support our hypotheses.

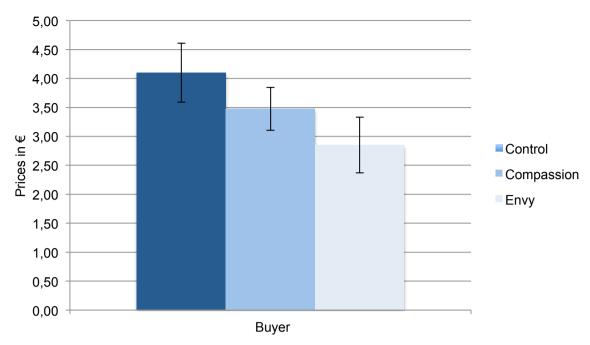


Figure 3: Mean monetary prices and standard errors of buyer condition compared between the 3 priming conditions (control, compassion, envy).

Social Value Orientation

Examining Social Value Orientation, we used the most recently issued SVO-method by Murphy, Ackermann, and Handgraaf (2011), which enabled us to get a more differentiated picture of our sample's SVO-characteristics. Concerning the 4 different SVO-types, our sample divided in 7 *competitive*, 43 *individualistic*, and 70 *prosocial* types, which can further be divided in 43 for *inequation aversion* and 7 for *joint gain maximisation* (and 20 subjects not assignable). No subjects showed an *altruistic* SVO-type. However, since for making reliable assertions when comparing different groups adequately large sample sizes are essential, we limited our analysis to comparing *individualistic* subjects with *prosocial* subjects.

Specifically, we look at the main effects within the *SVO-individualistic* and *SVO-prosocial* groups. For *SVO-prosocials*, all 3 priming groups reveal a significant endowment effect. In the control group, transaction types show a marginally significant effect (t(17) = -1.97, p = .07, d = 1.06), while in compassion group (t(25) = -2.12, p < .05, d = 1.13) and envy group (t(22) = -2.17, p < .05, d = 0.887), no significant effect can be observed. Overall, *SVO-prosocials* reveal weaker price gaps between seller and buyer prices compared to the entire sample, although still statistically significant. However, the high effect sizes in the two experimental conditions indicate a considerable effect, even if the gaps are not statistically significant. For *SVO-individualists*, only the control group shows a strong endowment effect

(t(18) = -3.58, p < .01, d = 2.42), while emotional induction equalizes the price gap between transaction types (*compassion*: t(8) = -1.03, p = .33, d = 0.65; and *envy*: t(11) = -0.29, p = .78, d = 0.16).

Generally, significance levels and effect sizes indicate that *SVO-individualists* seem to be impacted more intensely by emotional priming regarding their object evaluation than *SVO-prosocials* are. However, further analysis seems to be statistically meaningless due to the small sample size within the subgroups.

Big-5 Personality Inventory

For analyzing the subjects' personality traits, we used a (short 11-item) Big-5 personality inventory by Rammstedt and John's (2007). Although using only 2 items per personality dimension (one additional for dimension *Agreeableness*), the inventory shows a test-retest reliability of .75 and a comparable validity to the long version.

Table 1	Seller mean price (standard deviation)	Buyer mean price (standard deviation)	Δ (p-values $^{1)}$
Extraversion high	5.10 (2.48)	3.48 (2.31)	1.62 (.013)
Extraversion low	5.48 (2.40)	2.75 (1.74)	3.05 (.000)
Agreeableness high	4.98 (2.34)	3.67 (2.22)	1.31 (.057)
Agreeableness low	5.31 (2.11)	3.17 (2.05)	2.14 (.001)
Conscientiousness high	4.59 (2.28)	3.16 (2.35)	1.43 (.024)
Conscientiousness low	5.48 (2.28)	3.62 (2.01)	1.86 (.015)
Neuroticism high	5.56 (2.62)	3.34 (2.33)	2.22 (.006)
Neuroticism low	4.48 (1.74)	3.52 (1.99)	0.96 (.061)
Openness high	5.83 (2.50)	3.66 (2.09)	2.17 (.001)
Openness low	4.71 (2.09)	3.28 (2.08)	1.43 (.010)

Table 1: Mean prices and standard deviations: seller and buyer compared in high and low personality dimension cluster (split by dimensional median of respective personality score).

For each dimension, we separated the sample into a *high score group* and a *low score group*, split by the dimension's respective median. Participants who scored the respective median were excluded from further analysis, since could not be clearly assigned to a personality cluster. Subsequently, the buying and selling prices were compared within the dimensional groups. Generally, t-tests of transaction prices between buyer and seller roles within the respective dimensional groups show a consistent picture, with seller prices exceeding buyer prices in every personality dimension (*see table 1*). These results do not

advert to any specific influence of the personality dimension, therefore we compared the mean prices of buyers – and respectively sellers – between the high and low personality cluster (*see table 2*). Generally, t-tests did not find significant differences between high group seller (buyer) and low group seller (buyer) within a personality dimension. However, seller in the dimension *Neuroticism* and *Openness* show marginally significantly different prices. Therefore, we additionally split them in the emotional priming groups to see where this difference in the prices stems from (*see table 2*).

Concerning *Neuroticism*, the marginal significant price difference between the high and low personality dimension clusters can be mainly ascribed to highly significant price differences in the control group (p = .01), while the compassion and envy groups do not show considerable price differences. For *Openness*, envy priming (p = .10) mainly contributes to the marginal significance of the price differences between high and low dimensional clusters. These results propose a general effect of *Neuroticism* on seller prices – with high scores in Neuroticism leading to higher prices –, while emotional priming annihilating this effect. Additionally, high scores in *Openness* lead to higher prices only combined with envy priming. However, since the groups in this comparison are too small, results can only be interpreted as vague indications for possible effects. Therefore, we refrain from precipitately leaping to conclusions based on these results, for meaningful conclusions are not possible.

Table 2	High mean price (standard deviation)	Low mean price (standard deviation)	Δ (p-values)
Extraversion: Seller	5.10 (2.48)	5.48 (2.40)	-0.38 (.57)
Extraversion: Buyer	3.48 (2.31)	2.75 (1.74)	0.73 (.24)
Agreeableness: Seller	4.98 (2.34)	5.31 (2.11)	0.33 (.63)
Agreeableness: Buyer	3.67 (2.22)	3.17 (2.05)	0.50 (.49)
Conscientiousness: Seller	4.59 (2.28)	5.48 (2.28)	-0.89 (.20)
Conscientiousness: Buyer	3.16 (2.35)	3.62 (2.01)	-0.46 (.50)
Neuroticism: Seller	5.56 (2.62)	4.48 (1.74)	1.08 (.10)
Neuroticism: Buyer	3.34 (2.33)	3.52 (1.99)	-0.18 (.78)
Openness: Seller	5.83 (2.50)	4.71 (2.09)	1.12 (.07)
Openness: Buyer	3.66 (2.09)	3.28 (2.08)	0.38 (.48)
Neur. Seller: Control	7.89 (2.36)	5.14 (0.85)	2.75 (.01)
Neur. Seller: Compassion	4.50 (1.72)	4.42 (0.72)	0.08 (.91)
Neur. Seller: Envy	3.50 (1.12)	4.09 (2.42)	-0.59 (.62)
Open. Seller: Control	7.09 (2.47)	6.45 (2.31)	0.64 (.56)
Open. Seller: Compassion	5.28 (2.43)	4.59 (1.43)	0.69 (.44)
Open. Seller: Envy	4.83 (2.17)	3.41 (1.50)	1.42 (.10)

Table 2: Mean prices (standard deviations) and differences (p-values): Above: Mean seller prices (and mean buyer prices) compared within transaction role between high and low personality dimension cluster. Down: Mean seller prices compared between high and low personality dimension cluster within emotional priming group in personality dimensions Neuroticism and Openness.

DISCUSSION

We conducted an experiment testing emotional influences of compassion and envy on the endowment effect, i.e. the fact that maximum selling prices (WTA) exceed minimum buying prices (WTP) for the same object. Specifically, we found that both compassion and envy weaken the endowment effect compared to the control condition (hypotheses 1 and 2). Furthermore, for people with an *individualistic* SVO approach, i.e. primarily trying to maximize their benefit in distribution situations, this specific emotional priming seemed to weaken the endowment effect considerably stronger than for people with a *prosocial* SVO approach, i.e. primarily trying to achieve equal outcomes for the others and themselves (hypothesis 3). The experiment also approved the endowment effect with an until then not investigated object/good, i.e. USB-devices, thus contributing to a further generalizability of the endowment effect.

