Dissertation

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This dissertation is dedicated in loving memory to my

Grandparents Jadwiga and Jerzy Leman

♥

“Mindlessly Polite”
Cognitive Busyness Reduces Compliance Resistance In Social Influence Settings

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Chapter 1: Introduction

Please imagine the following scenarios:

1. You go to your local supermarket in order to buy some water and a newspaper. Suddenly a nice lady approaches you with a tray full of little cheese cubes. She hands you a toothpick with a free cheese sample. You leave the shop with water, a newspaper and a family pack of cheese.
2. A delightful old lady comes to your house and asks you whether you would agree that it is terrifying when poor little kittens are mistreated by their owners. Even though you are not a cat-person, you agree that it is awful when kittens are mistreated. Then the lady asks you whether you would join and support her organization for kittens in need. As the new "voluntary" president of the organization, one third of your salary was transferred to the cause - you still don´t like kittens.
3. You saved 5000 € in order to buy a used car. The charming salesman shows you a perfect model for exactly 5000€. You like it and can see yourself driving it. After you have committed to the purchase the salesman reveals, that in order to get windows, tires and seats you have to pay 3000€ extra…. you buy it anyway.
4. Your neighbors' TV set has been stolen. You are the main suspect. After a 3 hour interrogation, the terrifying, screaming, brutal policeman is replaced by a kind and gentle one. You have not stolen the TV! He offers you tea…. You confess…

Now you might think that you would never behave so irrationally. We will abstain from proving you wrong, but research has shown that situations like those described actually happen quite frequently in everyday life. While we acknowledge that those examples may be slightly exaggerated, they offer apt illustrations of four different Social Influence Techniques (SITs) (along with their desired consequences) used by compliance professionals, including fundraisers, salesmen and marketers. And although these scenarios may seem very different from each other, they share key characteristics geared towards acquiring your compliance.

This paper aims to explore one of the SITs: the Emotional Seesaw Phenomenon (ESP) exemplified by the familiar Bad-Cop-Good-Cop routine described in Scenario 4. It is a relatively

new Social Influence Technique, characterized by a sudden emotional shift described by Dolinski & Nawrat (1998). Said research indicates increased compliance as well as impairment of cognitive functioning in post ESP conditions. Here, we mainly focus on the internal process that takes place after its implementation and its cognitive and behavioral consequences (Chapter 2); as well as on some factors that might inhibit this effect (Chapter 3).

This chapter will provide some theoretical background information concerning persuasion, social influence and compliance. It will also introduce definitions and concepts relevant to our study. Importantly, one must bear in mind that this introduction is not a complete rendering of all information available in this field of study, but is our attempt to highlight and explain some foundational knowledge underlying our studies. The most relevant of these concepts and empirical specifications will be further elaborated on in Chapters 2 and 3. Following a theoretical introduction, a brief overview of existing literature on the Emotional Seesaw Phenomenon will be provided so as to offer a framework for understanding subsequent experiments, and finally to specify the rationale for, and the goals of, this dissertation. The chapter will conclude with a brief outline of the subsequent chapters.

1.1.Persuasion 101: Social Influence Techniques and compliance

At the beginning of this Chapter we exemplified four different influence scenarios. The question that now arises is, what do those scenarios have in common? The central characteristic of all these examples is the aim to persuade. *Persuasion* is an "activity whose purpose is to effect the internalization or voluntary acceptance of new cognitive states or patterns of overt behavior through the exchange of message" (Smith, 1982, p.7). In other words, persuasion is an attempt to influence another's autonomous judgments and behavior in a desired direction. This means that in a persuasive setting you will always find a *persuader* (the promotion lady, the fundraiser, the salesman, or the policeman) who has a clear intent to *persuade* (sell cheese, or a car, make you support kitten rights, or make you confess a crime). Another shared feature is the use of communication to accomplish persuasion. As seen in the examples above, there are many ways to structure this persuasive attempt. On the other side you have the *target person*, the one at whom

the persuasive attempt is directed. This person is also referred to as the *persuadee,* or the *requestee*. It is the summation of factors and their individual characteristics that determines the outcome of a persuasive attempt. For successful persuasion it is important, in addition to the *persuasive goal* (attitude change vs. compliance) and the *processing modality* (central vs. peripheral), *who* (source characteristics) says *what* (message characteristics) to *whom* (target characteristics) and *how* (requesting techniques).