Addressing loss aversion and position-valence-hypothesis

The study design enabled a reliable investigation of the endowment effect. The control group showed a strong baseline effect, which corresponds to previous findings in the literature (Peck & Shu, 2012; Thaler, 1980; Tversky & Kahneman, 1991). With compassion and envy, we also introduced two emotions that have not been examined before in connection with the endowment effect. The conception of the design – e.g. single participant testing, usage of written, standardized subtest introductions or group parallelization according to socio-demographic factors – was planned in precautious and thorough manner to minimize systematic or methodical errors. However, since we were mainly interested in the differences of the scores (i.e. prices) between the two emotional priming groups and the control group, respectively, the experimental setting, including the detailed parallelization of the experimental design for the priming groups, bears the advantage of any possible methodical errors involved being least influential on the results we are specifically interested in. Consequently, this study's results can be considered highly reliable.

The experiment's results are in line with the literature on emotional influences on the endowment effect. We see that emotions do have a considerable effect on subsequent economic decisions, even if they are not directly related to those decisions, once more indicating that economic decision-making is not solely based on rational reasoning.

Moreover, the endowment effect changes depending on the distinct emotional state the decision-maker is in: Just as the emotions happiness and sadness (Lin et al., 2006; Zhang & Fishbach, 2005), disgust (Lerner et al., 2004) and disappointment (Martinez et al., 2011) were

found to influence the endowment effect, this study reveals the influences of compassion and envy in this context. However, we identify loss aversion as the most probable determinant of the systematic price differences occurring. Even though previous studies have already identified distinct moderators of loss aversion (i.e. queries, length of ownership, or mood, etc.; cf. Shu & Peck, 2012), we emphasise the role of emotions as a moderator. Some facts speak for loss aversion to be critical here: While buyer prices are not affected by emotional induction, seller prices fall considerably in the priming conditions (compared to the neutral control condition). Thus, we see that the moderating effect of the priming concerns only the seller group. And exactly the sellers are the ones loss aversion is ascribed to in literature. Also, alternative explanations of the endowment effect would not be able to explain these results.

Interestingly, both emotions reduce the strength of the endowment effect by affecting seller's loss aversion. According to the *position-valence-hypothesis*, this influence can be described as follows: Compassion shifts the participant's focus away from the own position towards the person triggering compassion. Furthermore, the person felt compassionate for is relatively worse-off and the own person relatively better-off in this situation. On the other side, envy as well shifts the participant's focus away from the own position towards the person triggering envy. However, the own person relatively worse-off and the person envied is relatively better-off in this situation. Therefore, both emotions make another person more salient and thus shift the participant's focus away from the own position. Thus, loss aversion is not as heavily experienced as in the rather neutral control group, resulting in significantly lower seller prices. Also, the differences in the emotions' relative valences, which are distinguishable between compassion and envy, may have an additional influence on loss aversion. However, we cannot say if and how strong this influence may be, since we could not measure the exact priming strength (see section about methodical issues). Still, we find evidence that emotions are powerful moderators for the endowment effect, and specifically that the fact whether the own position or another person is made salient, seems to have considerable effects on the resulting strength of loss aversion.

Finally, with the usage of the USB-devices, we also introduced a new object into study designs of the endowment effect. In contrast to pens and cups, which have been widely used in previous studies, USB-devices seem more appropriate and up to date, for in modern times of information technology, the benefit of possessing those devices seems clear and evident. Additionally, USB-devices are regularly handed out by companies as marketing gifts, therefore people not often buy them in stores, which results in the fact that few people

know the current market price of USB-devices. This seems distinctly beneficial for the study's purposes, for subjects rarely know about the costs of these devices and rather guess the price according to their personal value.

Concerning the influence of subjects' personality traits on the endowment effect, this study also contributes new insights: Generally, results indicate that the endowment effect is not influenced by personality differences between subjects, rather it is a situational phenomenon caused by loss aversion. The specific influential tendencies of the dimensions *Neuroticism* and *Openness*, which appear to have some influence on seller prices, could be argued to stem from those dimensions playing a role in loss aversion, i.e. the higher one scores in *Neuroticism*, the more loss aversion is experienced in the neutral priming condition, and the higher one scores in *Openness*, the more loss aversion is experienced in the envy priming condition. However, small group sizes make any sophisticated assertions unqualified. Still, the influence of personality traits in the endowment effect reveals to be an interesting area worth addressing in further studies.

Addressing possible methodical issues

One issue we have to address is the questionable interpretability of the scores in the manipulation check: Due to the fact that the manipulation check itself does not unambiguously reveal whether priming sufficiently elicited the emotions in the respective priming groups, we had to delve deeper into this issue and conduct an objective inter-rating of the written answers to the questions involved. Even though the priming methods we used, i.e. a combination of an external priming stimulus and biographical priming, are both widely used for emotional priming in comparable studies (Lerner et al. 2004; Lin et al, 2006; Martinez et al. 2011; Zhang & Fishbach, 2005), the fact that our measure for elicitation strength relied on participants' self-evaluation involved some methodical issues, such as wrong interpretation of situational emotions or social acceptability of the emotions. Specifically, the results of the manipulation check in the envy-primed groups indicate a lower score (in the respective emotion, i.e. envy) compared to the scores of the compassion-primed groups (in compassion), indicating that envy priming did not work as effectively. However, the scores in the manipulation check for the emotion envy could be biased, for envy is strongly negatively connoted and feeling envious is generally not socially accepted. Therefore, it is likely that even if participants felt envious in this situation, they refrained from admitting it in the questionnaire, thus leading to lower scores in these groups. Luckily, we anticipated this issue and had participants actively write down their answers to the

emotion-related questions prior to the manipulation check. Even though – for ethical purposes – we indicated in the experiment's standardized explanation sheets that participants were free to hand in their answer sheets and thus could also have denied sharing their personal information without having to face consequences, 116 out of 120 participants did actually hand in their written answers (the remaining 4 kept the sheets due to personal confidential reasons), which made it possible to further investigate the involved information. Using the two objective interraters – oblivious to the real study purposes – we were able to check whether the participants were concerned with the respective emotion, and whether other, unrelated emotions or interfering issues were addressed. Thus, the interrater scores yield being a reliable proxy for the participants' real emotional priming impact.

Consequently, we can evidentially assume that the results of the manipulation check in the envy-groups are underestimating the real priming success, which supports the conclusion that our priming method effectively worked.

However, it is true that the 7-scale manipulation check – even in addition with the interrater results – is not eligible to measure the strength of the emotional induction. By using this very scale we rely on the subjects' judgements on how strong they currently feel the respective emotion, as a consequence we lack an objective measure, thus we cannot make statements about the differences on the endowment effect between compassion priming and envy priming (even if these statements would be utterly enlightening). However, even though the differences with regard to the (neutral) control group just as well answer our research questions (as shown above), the position-valence-hypothesis can only be tested with limitations. Although we find evidence that whether the own position or another person is made salient by the emotion does have a strong influence on how strong loss aversion is felt, in this study we unfortunately cannot measure the strength of this influence, and thus fail to address how prominent the dimensions position and valence are for these emotions. Even so, this study satisfiably reveals that *position* and *valence* are significant dimensions to the emotional moderation of loss aversion.

Another possible weakness of the design is the fact that seller were endowed with the USB-device prior to the testing, while in case of buyer-group the device was introduced right before the transaction, i.e. at the end of the testing. It is true that this difference might have resulted in the seller group to be more attached to the device, since literature found that the valuation and perceived attractiveness of objects can increase with their possession duration (Strahilevitz & Loewenstein, 1998). This would lead to a stronger endowment effect in our setting. However, even if this difference in possession time between buyer-group and seller-

group has an effect on the endowment effect, we do find this possible influence in all the three priming conditions. Consequently, our interpretation, i.e. the differences between the endowment effects between the 3 priming conditions, would not be affected, since we can assume that the USB-device possession time is equally higher in all three seller conditions. Even if the baseline endowment effects would be weaker after dealing with this issue, the differences between the priming conditions still would remain unaffected.