1.1.1. Persuasion goals

The act of persuasion can have two goals, to change attitudes or to evoke compliance. Persuasive messages aimed at attitude change can be communicated to groups or individuals. Social campaigns persuade for a healthy lifestyle; parents persuade for the importance of good education and behavior; marketers persuade for the urgent need of possessing their exact product. *Attitudes* are relatively enduring evaluations people hold to with respect to themselves, other people, objects and issues (Thurstone, 1928). To alter attitudes is difficult because the likelihood of change is determined not only by the quality of the persuasive message, but also by the target's subjective importance of the attitude itself, and by the target's motivation and ability to understand and incorporate the persuasive message.

Social Influence Techniques (SITs), on the other hand, are most often designed in order to change behavior directly (without the hard work of attitude change). SITs focus mainly on the dyad (persuader and persuadee) and aim at gaining compliance. *Compliance gaining* is defined as "any interaction in which a message source attempts to induce a target individual to perform some desired behavior that the target otherwise might not perform" (Wilson, 2002, p. 4). Compliance might look like agreement with others, but is mostly nothing more than a single behavioral response. As illustrated in Example 2 (the kitten protection organization) you do not have to be *persuaded* to like kittens, as long as you still *comply* with the plea to donate money.

1.1.2. Persuasive message elaboration

The level of message elaboration by the target person is very important for persuasion success. If your goal is to change somebody's attitudes it is important that the target person fully attends to and understands the message content. If your message argument is not very strong and the only thing you seek is a one-time compliant response, you should hope for shallow elaboration. These two different ways of message processing have many different names: controlled vs. automatic (Schneider & Schiffrin, 1977); central vs. peripheral (Petty & Cacioppo, 1989); systematic vs. heuristic (Chaiken, Liberman, & Eagly, 1989); mindful vs. mindless (Langer, Blank & Chanowitz,1978), and can be summarized under the notion of dual-process models (for overview see: Chaiken & Trope, 1999). These terms will be used interchangeably. Although there are differences among those models, all of them emphasize two distinct ways of processing.

The *controlled, central, systematic* and *mindful* way of processing demands considerable cognitive involvement and effort. It involves active scrutiny of all relevant information. Individuals focus in depth on information, carefully evaluate the message arguments and ponder implications. This mode of processing is especially relevant if our goal is attitude change.

The *automatic, peripheral, heuristic* and *mindless* way of processing involves the use of simple, well-learned and readily accessible decision rules, often referred to as rules of thumb, or heuristics (like " doctors are always right" or " if everybody does it, it can´t be wrong") in order to arrive at a decision. This kind of processing is fast end relatively effortless. It operates well in high workload situations and is suitable for persuasive attempts using low quality, low effort arguments while aiming for compliance.

Whether an individual will process a persuasive message in one mode or the other mainly depends on the target's involvement with the message as well as his ability to be involved in this moment (Perloff, 2008). If *involvement* is high (persuasive attempt is subjectively relevant) more effortful and deep elaboration will take place. The *ability* to fully engage in the elaboration can be inhibited or enhanced by the situation itself. For example, high *cognitive load*, the amount of information processed simultaneously by the finite amount of working memory one possesses

(Paas, Renkel, & Sweller, 2004), is known to preempt a shallower processing style (Langer, 1992).