Finally, one issue remains to be discussed, i.e. the fact that the amount of USB-devices that have already been in subject's possession was not controlled. Thus, subjects could have had differently strong individual demand for a USB-device: While one participant could likely just needed a device, another participant could have already possessed one or more devices and consequently lacked any interest in obtaining the device. Even though we appreciate that this could have influenced on the result, it is not likely to be considerable influence, due to the fact that we randomly recruited and allocated participants to the respective groups in the design. Therefore, we can assume that the differences in subjects' demand should have evenly distributed among the design groups, and consequently did not systematically influence the result. Of course, measuring and controlling this factor may have been an alternative way to eliminate possible systematic influences. However, we chose to keep the design lean and effective, and simply trust that allocation randomization excluded this confounding factor.

General conclusion

This study revealed additional valuable evidence that the endowment effect is mainly caused by experiencing strong loss aversion when selling a specific good. Loss aversion, however, is moderated by the emotional state participants are experiencing in the very situation. Specifically, compassion and envy alleviate loss aversion, resulting in weaker endowment effects. Evidence is found that two distinct dimensions (*position-valence-hypothesis*), i.e. focus on own person versus another person (*position*) and relative valence of own position compared to the reference position (*valence*), play a particular role in the emotional moderation of loss aversion. However, future research may measure the effects of further emotions, chosen especially regarding the dimensions position and valence to find more accurate evidence in this research area. Also, if managed to accurately measure the strength of the emotional priming, restrictive limitations could be eradicated, thus creating more insights into the mechanisms involved. However, this study managed to successfully

contribute insights into a rather uncharted area of economic decision-making, inviting future research to extend the findings ascertained.

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APPENDIX

A. Vollständiger deutscher Testablauf

I. Einleitung

Danke, dass Sie sich bereit zur Teilnahme an der Studie bereit erklärt haben! Die folgende Studie besteht aus mehreren unabhängigen Teilen Im ersten Teil können Sie fiktive Punkte zwischen sich und einem unbekannten anderen aufteilen. Im zweiten Teil werden Sie gebeten, Aussagen über Sie selbst zu bewerten. Im dritten Teil überprüfen wir die Wirkung und Verständlichkeit eines bestimmten Textes. Im letzten Teil werden Sie gebeten, Entscheidungen in einer bestimmten ökonomischen Situation zu treffen. Im letzten Teil haben Sie auch die Möglichkeit, bis zu 10€ zu erhalten. Bitte beachten Sie, dass Ihr Ertrag von Ihren Entscheidungen in diesem letzten Teil abhängt, aber von den übrigen Teilen der Untersuchung unabhängig ist.

Bitte versuchen Sie während der gesamten Untersuchung spontan und ehrlich zu antworten. Sie können natürlich die Untersuchung jederzeit ohne Angabe von Gründen abbrechen, wenn Sie das wollen. Sollten Sie irgendwelche Fragen haben, können Sie diese jederzeit an den Testleiter stellen.

II. Social Value Orientation - Instruktion

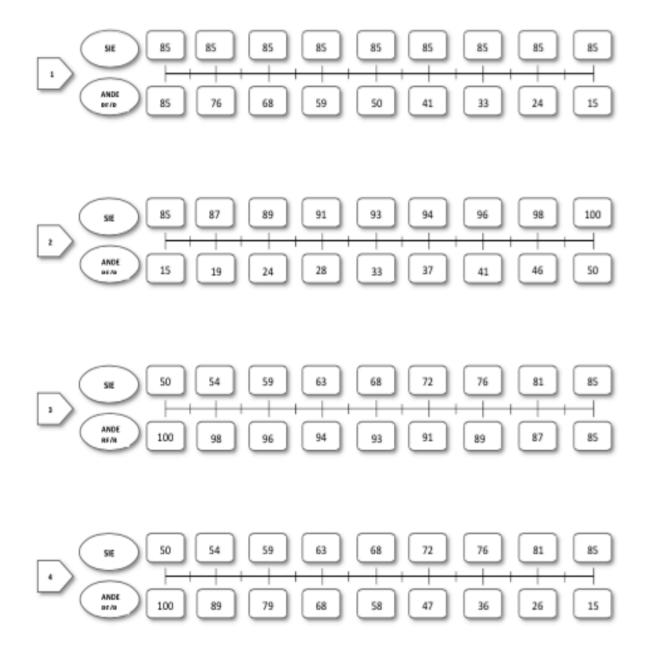
Stellen Sie sich vor, Ihnen wird zufällig eine andere Person (ANDERE/R) zugeteilt, die Sie nicht kennen und die Sie auch in Zukunft nicht treffen werden. Sie beide haben die Aufgabe zwischen SICH und der ANDEREN Person fiktive Punkte aufzuteilen. Ihre Entscheidungen werden sowohl Ihnen ("SIE") als auch der anderen Person ("ANDERE/R") Punkte einbringen. Gleichermaßen bringen auch die Entscheidungen der anderen Person ihnen beiden Punkte ein. Je mehr Punkte SIE erhalten, umso besser für Sie, und je mehr Punkte die ANDERE Person erhält, umso besser für die andere Person.

Bevor Sie beginnen, beachten Sie bitte, dass es keine korrekten oder falschen Antworten gibt—wählen Sie jeweils die Option, die Ihnen am besten gefällt, warum auch immer. Bedenken Sie, dass die Punkte einen Wert haben, je mehr Sie sammeln, umso besser. Dasselbe gilt für die andere Person, je mehr Punkte sie hat, umso besser für sie.

Fragen können Sie natürlich jederzeit an den Testleiter stellen.

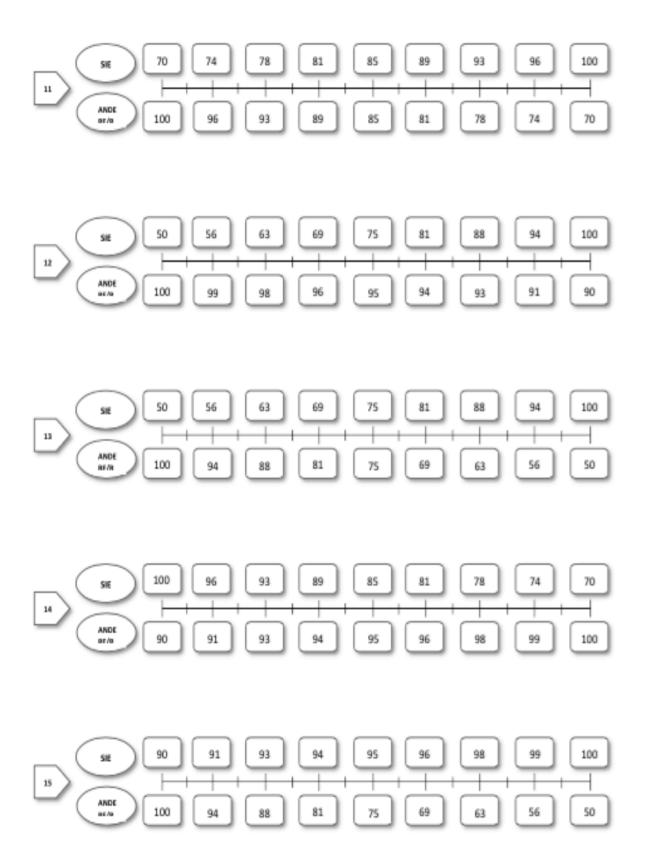
III. Social Value Orientation - Test

Bitte markieren Sie jeweils auf der Linie die Stelle der Verteilung, die Sie bevorzugen!