1.1.3. "Who" – Source characteristics

People influence other people both consciously and inadvertently. This phenomenon is called *Social Influence*. *Social Influence* is a process by which an individual's attitudes, beliefs or behaviors are modified by the presence or actions of others (Saks & Krupat, 1988). Research has shown that the mere presence of another individual in a room can affect another person's performance on recognition tasks (Zajonc & Sales, 1966); complex motor tasks (Martens, 1969); and simple and complex mazes (Hunt & Hillery, 1973). Although all humans are able to influence other people some are more efficacious persuaders than others. The crucial component in a successful persuasion is source credibility. *Source credibility* is defined as "the attitude towards a source of communication held at the given time by a receiver" (McCroskey, 1997, p.87); and it encompasses mainly 3 aspects: expertise/authority, liking and trustworthiness (Perloff, 2008). From infancy, we are taught to act and rewarded for behaving in accordance with the opinions and demands of authority figures (i.e., parents, teachers, doctors…). Research has shown that even by only giving a superficial appearance of expertise or authority (e.g., through clothing or scientific titles) the likelihood of compliance with a request increases (Milgram, 1974; Petty & Wegner,1998). Furthermore research has shown, that those who are likable (Cialdini & Trost, 1998; Rhoados & Cialdini, 2002), similar to the message recipient (Brock, 1965; Berscheid, 1966; Burger et a. 2001) and physically appealing (Chaiken, 1979; Cialdini & Goldstein, 2004) are more prone to be successful with their persuasive attempt.

All these source characteristics enhance the most crucial compliance facilitating aspect: trustworthiness. If we like somebody, or we think she is an authority figure we will put bigger trust into her opinion and in what she wants us to do. Said peripheral source characteristics are especially important when the individual's decision towards the persuasive attempt is a derivative of automatic processing.

1.1.4. "To Whom"- Target characteristics

Some people are more easily persuaded than others. The general tendency to be more susceptible to persuasive communication is called *persuasibility*. A personality trait can affect persuasibility mainly by affecting the level of elaboration a persuasive message receives (Perloff, 2008). There are many personality factors that correlate with the way people process information. The most influential characteristics are level of self-esteem, intelligence, need for cognition, self-monitoring and dogmatism (Perloff, 2008).

Research has found that individuals most susceptible to persuasion are those with medium levels of *self-esteem* (Rhodes & Wood, 1992). Individuals with low self-esteem are so preoccupied by their own problems that they do not fully pay attention to the persuasive message (not favorable for attitude change, but for compliance gaining). And while individuals with high self-esteem direct attention towards the persuasive message and fully understand the arguments of the persuader, their confidence in their preconceptions inhibits them from yielding (McGuiere, 1968).

Intelligence attenuates influence attempts (Rhodes and Wood, 1992). Individuals high in *working knowledge* (accessibility of attitude- relevant information in memory) are known to critically evaluate and reject all incoherent persuasive messages.

It has also been found that individuals high in *need for cognition* [inclination towards effortful cognitive activities like more elaborated information processing (Cacioppo & Petty, 1982)] process arguments more deeply and carefully. But individuals with lower need for cognition, display lower message elaboration and are known to process information more heuristically (Haugtvedt &Petty, 1992).

The degree of *self-monitoring*, [self- observation and self-control guided by social cues of social appropriateness (Snyder, 1974)] is also correlated with determining persuasibility. Because individuals high in self-monitoring are very concerned with the image that they project in social situations, it is often easier to persuade them. However, individuals low in self-monitoring make decisions based on their own feelings and preferences rather than on social appropriateness (Snyder & DeBono, 1985).

A person's level of *dogmatism* or generalized authoritarian tendencies (Rokeach, 1954) has an influence on susceptibility to persuasion. Low dogmatic individuals (characterized as open minded and receptive to new information) rely on argument quality. High dogmatic people (characterized as close minded and intolerant, tend to rely their attitudes and beliefs on authority figures) base decisions on simple peripheral cues like the persuader's status. These individuals are not able to objectively evaluate the content and quality of new information (DeBono & Klein, 1993).

Gender may also impact persuasion susceptibility. Eagly and Carli (1981) conducted a meta-analysis showing that women are more susceptible to persuasive attempts than are men. This difference, however, was explained by the gender imbalance of included studies. In the analyzed studies, 79 percent of *persuaders* were male. Researchers hypothesized that it is easier for men to gain compliance from women than from other men. Nevertheless, a consistent gender effect was found in group pressure situations (Eagly & Carli, 1981). Women complied more often with the viewpoint of others because they were more concerned to maintain social harmony than their male counterparts.

Finally, *mood* can affect persuasibility. Research has shown that people in a good mood are persuaded more easily. It is believed that a positive affective state becomes associated with the persuasive message, or its source, which facilitates compliance (Bless, Bohner, and Schwartz; 1990).

1.1.5. "What" – Message characteristic

As for the "what" of the message, the processing mode is crucial. There are three factors that affect the persuasiveness of a message (Perloff, 2008). The first one concerns the *structure* of the message, and is especially important for central route processing. Two meta-analyses have shown that two sided argumentation (stating arguments for both sides) persuades attitudes better than solely one-sided presentation by increasing source credibility (Allen, 1998; O'Keefe, 1999). It should be emphasized that in presenting both sides to an argument, the opposing view should be mentioned, but also disproved at the same time. A second aspect crucial for central route processing is the *content* of argumentation, which encompasses a cognitive and an emotional

aspect. Evidence based urgings (Reinard, 1991; Reynolds & Reynolds, 2002) using qualitative and quantitative rhetoric (e.g. statistics) that also appeals to emotions (Nisbett, Borgida, Crandall, & Reed, 1976) is the most persuasive. A component important for peripheral route processing is *language*. Research has shown that a moderate to high *speech rate* (Street & Brady, 1982), *powerful speeches* low in hesitations like "uh" or hedges like "I guess" (Burell & Koper, 1998) and *language intensity* evinced through metaphors and emotionally charged words (Sopory & Dillard, 2002; Hosman, 2002) can affect perceived credibility thereby enhance persuasibility.

1.1.6. "How"- Social Influence Techniques

There are many scripted techniques that are shown to significantly alter an individual's propensity to react compliantly (Cialdini & Goldstein, 2004). Such scripted techniques all profit from, or even induce peripheral route processing, which fosters decision making based on heuristic principles to drive a target's cognition and behavior via mindless compliance. The most compliance augmenting principles are *reciprocity* ("If you are good to me, I am good to you") and *consistency*/*commitment* ("If I have done it once, I should do it again") (Cialdini & Goldstein, 2004). Three of the most studied Social Influence Techniques (SITs) are the Door-In-The-Face, Foot-In-The-Door and Low-Ball procedure. Each uses the principles in their sequential requesting scripts. S*equential* means that the requesting itself proceeds in stages, each of which establishes the foundation for further changes in behavior. And it is hypothesized that it is their sequential structure that induces mindless peripheral processing of information (Fennis, Pruyn, & Vohs, 2008). It is argued, that the first stage of the requesting technique (understanding the message and rejecting or accepting the offer) involves deliberation and controlled self-regulation which can result in self-regulatory resource depletion. This state of depletion has been shown to lower persuasion resistance (Wheeler, Brinol, & Hermann, 2007) and to foster automatic processing (Baumeister, 2002; Vohs, Baumeister, & Ciarocco, 2005). Researchers have shown that in this state of depletion individuals become less sensitive towards persuasive message quality and more sensitive towards peripheral (heuristic) cues and principles, including reciprocity and commitment (Wheeler et al., 2007). Other known heuristic rules that people are known to resort to when in a depleted state of mind are *liking ("*I always help people I like*")*,

authority ("He is a credible source- he knows it better"), *social proof* ("if everybody does it, it should be right") and scarcity ("it is valuable because it is scarce") (Cialdini & Goldstein, 2004).

Dolinski, Nawart and Rudak (2001) proposed another explanation for why people are more compliant after sequential requesting scripts. They suggest that an involvement into a dialogue as opposed to a monologue raises compliance rates because mere involvement in dialogue makes people prone to treat strangers as someone more familiar, thus increasing willingness to comply.

The *Door-In-The-Face technique* (Cialdini et al., 1975) precedes the target request with a larger request that is likely to get rejected. When the persuader accepts the rejection and asks for a smaller favor, the target feels the need to reciprocate the concession and complies with the second request. The same principle is used in Example 1 (cheese) presented at the beginning of this chapter. Free samples fosters the target's need of reciprocity- hence the purchase of the product.