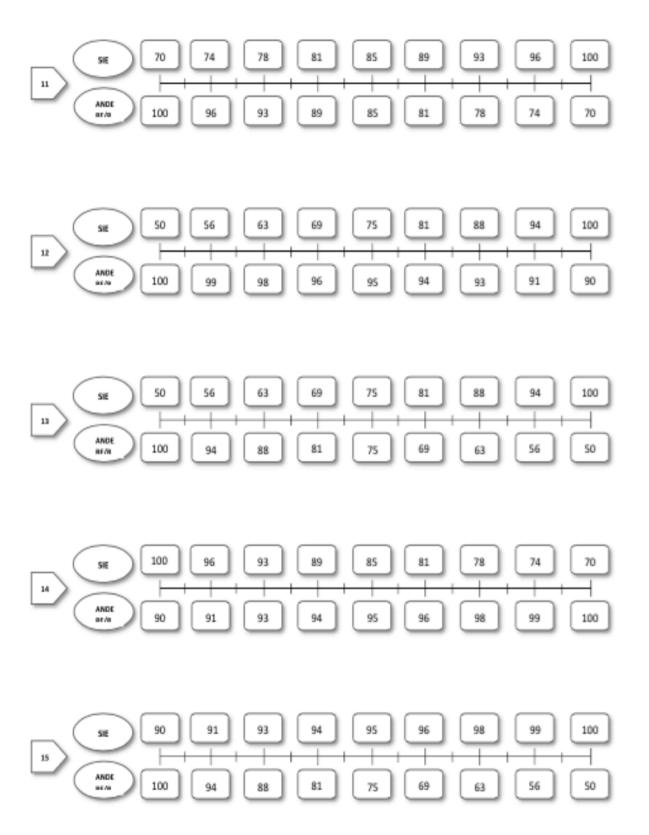




Bitte markieren Sie jeweils auf der Linie die Stelle der Verteilung, die Sie bevorzugen!



Bitte markieren Sie jeweils auf der Linie die Stelle der Verteilung, die Sie bevorzugen!



IV. BIG5-Persönlichkeitsinventar

Inwieweit treffen folgende Aussagen auf Sie zu?

Ich	Trifft überhaupt	Trifft	Weder	eher	trifft voll
	nicht zu	eher	noch	zutreffend	und ganz
		nicht zu			zu
a)bin eher zurückhaltend,	(1)	(2)	(3)	(4)	(5)
reserviert.					
b)schenke anderen leicht	(1)	(2)	(3)	(4)	(5)
Vertrauen, glaube an das					
Gute im Menschen.					
c)bin bequem, neige zur	(1)	(2)	(3)	(4)	(5)
Faulheit.					
d)bin entspannt, lasse	(1)	(2)	(3)	(4)	(5)
mich durch Stress nicht aus					
der Ruhe bringen.					
e)habe nur wenig	(1)	(2)	(3)	(4)	(5)
künstlerisches Interesse					
f)gehe aus mir heraus,	(1)	(2)	(3)	(4)	(5)
bin gesellig.					
g)neige dazu, andere zu	(1)	(2)	(3)	(4)	(5)
kritisieren.					
h)erledige Aufgaben	(1)	(2)	(3)	(4)	(5)
gründlich.					
i)werde leicht nervös und	(1)	(2)	(3)	(4)	(5)
unsicher.					
j)habe eine aktive	(1)	(2)	(3)	(4)	(5)
Vorstellungskraft, bin					
phantasievoll.					
k)bin rücksichtsvoll zu	(1)	(2)	(3)	(4)	(5)
anderen, einfühlsam.					

VI. Emotionales Priming Text – Mitleid

Sie haben nun einige Minuten Zeit einen Text zu lesen. Bitte lesen Sie diesen Text genau und konzentriert, da Sie im Anschluss einige Fragen dazu beantworten sollen:

Da ist sie wieder, die alte Frau. Sie steht jeden Tag an der gleichen Stelle, gleich neben meinem Haustor, ihre Kleider stinken – sie hat sich sichtlich lange nicht mehr gewaschen - und sie murmelt vor sich hin. Jedes Mal, wenn ich ihr begegne, tut mir das weh, sie so zu sehen. Oft habe ich mir schon vorgenommen, etwas zu tun, mit ihr zu reden, sie zu fragen, aber ich habe es mich bisher nie getraut...

Wie alt ist sie wohl? 80? Man kann das nicht gut erkennen, sie ist so mager und schmutzig. Sie blickt unverwandt auf ein Fenster im vierten Stock. Was sagt sie? "Da ist er rausgesprungen, da war das. Georg, bleib! Nicht springen! Mama ist gleich da. Nicht springen!" Jeden Tag dasselbe. Hat sie ihr Kind verloren? Das muss schon lange her sein. Und seither steht sie unter dem Fenster? Ich möchte ihr so gerne helfen, aber wie? Sie zittert, kein Wunder, es hat 2 Grad und sie hat nur diese Wollweste an. Und ein dünnes Kleid. Wie verschlissen es ist! Und ihr verfülztes Haar hängt ihr ins Gesicht. Man sieht nicht viel, außer, dass sie viele Falten hat. Es hört sich an, als ob sie auch keine Zähne mehr hätte. Die Leute wechseln die Straßenseite, wenn sie an ihr vorbei müssen. Der Einkaufswagen, in dem sie lauter Plastiksäcke hat, versperrt den Weg. Aber das ist wohl nicht der einzige Grund, warum keiner an ihr vorbei gehen will. Man meidet sie. Sie, die ohnedies so alleine ist. Ohne ihr Kind. In der Vergangenheit gefangen. Jetzt weint sie. Was mache ich bloß? Es tut mir so weh...³

³ geistiges Eigentum wohlwollend bereitgestellt von Mag. Christiane Sartena

VII. Emotionales Priming Fragen – Mitleid

Bitte beantworten Sie die folgenden Fragen und schreiben Sie dazu die Antworten auf das Blatt Papier, das Sie vor sich finden, detailliert auf.

HINWEIS: Sie können das Blatt im Anschluss gerne mit abgeben, müssen dies aber nicht tun. Die Niederschrift dient dazu, dass Sie die Situation strukturierter und intensiver rekapitulieren.

- 1. Wie würden Sie sich fühlen, wenn Sie die soeben geschilderte Beobachtung gemacht hätten? Bitte versuchen Sie die gefühlten Emotionen genau zu beschreiben.
- 2. Beschreiben Sie bitte kurz drei bis fünf Situationen, in denen Sie in der Vergangenheit Mitleid empfunden haben.
- 3. Beschreiben Sie nun bitte die Sache, die in Ihnen das größte Mitleid auslöst bzw. ausgelöst hat, etwas genauer. Was hat diese Emotion in Ihnen ausgelöst?

VIII. Emotionales Priming Text – Neid

Sie haben nun einige Minuten Zeit einen Text zu lesen. Bitte lesen Sie diesen Text genau und konzentriert, da Sie im Anschluss einige Fragen dazu beantworten sollen:

Das ist unfair! Ich war immer vernünftiger als sie, habe mit ausgezeichnetem Erfolg die Schule abgeschlossen und musste auch immer im Haushalt mithelfen! Habe mich selbstverständlich um meine Geschwister kümmern müssen, täglich nach der Schule und auch am Wochenende. Ok, ich hab's gern gemacht, weil meine Mutter das nicht alleine geschafft hätte. Aber jetzt reicht's mir! Als ich so alt war wie sie, habe ich nie so viel Taschengeld bekommen, und jetzt erfahre ich, dass meine kleine Schwester mit 16 Jahren schon 150€ im Monat bekommt! Noch dazu hat sie keine Ausgaben: Essen, Kleidung und Sonstiges bekommt sie alles bezahlt! Das ist einfach nicht fair!

Ich meine, wenn sie wenigstens sonst keine Probleme machen würde, das würd' ich ja verstehen. Aber sie ist schlecht in der Schule, geht nur feiern und lernt nichts! Dann kommt sie daher mit ihrer Markenkleidung. Und die hat sie nicht mal selber bezahlt, nein, das zahlt die Mama! Ich hab nie solche Kleidung bekommen! Ich versteh's einfach nicht, es ist so unfair!

Aber ist eh klar: immer das Lieblingskind gewesen. Die Mama lässt sich alles gefallen und zahlt ihr noch dazu so viel Geld im Monat. Ich könnte das auch gut gebrauchen, schließlich möchte ich ein Auslandsemester machen. Aber nein, das ist ja mein Privatvergnügen, meint Mama, ich kann genauso gut in Wien studieren. Aber meine kleine Schwester kassiert 150€ im Monat für nichts. Das ist nicht nur unfair, das ist eigentlich schon gemein. Dass man eines seiner Kinder dermaßen bevorzugen kann...

Also gut, werde ich eben auch so wie sie. Da kann die Mama lange warten, wenn sie wieder jemanden braucht, um schwere Sachen zu tragen. Und mit meiner kleinen Schwester werde ich auch nicht mehr lernen, die soll ruhig durchfallen. Dann sieht die Mama endlich, wie "gut" ihr die 150 € getan haben! So eine Frechheit!⁴

⁴ geistiges Eigentum wohlwollend bereitgestellt von Mag. Christiane Sartena

IX. Emotionales Priming Fragen – Neid

Bitte beantworten Sie die folgenden Fragen und schreiben Sie dazu die Antworten auf das Blatt Papier, das Sie vor sich finden, detailliert auf.

HINWEIS: Sie können das Blatt im Anschluss gerne mit abgeben, müssen dies aber nicht tun. Die Niederschrift dient dazu, dass Sie die Situation strukturierter und intensiver rekapitulieren.

- 1. Wie würden Sie sich fühlen, wenn Sie diese Beobachtung erlebt hätten? Bitte versuchen Sie die gefühlten Emotionen genau zu beschreiben.
- 2. Beschreiben Sie bitte kurz drei bis fünf Situationen, in denen Sie in der Vergangenheit Neid empfunden haben.
- 3. Beschreiben Sie nun bitte die Sache, die in Ihnen den größten Neid auslöst bzw. ausgelöst hat, etwas genauer. Was hat diese Emotion in Ihnen ausgelöst?

X. Emotionales Priming Text – Kontrolle

Sie haben nun einige Minuten Zeit einen Text zu lesen. Bitte lesen Sie diesen Text genau und konzentriert, da Sie im Anschluss einige Fragen dazu beantworten sollen:

Das Blatt ist neben der Sprossachse und der Wurzel eines der drei Grundorgane der höheren Pflanzen und wird als Organtyp *Phyllom* genannt. Blätter sind seitliche Auswüchse an den Knoten (Nodi) der Sprossachse. Die ursprünglichen Funktionen der Blätter sind Photosynthese (Aufbau von organischen Stoffen mit Hilfe von Licht) und Transpiration (Wasserverdunstung, ist wichtig für Nährstoffaufnahme und -transport).

Blätter treten nur bei Sprosspflanzen auf, das heißt bei farnartigen Pflanzen (Pteridophyta) und Samenpflanzen (Spermatophyta). Dagegen fehlen sie bei Moosen und Algen, an deren Thallus allerdings blattähnliche Gebilde auftreten können, die jedoch nur als Analogien der Blätter zu betrachten sind.

Der Reichtum an Blattformen ist enorm. In einigen Fällen entstanden im Laufe der Evolution auch Blattorgane, die mit der ursprünglichen Funktion des Blattes, nämlich der Photosynthese und Transpiration, nichts mehr zu tun haben: zum Beispiel Blütenblätter, Blattdornen und Blattranken, sowie Knospenschuppen (siehe Metamorphosen des Blattes).

Bei vielen fleischfressenden Pflanzen sind die Blätter zu Organen umgewandelt worden, mit denen Beute gefangen und absorbiert wird, je nach Gattung werden sie entweder als Klebe-, Klapp- oder Fallgrubenfallen bezeichnet. Dabei sind bei einigen Pflanzengattungen die Blätter auch zu, teils sehr schnellen, Bewegungen fähig (Sonnentaugewächse, Wasserschläuche). Alle fleischfressenden Pflanzen sind in der Lage, mit der Oberfläche ihrer Fallen die gelösten Nährstoffe der Beute zu absorbieren, die im strengen Sinne karnivoren Pflanzen sind zusätzlich noch mit Drüsen auf der Oberfläche der Fallen versehen, durch die sie Enzyme ausscheiden, die die Beute auflösen.⁵

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⁵ Das Blatt. (n.d.). In Wikipedia online. Retrieved from http://en.wikipedia.org/wiki/Leaf [30.1.15]

XI. Emotionales Priming Fragen – Kontrolle

Bitte beantworten Sie die folgenden Fragen und schreiben Sie dazu die Antworten auf das Blatt Papier, das Sie vor sich finden, detailliert auf.

HINWEIS: Sie können das Blatt im Anschluss gerne mit abgeben, müssen dies aber nicht tun. Die Niederschrift dient dazu, dass Sie die Situation strukturierter und intensiver rekapitulieren)

- 1. Worum ging es in dem Text? Bitte schreiben Sie eine kurze Zusammenfassung auf.
- 2. Der Frühling ist die Zeit des Aufbruchs und der Blüte. Dabei lockt es viele Menschen hinaus in die Natur, wenn das Wetter es zulässt. Bitte beschreiben Sie, welche Aktivitäten Sie am liebsten in der Natur ausüben.
- 3. Bitte wählen Sie ein Hobby, das Sie derzeit am intensivsten ausführen! Bitte beschreiben Sie genau, weshalb Sie es ausführen und was daran Ihnen besonders zusagt!

XII. Emotionales Priming – Manipulation Check

Nun werden Ihnen einige Fragen zu ihren Gefühlen präsentiert. Bitte versuchen Sie, diese spontan und wahrheitsgemäß zu beantworten. Halten Sie sich bitte nicht allzu lange bei den einzelnen Fragen auf, sondern versuchen Sie eher, die Fragen spontan zu beantworten. Gehen Sie dazu in sich und ermitteln Sie, in welchem Ausmaß Sie die jeweiligen Gefühle empfinden.

Bitte geben Sie an, wie Sie sich momentan fühlen!	(0 = keine Ausprägung; 7 = starke Ausprägung)
Wie viel Ärger verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Traurigkeit verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Glück verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Neid verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Mitleid verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Unbehagen verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Interesse verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Langeweile verspüren Sie gerade?	0-1-2-3-4-5-6-7
Wie viel Schuld verspüren Sie gerade?	0-1-2-3-4-5-6-7

XIII. Instruktion zur Transaktion – Buyer

Im Folgenden wird Ihnen ein USB-Stick (2GB) präsentiert. Sie haben nun die Möglichkeit, diesen Stick zu kaufen. Dabei geben Sie bitte den Preis an, zu dem Sie den USB-Stick kaufen wollen. Bitte kreuzen Sie so lange **JA** an bis zu dem Preis, zu dem Sie den Stick gerade nicht mehr kaufen wollen, und ab da dann **NEIN**.

HINWEIS: Sie müssen natürlich den Betrag nicht aus ihrer eigenen Tasche bezahlen. Ihre Angabe bestimmt allerdings, ob Sie nun den USB-Stick erhalten oder andernfalls den Betrag in €, den Sie nach der Testung bekommen. Dazu wird mit einem 20-seitigen Würfel 1x gewürfelt. Jede Ziffer auf dem Würfel entspricht einem Preis auf der Skala (1-20). Das Ergebnis des Würfelns wird anschließend mit Ihren Angaben (JA oder NEIN) bei dem jeweiligen Preis verglichen. Haben Sie zu dem erwürfelten Preis den USB-Stick gekauft und somit JA angekreuzt, so bekommen Sie den USB-Stick. Haben Sie allerdings zu dem erwürfelten Preis den USB-Stick nicht gekauft und somit NEIN angekreuzt, so bekommen Sie den erwürfelten Betrag ausgezahlt. Bitte beachten Sie, dass es Sinn macht, sich genau zu überlegen, wie viel Ihnen der USB-Stick persönlich wert ist und zu welchem Preis Sie ihn daher kaufen wollen.

Fragen können Sie natürlich jederzeit an den Testleiter stellen.

XIV. Price Elicitation Scale – Buyer

Bitte kreuzen Sie nun für jeden Preis an, ob Sie den USB-Stick kaufen wollen (**JA**) oder nicht (**NEIN**),

Ich würde den USB-Stick verkaufen um	JA	NEIN
(1) € 10.00	0	0
(2) € 9.50	0	0
(3) € 9.00	0	0
(4) € 8.50	0	0
(5) € 8.00	0	0
(6) € 7.50	0	0
(7) € 7.00	0	0
(8) € 6.50	0	0
(9) € 6.00	0	0
(10) € 5.50	0	0
(11) € 5.00	0	0
(12) € 4.50	0	0
(13) € 4.00	0	0
(14) € 3.50	0	0
(15) € 3.00	0	0
(16) € 2.50	0	0
(17) € 2.00	0	0
(18) € 1.50	0	0
(19) € 1.00	0	0
(20) € 0.50	0	0

XV. Instruktion zur Transaktion – Seller

Im Folgenden wird Ihnen ein USB-Stick (2GB) präsentiert. Dieser Stick gehört nun Ihnen. Sie haben aber die Möglichkeit, diesen Stick zu verkaufen. Dabei geben Sie bitte den Preis an, zu dem Sie den USB-Stick verkaufen wollen. Bitte kreuzen Sie so lange JA an bis zu dem Preis, zu dem Sie den Stick gerade nicht mehr verkaufen wollen, und ab da dann NEIN.