The *Foot-In-The-Door technique* (Freedman & Frasier, 1966) (illustrated in Example 2 – kittens) employs a different approach. First a minimally invasive question is asked, and after gaining compliance, the target request is introduced to a larger, but related, request. Freedman and Frasier (1996) conducted a study in which they persuaded twice as many women to let six men to enter their houses and rate their household products, after using this technique, as compared with the control group where no smaller question was asked. The authors concluded that compliance with the first question activates a process of self-reflection. The change in self-perception fosters the need of being consistent with this new self-image (e.g. "I am a person that is against mistreating kittens"), hence compliance with the second request follows ("now I should do something against the mistreating").

The Low Ball Technique (Example 3) is another example using the principle of consistency/commitment. It is often used by automobile sales dealers (Carlson, 1973). The technique always follows the same scenario: the tempting reason why the customer made a favorable purchase decision in the first place is removed and the future behavior (in our case the purchase of the car) is rendered more costly. The technique is based on the commitment towards an initial, voluntary decision to perform a behavior. Research has shown that revealing the real

cost after an agreement evokes higher compliance rates than revealing it from the beginning (Cialdini, Cacioppo, Bassett and Miller, 1978; for meta-analysis see: O´Keefe & Hale, 1998).

In sum, the SITs presented above aim at eliciting compliance and are characterized by a sequential requesting script, which induces peripheral processing due to a depletion of self-regulatory resources, or an establishment of a personal relation due to dialogue involvement induced by the first stage of the procedure. In this state of mind individuals are known to make decisions relying on automatic mental shortcuts (heuristics).

A fairly new Social Influence Technique that does not share the same characteristics as the above mentioned SITs is the Emotional Seesaw Phenomenon. Although it also aims at achieving compliance it does not follow the sequential requesting structure. Dolinski and Nawrat (1998) described this SIT using the police interrogation routine known as bad-cop-good-cop (Example 4). The script for ESP is as follows: first an intense emotion is evoked (e.g. fear of the bad cop), and second, the negative emotion evoking stimulus is revoked (bad cop leaves) and replaced with a new, positive emotion stimulus (nice cop takes the former's place). Research has shown that whenever a shift in the emotional dynamic occurs, from negative to positive or vice versa, compliant behavior is the predominant consequence.

1.2. The Emotional Seesaw Phenomenon (Fear-Then-Relief-Technique)

Dolinski and Nawrat (1998) first referred to this technique the *Fear-Than-Relief* technique, conducting a series of experiments where they frightened people and afterwards suddenly removed the stimulus of this negative emotion (for overview see: Dolinski, 2001; 2011; 2012). In their experiments they primarily used two fear-than-relief induction scenarios as described below:

[1] Participants were jaywalkers not crossing the street in a lawful area. When the subjects were in the middle of the road, a police whistle was blown (fear evoking stimulus). The participants turned their heads to discover no policeman on the sidewalk behind them (relief). All participants

were then approached by a confederate who asked them to fill out Spielberger, Gorsuch & Lushene's (1970) Self-Description Inventory, enabling researchers to measure current levels of fear.

[2] Participants of the study included parking violators who parked their cars in a no parking-zone. Researchers placed pieces of paper resembling police tickets (fear stimulus) under the wipers of the parking violators' cars. When the drivers returned to their cars they were given some time to read the piece of paper, which turned out to be an advertisement for a non-existing shampoo (relieve). They were subsequently given the Self-Description Inventory.

In both experiments participants who experienced the fear-than-relief scenario more frequently consented to fill out the questionnaire than participants who did not (control group). Levels of fear exhibited, did not differ significantly between experimental conditions.

In subsequent, more elaborate experiments Dolinski and Nawrat demonstrated that compliance, measured by participants' willingness to fill out the questionnaire, did not result exclusively from the experience of fear (when the signals provoking anxiety continued to affect them while asking for a favour). In the modified experiment, parking violators were punished with a real police ticket. The penalized subjects did not reveal any compliant behaviour at all, so researchers concluded that it was the fear-than- relief situation that induced compliance and not exclusively the emotion of fear.