HINWEIS: Um nun herauszufinden, zu welchem Preis Sie den USB-Stick verkaufen, wird mit einem 20-seitigen Würfel 1x gewürfelt. Jede Ziffer auf dem Würfel entspricht einem Preis auf der Skala (1-20). Das Ergebnis des Würfelns wird anschließend mit Ihren Angaben (JA oder NEIN) bei dem jeweiligen Preis verglichen. Haben Sie zu dem erwürfelten Preis den USB-Stick verkauft und somit JA angekreuzt, so bekommen Sie den erwürfelten Betrag ausgezahlt. Haben Sie allerdings zu dem erwürfelten Preis den USB-Stick nicht verkauft und somit NEIN angekreuzt, so behalten Sie den Stick. Bitte beachten Sie, dass es Sinn macht, sich genau zu überlegen, wie viel Ihnen der USB-Stick persönlich wert ist und zu welchem Preis Sie ihn daher kaufen wollen.

Fragen können Sie natürlich jederzeit an den Testleiter stellen.

XVI. Price Elicitation Scale – Seller

Bitte kreuzen Sie nun für jeden Preis an, ob Sie den USB-Stick verkaufen wollen (**JA**) oder nicht (**NEIN**)

Ich würde den USB-Stick verkaufen um	JA	NEIN
(1) € 10.00	0	Ο
(2) € 9.50	0	0
(3) € 9.00	0	0
(4) € 8.50	0	0
(5) € 8.00	0	0
(6) € 7.50	0	0
(7) € 7.00	0	0
(8) € 6.50	0	0
(9) € 6.00	0	0
(10) € 5.50	0	0
(11) € 5.00	0	Ο
(12) € 4.50	0	0
(13) € 4.00	0	0
(14) € 3.50	0	0
(15) € 3.00	0	0
(16) € 2.50	0	0
(17) € 2.00	0	Ο
(18) € 1.50	0	0
(19) € 1.00	0	0
(20) € 0.50	0	0

Demographische Daten

XVII.

Abschließend bitten wir Sie noch um einige Angaben zu Ihrer Person: Alter: Jahre Geschlecht: o weiblich o männlich Höchste abgeschlossene Ausbildung: Kein Abschluss o Pflichtschule o Lehre o Matura o Akademische Ausbildung Studieren Sie oder haben Sie studiert? Wenn ja, welches Studium? o ja, Studienrichtung: o nein, studiere nicht bzw. habe nicht studiert Was glauben Sie wollten wir mit dieser Studie untersuchen? Haben Sie noch sonstige Anmerkungen?

Vielen Dank für Ihre Teilnahme! Bitte wenden Sie sich an den Testleiter.

B. Complete English survey version

I. Introduction

Thank you for participating in this survey. The following study is compound of several parts: In the first part, you are asked to distribute fictive points between yourself and another, unknown person. In the second part, you will be asked to rate statements as to whether they apply to your personality. Next, you will be asked to rate the effect and comprehensibility of a particular text. Finally, you will have to make decisions in a particular economical situation. The last part – and only the last part - will be the one determining how much money you will receive for participation, up to $\mathbf{\epsilon}$ 10.

Please consider that best results will be achieved, if you are spontaneous and honest throughout the process. Of course, you are eligible to discontinue the survey at any point without further explanation, if you wish to. If you have any questions, please do not hesitate to ask the test leader.

II. Social Value Orientation - Instruction

Please imagine that you are randomly allocated with a person you do not know and do not have to meet in future. You both have the task to distribute fictive pointe between YOU and the OTHER person. Your decisions will earn both YOU and the OTHER person a certain amount of points. Likewise, the OTHER person's decisions will earn both him/her and YOU a certain amount of points. The more points YOU earn, the better for YOU. The more points the OTHER person earns, the better for him/her.

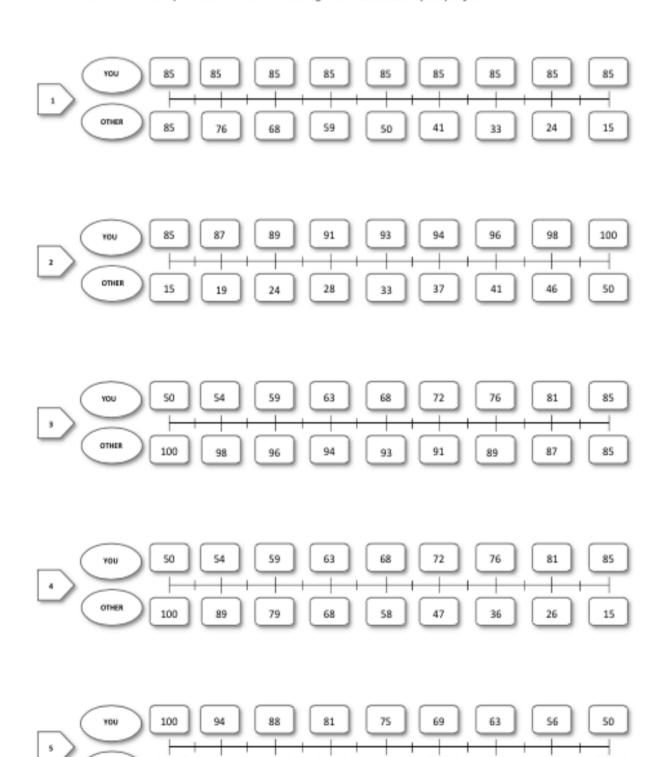
Before you start, please consider that there are no correct or wrong answers – please choose an option that you personally prefer, for what reasons soever. Please consider that the points have a certain value, the more you earn, the better. Likewise, the more points the other person earns, the better for him/her.

If you have any questions, please do not hesitate to ask the test leader.