Researchers discredited the possibility that in situations where the fear is unconfirmed and relief is induced, good mood underlies compliance by measuring degree of experienced positive emotion using the PANAS questionnaire (Watson, Clark & Tellengen, 1988). Shame and guilt were also eliminated as possible compliance mechanisms through PANAS analysis. In fact, only participants who were informed that they should contact the police for parking illegally showed a significantly higher level of shame and guilt in comparison to the other groups, but they did not exhibit more compliant behaviour.

Researchers also excluded the excitation-transfer effect (Zillman, 1978) as an alternative mechanism explaining compliance after the fear-than-relief situation. Zillman proposed that the negative emotional arousal would linger after the source of it was removed, infiltrating and intensifying subsequent emotional experiences, including positive ones. Dolinski and Nawrat

(1998) also explored the possibility that participants of the experiment might attribute lingering arousal to the attractiveness of the requester, thereby making them more compliant. The pair tested this notion indirectly by assuming that if the excitation-transfer were the underlying mechanism, there would be a positive correlation between the level of fear and degree of compliance. According to this theory, compliance should be more easily elicited in people who have been exposed to a more intense fear-inducing stimulus. In an experiment participants randomly were assigned to one of three conditions:

Group 1: anxiety induced by informing participants they were part of an experiment concerning the effects of punishment on learning, and they would be lightly shocked for every mistake made

Group 2: anxiety induced and subsequently reduced by giving them the same instructions as the first group, but immediately the instructions were retracted and participants were informed that they were actually taking part in another experiment concerning visual-motor coordination

Group 3: controls were not informed about any procedure

Next the participants were approached by a confederate, and asked if they would help organize a charity action for an orphanage. When the participants agreed, they were asked to declare how many days they were willing to work for the cause. Results indicated that exclusively inducing anxiety in subjects is not sufficient to increase compliant behaviour. But it is only with the subsequent reduction of anxiety through an unexpected stimulus shift that then triggers compliance. An interesting finding was that the fear-than-relief situation increased the probability that subjects would take part in charity action, but it did not affected the degree of involvement, expressed by the number of declared days. The participants of the other two groups were considerably less likely to participate, but those who did, were actually more willing to commit themselves to longer periods of time. The researchers hypothesized that the fear–than-relief scenario may put people into a transient state of mindlessness, but the subsequent question about the possible time involvement with charity work prompted a shift back to mindfulness. In order to explore this hypothesis, Dolinski and Nawrat performed another experiment with the "jaywalker methodology" using money donation as an index of compliance. Participants were given a sound explanation to donate money (collecting money for a holiday camp for mentally handicapped children), a placebic justification (because we have to collect as much money as

possible), or no reason at all (would you please give us some money). Participants in the fear-than-relief condition approached with the placebic justification hardly ever asked any questions about the goal of this collection or the organization behind the action. However, in the control condition questions about the goal and organization were very common. Results supported the hypothesis that sudden withdrawing of the source of anxiety, invokes a disoriented, mindless state of mind, wherein superficial compliance is likely to occur.

All of these experiments enabled researchers to reject alternative explanations (subjects' experience of good mood upon relief, negative emotions like shame and guilt, and the excitation transfer model) as being viable underlying mechanisms of the fear-than-relief phenomenon. They have shown that the fear-than-relief condition introduces people into a state of mindlessness, which in turn promotes compliance.

Testing whether the technique was unique to the induction of a negative and relief to a positive state, researchers explored the induction of a positive mood followed by the induction of a negative emotional condition. Researchers had a confederate phone people, introducing himself as employee of a Polish telecommunication company. He randomly informed participants about an overpayment, resulting in the return of a considerable sum of money (positive condition) or about a considerable overdue sum of money to be paid back by the interlocutor soon (negative condition). Half of the participants were left in this emotional state, the other half, after confirming their addresses, were told that the computer had made a mistake and another person was meant. In all conditions the participants were told, that the Polish Telecom was testing the permeability of the telephone lines, and in order to do so adequately, people must change the receiver of the telephone from one ear to the other. The interlocutors' confirmation about the completed switch of sides was treated as mindless compliance to an absurd request. In the conditions where both the positive and the negative emotional state were withdrawn participants displayed more compliant behaviour than in the conditions without emotional source withdrawal. The results from this experiment suggest that compliance can be increased by a sudden withdrawal of a negative emotion (fear), but also increased via withdraw from a positive emotion as (joy). It was this finding that prompted researchers to rechristen the fear-than-relief technique as the *emotional- seesaw- phenomenon*.