III. Social Value Orientation – Test

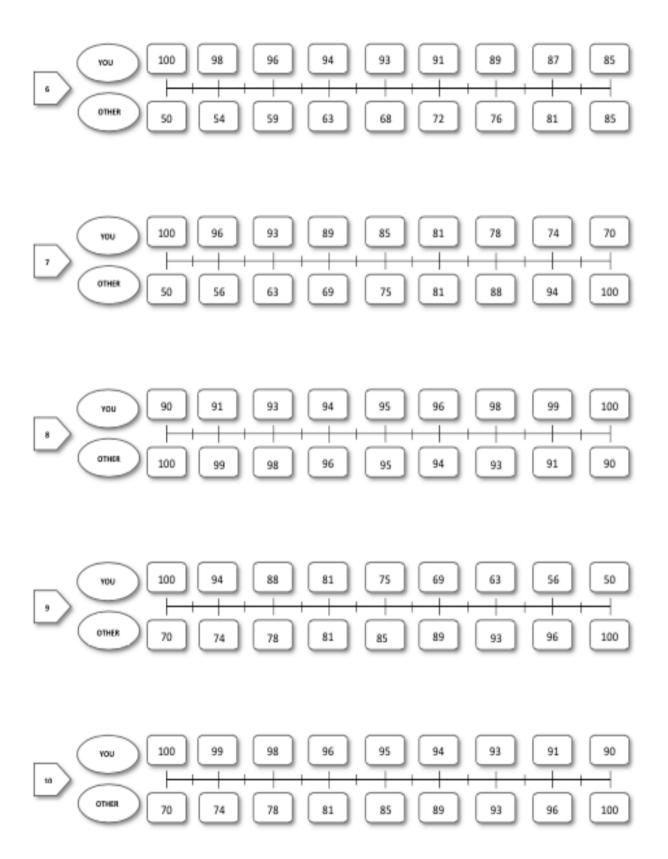
50

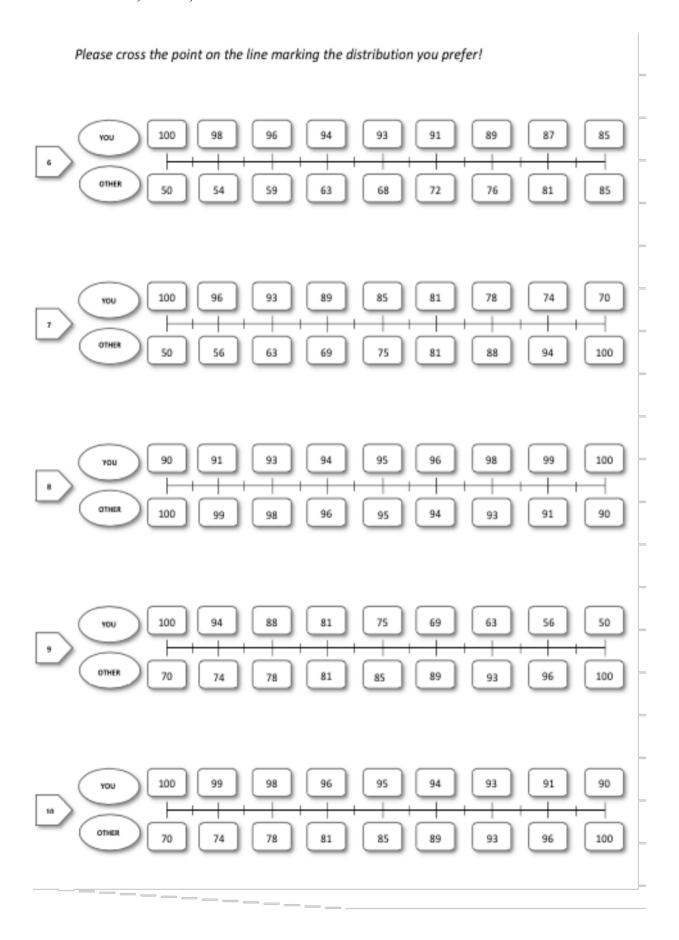
Please cross the point on the line marking the distribution you prefer!



100

Please cross the point on the line marking the distribution you prefer!





IV. Big-5 personality inventory

Please rate the following statements as to whether they apply to your general personality?

I	Is not accurate at all	Is rather not accurate	Neutral	Is rather accurate	Is completely accurate
a)am rather reserved.	(1)	(2)	(3)	(4)	(5)
b) am trusting people easily, believe in the good in people.	(1)	(2)	(3)	(4)	(5)
c)am modest, tend to laziness.	(1)	(2)	(3)	(4)	(5)
d)am relaxed, not easily stressed out.	(1)	(2)	(3)	(4)	(5)
e)show only little artistic interest.	(1)	(2)	(3)	(4)	(5)
f)am sociable, companionable	(1)	(2)	(3)	(4)	(5)
g) tend to criticize people.	(1)	(2)	(3)	(4)	(5)
h)do my work thoroughly.	(1)	(2)	(3)	(4)	(5)
i)get nervous easily, anxious easily.	(1)	(2)	(3)	(4)	(5)
j)have a wide imagination.	(1)	(2)	(3)	(4)	(5)
k)am a thoughtful, respectful person.	(1)	(2)	(3)	(4)	(5)

V. Emotional priming text – Compassion

Please read the following text carefully. You will be asked to answer some related questions subsequently:

There she is again, the old woman. Every day I see her standing on the same spot, right next to the entrance. Her clothes smell – she obviously did not have a wash for long – and I hear her murmuring again. Every time I met her, it hurts me to see her. I often intended to act, to talk to her, to ask her, but I never dared to really do it thus far...

How old she might be? 80? You cannot tell, she is so slender and filthy. She always gazes at that 4th floor window. What is she saying? "There he jumped out, there it was. George, stay!! Don't jump! Mom is there for you. Don't jump!" Everyday the same. Did she lose her son? It must have been a long time ago. And every since she has been standing under that window? I would really like to help her, but how? She is trembling, no wonder, its 2 degrees outside and she's only wearing this cardigan. And this thin dress. How worn out it is. And her filthy hair is covering her face. You can't see much, only that she must have deep wrinkles. It sounds as though she misses some teeth. People are changing the side of the street when they have to pass her. Her cart covered with plastic bags is blocking the way. But that is not the only reason why people are changing tracks. They avoid her. Her who is so lonely anyway. Without her child. Trapped in the past. Now she is crying. What can I do? It hurts so much... 6

⁶ intellectual property generously provided by Mag. Christiane Sartena

VI. Emotional priming questions – Compassion

Please read the following questions related to the text. Please note the answers in detail on the sheet of paper you find in front of you.

NOTE: While we would kindly ask you to hand in the written answers, you do not have to do that. For any reason, you may as well take the sheet with you after completing the answering. Writing down the answers serves that you work through the information given more structured and intensively.

- 1. How would you feel when having made the observation described? Please try to describe the emotions felt in particular!
- 2. Please note three to five situations in your past, in which you have experienced compassion!
- 3. Please explain the one situation more in detail, which caused you to feel compassion in your past! What exactly made you feel compassion?

VII. Emotional priming text – Envy

Please read the following text carefully. You will be asked to answer some related questions subsequently:

That's not fair! I have always been more reasonably than her, had better grades in school and also helped out home with housekeeping! Of course, I had to take care of my little siblings, bring them from school, even at weekends! Ok, I did it gladly, cause Mom couldn't handle it alone. But that's too much! When I was her age, I never got that much pocket money, and now I'm told that my little sister gets 150€ a month! And she doesn't even have to spend anything: no food, no clothes, nothing, it's all taken care of! That is just not fair! I mean, if she only would be causing no trouble, then I would understand. But she sucks at school, only goes to parties and never studies. And then I see her in her brand clothes. Didn't even pay herself, no, that paid our mother. I would have never got that expensive clothes! I don't understand, it's so unfair!

Well, its clear to me: she has always been the favourite child. Mom tolerates all her flaws and even pays her so much money. I would need that money myself, cause I wanna do this expensive exchange semester. But no, that's my concern, my mother says, I might as well study here in Vienna. But my sister gets 150€ a month! That is not unfair, that is literally mean. That she favours one child that obviously...

Ok, so I will become more like my sister: Oh, Mom will have to wait long hours, next time she needs someone to carry the heavy groceries. And I will stop helping my sister to study, even if she fails class then. Then Mom will see how "good" it was to give her 150€! Ridiculous!⁷

⁷ intellectual property generously provided by Mag. Christiane Sartena

VIII. Emotional priming questions – Envy

Please read the following questions related to the text. Please note the answers in detail on the sheet of paper you find in front of you.

NOTE: While we would kindly ask you to hand in the written answers, you do not have to do that. For any reason, you may as well take the sheet with you after completing the answering. Writing down the answers serves that you work through the information given more structured and intensively.

- 1. How would you feel when having made the observation described? Please try to describe the emotions felt in particular!
- 2. Please note three to five situations in your past, in which you have experienced envy!
- 3. Please explain the one situation more in detail, which caused you to feel envy in your past! What exactly made you feel envy?

IX. Emotional priming text – Control

Please read the following text carefully. You will be asked to answer some related questions subsequently:

A leaf is an organ of a vascular plant and is the principal lateral appendage of the stem. The leaves and stem together form the shoot. Foliage is a mass noun that refers to leaves collectively.

Typically a leaf is a thin, dorsiventrally flattened organ, borne above ground and specialized for photosynthesis. Most leaves have distinctive upper (adaxial) and lower (abaxial) surfaces that differ in colour, hairiness, the number of stomata (pores that intake and output gases) and other features. In most plant species, leaves are broad and flat. Such species are referred to as broad-leaved plants. Many gymnosperm species have thin needle-like leaves that can be advantageous in cold climates frequented by snow and frost. Leaves can also come in other shapes and forms such as: scales in certain species of conifers; some are not above ground (such as bulb scales); succulents plants have thick juicy leaves; and some leaves are without major photosynthetic function (consider for example cataphylls, and spines). Furthermore, several kinds of leaf-like structures found in vascular plants are not totally homologous with them. Examples include flattened plant stems (called phylloclades and cladodes), and phyllodes (flattened leaf stems), both of which differ from leaves in their structure and origin. Conversely, many structures of non-vascular plants, and even of some lichens, which are not plants at all (in the sense of being members of the kingdom Plantae), do look and function much like leaves. The primary site of photosynthesis in most leaves (palisade mesophyll) almost always occurs on the upper side of the blade or lamina of the leaf but in some species, including the mature foliage Eucalyptus palisade occurs on both sides and the leaves are said to be isobilateral.8

[1/30/15]

⁸ Leaf. (n.d.). In Wikipedia online. Retrieved from http://en.wikipedia.org/wiki/Leaf

X. Emotional priming questions – Control

Please read the following questions related to the text. Please note the answers in detail on the sheet of paper you find in front of you.