Researchers then assessed whether the mindlessness experienced after the emotional seesaw were necessary to bring about increased compliance by forcing people back to a state of mindfulness. The aim was to reduce subjects' compliance. The emotional seesaw was created by grabbing people in a shopping mall from behind by their shoulders. Astonished, people turned around only to be confronted by an apparently blind person, who then inquired " How much time is left till.... o´clock" or "Excuse me, is that you?" It was assumed that because both questions demand certain cognitive activity, the subjects' cognitive orientation should shift from mindless to mindful. Afterwards the encounter, participants were approached by another confederate asking them to answer a short questionnaire. The proportion of people who complied with the request was no different between the control participants who were only asked to fill out a questionnaire and had no interaction with the blind person, than those in the experimental condition wherein mindfulness was re-induced. However, participants who experienced the ESP but were *not* made to return to mindfulness considerably more often agreed to fill out the questionnaire. Outcomes support the postulation mindlessness is a necessary condition for compliance.

Dolinski, Cieszek, Godlewski and Zawadzki (2002) more thoroughly examined cognitive functioning of people subjected to the emotional seesaw, and found that after a sequence of changed emotions, subjects experienced delayed perception with respect to the emotional expressions of others. Participants were shown 71 photos of smiling faces among which there was one photo of a frightened face and vice versa. In a subsequent experiment, subjects were asked to add and subtract mentally the lines of three two-digit numbers. The experiment revealed that the emotional seesaw participants needed more time to solve tasks than the fear group and the control group participants. Researchers concluded that under emotional seesaw conditions, both simple (emotional perception) and more complex cognitive processes (arithmetical operations) are impaired.

1.3.Rational for this dissertation

Commonalities among SITs are evident in that each induces mindlessness, which is characterized by automatic processing and the use of pre-fixed decision heuristics. Mindless compliance occurs as a result of focusing attention on only select peripheral cues (e.g. source of persuasion) while diverting attention from other information pieces (requests or justification). So far it has been proffered that the observed mindlessness may originate from depleted self-regulatory resources due to multiple decision moments characteristic of SITs (Baumeister, Vohs, & Tice, 2007) or the establishment of a personal relationship due to involvement in dialogue (Dolinski, Nawrat, & Rudak, 2001). The ESP, although also sequential, differs from the other SITs in that it does not involve multiple decision moments, crucial for self-regulatory resource depletion, but rather the ESP involves multiple affect evoking stages. Nor are the ESP evoking stimuli connected to the persuading source; thus no personal relationship can be established beforehand. Dolinski et al. (1998, 2001, 2002, 2011) have shown that the ESP does, indeed, induce mindless processing, and that mindlessness is crucial for obtaining heuristic based compliance. Furthermore research has shown that the ESP is bidirectional (positive to negative stimuli and vice versa) and slows normal cognitive processing speeds. Good mood, fear and the excitation transfer model have been eliminated as potential compliance enhancing mechanisms. So while there is a solid foundation of research on the ESP, which provides a deeper understanding of the ESP structure and its properties and consequences, the exact underlying processes have not been yet elucidated. Therefore the main question that arises – and thusly the focus of this dissertation - is: from where does the mindlessness after the ESP stem?

We argue that the genesis of mindlessness after the ESP can be found in its expectancy violating structure. We assert that each ESP involves a situation that is believed to be true, and this supposition is then abruptly proven inadequate. We argue that this violation might be seen as a cue that a belief and its associated pattern of behavior are inappropriate, and consequently alterations to routines and beliefs ought to be incorporated. This process of information upgrade, or inconsistency resolution is triggered in order to restore predictive power. During inconsistency resolution, attention is directed towards the expectancy violating information and away from other extraneous stimuli (e.g., a requesting confederate). We propose that this *"inner focus"*

causes a decrease in available processing capacity, which leads to a less efficient cognitive processing, congruently inhibiting the onset of mindfulness.