NOTE: While we would kindly ask you to hand in the written answers, you do not have to do that. For any reason, you may as well take the sheet with you after completing the answering. Writing down the answers serves that you work through the information given more structured and intensively.

- 1. What was the text all about? Please give a short summary!
- 2. Spring is the season of awakening and flowering. Many people are drawn outside into nature, if weather is right. Please describe, what you personally like to do outside in nature!
- 3. Please choose one hobby that you particularly like and explain more in detail, why you chose exactly this hobby!

XI. Emotional Priming - Manipulation Check

In the following list, you find various emotions. Please indicate how intensely you feel the each emotion right now: Please note that subject of interest is **how you feel right now**, not how you generally experience those emotions. Therefore, please try to answer honest and spontaneously and be assured that there are no false or right answers. Thus, simply cross the respective number that best indicates how intensely you feel the respective emotion!

Please indicate how intensely you feel the following	(0 = no intensity;
emotions!	7 = strong intensity)

How much anger do you feel right now?	0-1-2-3-4-5-6-7
How much sadness do you feel right now?	0-1-2-3-4-5-6-7
How much happiness do you feel right now?	0-1-2-3-4-5-6-7
How much envy do you feel right now?	0-1-2-3-4-5-6-7
How much compassion do you feel right now?	0-1-2-3-4-5-6-7
How much discomfort do you feel right now?	0-1-2-3-4-5-6-7
How much interest do you feel right now?	0-1-2-3-4-5-6-7
How much boredom do you feel right now?	0-1-2-3-4-5-6-7
How much guilt do you feel right now?	0-1-2-3-4-5-6-7

XII. Instruction transaction - Buyer

In this last part of the survey, you are now handed a USB-device with 2GB data volume for inspection. You now have the opportunity to **buy** this device. Therefore, we ask you to indicate which price you are willing to pay for the device. Please thus refer to the scale on the next page: Please mark each one the indicated prices according to whether you would buy it **(YES)** or not **(NO)**. If you absolutely do not want to buy the device, mark **NO** for all the prices. Likewise, if you absolutely do want to buy the device, mark **YES** for all the prices.

HINT: To find out which price we are willing to sell the device, we will **cast one 20-sided die** after you have marked the prices on the scale. Each side is corresponding to one price (on the scale), thus the side casted will determine the price we will eventually set. If you have marked **YES** for the casted price, the transaction will be successful and you will buy the device for that very price. However, if you have marked **NO** for the casted price, the transaction is not successful and will receive the price in €. Therefore, it makes sense to contemplate what the device is personally worth to you and mark the scale accordingly.

If you have any questions, do not hesitate to ask the test leader.

XIII. Price Elicitation Scale - Buyer

Please mark for each price whether you would buy the USB-device (YES) or not (NO).

I would buy the USB-device for	YES	NO
(1) € 0.50	0	0
(2) € 1.00	0	0
(3) € 1.50	0	0
(4) € 2.00	0	0
(5) € 2.50	0	0
(6) € 3.00	0	0
(7) € 3.50	0	0
(8) € 4.00	0	0
(9) € 4.50	0	0
(10) € 5.00	0	0
(11) € 5.50	0	0
(12) € 6.00	0	0
(13) € 6.50	0	0
(14) € 7.00	0	0
(15) € 7.50	0	0
(16) € 8.00	0	0
(17) € 8.50	0	0
(18) € 9.00	0	0
(19) € 9.50	0	0
(20) € 10.00	0	0

XIV. Instruction transaction - Seller

The next part deals with the USB-device (2GB) you were previously given. This device is basically yours, however, you have the opportunity now to **sell the device**. Therefore, we would like you to indicate which price you demand in order to sell the device.

Please refer to the scale on the next page: Please mark each one the indicated prices according to whether you would sell it **(YES)** or not **(NO)**. If you absolutely do not want to sell the device, mark **NO** for all the prices. Likewise, if you absolutely do want to sell the device, mark **YES** for all the prices.

HINT: To find out which price we will offer you for the device, we will **cast one 20-sided die** after you have marked the prices on the scale. Each side is corresponding to one price (on the scale), thus the side casted will determine the price we will eventually offer you. If you have marked **YES** for the casted price, the transaction will be successful and you will be given the respective amount of money for the device. However, if you have marked **NO** for the casted price, the transaction is not successful and you will keep the device. Therefore, it makes sense to contemplate what the device is personally worth to you and mark the scale accordingly.

If you have any questions, do not hesitate to ask the test leader.

XV. Price Elicitation Scale - Seller

Please mark for each price whether you would sell the USB-device (YES) or not (NO).

I would sell the USB-device for	YES	NO
(1) € 10.00	0	0
(2) € 9.50	0	0
(3) € 9.00	0	0
(4) € 8.50	0	0
(5) € 8.00	0	0
(6) € 7.50	0	0
(7) € 7.00	0	0
(8) € 6.50	0	0
(9) € 6.00	0	0
(10) € 5.50	0	0
(11) € 5.00	0	0
(12) € 4.50	0	0
(13) € 4.00	0	0
(14) € 3.50	0	0
(15) € 3.00	0	0
(16) € 2.50	0	0
(17) € 2.00	0	0
(18) € 1.50	0	0
(19) € 1.00	0	0
(20) € 0.50	0	0

XVI.	Demographics
Finall	y, we would like to ask you some questions regarding demographics:
Age: _	years
Sex:	
0	female
0	male
Gradu	ated educational level:
0	No graduation
0	Compulsory School
0	Apprenticeship
0	Higher School
0	Academic degree
Are yo	ou currently or have you been studying? If so, which major?
0	Yes, major:
0	No, I am not studying or have never been studying, respectively.
What	intention do you guess did this study have?
Do yo	u have any other comments?

Thank you for your participation. When finished, please refer to the test leader!

C. Curriculum Vitae

Stephan Esterle



"Das Leben selbst ist es, das dem Menschen Fragen stellt. Er hat nicht zu fragen, er ist vielmehr der vom Leben her Befragte, der dem Leben zu antworten - das Leben zu verantworten hat. (V. Frankl)"

Berufserfahrung

01/2013 - 06/2013 **Praktikum (240 Stunden)**

bcd brunbauer communication development

Selbstständige Erarbeitung kommunikationspsychologischer Beratungslösungen. Leitung psychologischer Workshops für mehrere Klienten in Bildungsmanagement und öffentlichen

Dienst. Datenbankbetreuung.

 $04/2009 - 01/2013 \qquad \textbf{Service (geringfügig)}$

Wein&Co HandelsgesmbH

Kellner in Bar. Kundenpflege, Bestandsorganisation, finanzielle Abrechnung. Selbstständige Servicearbeit mit Fokus auf Stammkunden sowie Problemlösung.

Ausbildung

 $10/2009 - 03/2015 \qquad \textbf{Diplomstudium Psychologie}$

Universität Wien

Kerngebiete der Psychologie, Fokus auf Wirtschaftspsychologie sowie Arbeits- und

Organisationspsychologie. Planung und Durchführung wissenschaftlicher Studien. Coaching und Supervision. Markt-

und Konsumentenverhaltensforschung. Statistik und

Diagnostik.

10/2009 – 03/2015 Bachelorstudium Wirtschafts- und Sozialwissenschaften

Wirtschaftsuniversität Wien

Grundlagen der Betriebswissenschaften. Fokus auf

Entrepreneurship&Innovation sowie International Business. Internationalisierungsstrategien. Innovationsmanagement. Global Leadership. Buchhaltung und Kostenrechnung.

Finanzierung. Interkulturelle Kompetenz.

09/2013 - 12/2013 Austauschsemenster

McCombs School of Business; University of Texas at Austin

Wirtschaftsseminare in Top-10-Universität der USA. Economics

und Database Management. International Business und

Consumer Behaviour.

2008 – 2012 Humanistisches Gymnasium "Piaristen"

Matura mit Auszeichnung

1998 – 2004 Realgymnasium "Wiener Sängerknaben"

Musikalische Auftritte weltweit

Kenntnisse

Microsoft Office Ausgezeichnet SPSS Ausgezeichnet

Adobe Photoshop Sehr gut

Sprachen

DeutschMutterspracheEnglischAusgezeichnetSpanischSehr gut

Interessen

Schilehrer & Fussballlehrer für Kinder, Sport, Musik, Klavier, Literatur, Kochen, Lesen