But one could be left with the question, why then, is it important to understand the mechanism underlying the ESP? And this same skeptic might point out that the knowledge gathered from SITs might benefit individuals working in marketing at the cost of their subjects of compliance. And we do concede that is true that the application of SITs may enable individuals to more easily manipulate others towards a particular action without their conscious recognition, for as Aristotle (1932) once offered, "Rightly employed, they work the greatest blessings, and wrongly employed, they work the greatest harm." Nonetheless, while some unethical people might seek to abuse the knowledge provided by SIT research, it is our assumption (and hope) that most will use this knowledge in a prosocial, beneficial manner (e.g. health or risk related social campaigns). Studying persuasion, generally, and SITs, specifically, provides insight into how we generate, process, interpret and respond to influence attempts. Because social influence is so integral to daily human interactions, it is also vital to consider and understand the underlying psychological mechanisms. In our view, SIT research is not a manual on how to force consumers to comply, but rather contributes to the understanding of the dynamics behind yielding and – maybe even more importantly – about resisting harmful influence attempts. This means that a better understanding of the underlying processes may render resistance to malicious compliance attempts more easily.

The ESP is especially interesting as a subject of research, because in contrast to other SITs, it also occurs not only during social influence attempts, but also in single person settings. For example, finding something valuable on the street (positive emotion), and noticing that its only garbage (negative emotion) while picking it up is also an ESP. Although the ESP in this example is small and does not have meaningful (at least not evidenced) consequences, there are other organic ESP scenarios that are known to have more harmful consequences. Dolinski (2001) describes a situation that commonly affects car drivers who have narrowly avoided a dangerous traffic situation. When the "relief kicks in," drivers exhibit an increase in "silly" mistakes. So for example, after barely escaping hitting an old lady who has suddenly walked into a busy street, many car drivers forget to stop at the following red light. ESPs are present in our everyday lives and the consequences of the resulting mindlessness are potentially harmful.

Therefore we assert that an experimental and systematic approach of the underlying processes might give insight in to and extend knowledge of both compliance gaining research and other processes affecting everyday life. Thus it seems worthwhile to examine the ESP, its consequences and underlying mechanism more intensely.

1.4."Why"- are persuasion rules important when studying SITs?

Why is it essential to know so many details concerning persuasion when studying SITs? To answer this, we highlight that although SITs aim at eliciting mindlessness, the mindlessness does not increase compliance by default. This means mindlessness merely increases the susceptibility to compliance when the influence context is compliance promoting and a corresponding heuristic is present. This means when designing a SIT scenario, persuasion rules should be considered. So when exploring compliance processes using SITs it should be taken into account that source credibility is more important than message arguments. Factors such as these were taken into account while designing the experiments presented in this study. As such, we note that compliance rates in artificially designed compliance promoting scenarios might be slightly higher than levels of compliance in organic situations.

1.5.Goal and Outline of this Dissertation

The principle goal of the present research is to clarify whether the ESP is based on a general mechanism of cognitive busyness provoked by its expectancy violating structure. We propose that expectancy violations lead participants to assume an inner focus and react mindlessly. By replicating the ESP effect and focusing on the role of the expectancy violation as a compliance enhancing (Chapter 2) as well as compliance reducing (Chapter 3) factor, our research provides an integrative perspective on the ESP, involving its structure, mechanisms and consequences, and provides additional practical implications.

Chapter 2 emphasizes the process that unfolds from the ESP and its behavioral consequences. To this aim five experiments are reported, and each supports our hypothesized theoretical perspective. The first study extends the ESP to an innovative manipulation and introduces a novel measure of cognitive functioning (information recall). The second experiment demonstrates a similar pattern of findings with a non-emotional expectancy-violation manipulation. Cognitive busyness (experiment 3) and cognitive load (experiment 4) support similar findings, mediated by participants' self-reported inner focus. Finally, a formal test of mediation, bridges the methodology of Experiment 1 with the findings from Experiments 3-4. We discuss the theoretical position that the same general mechanism underlies all of these findings.

Extending results presented in the last experiment of Chapter 2, the third chapter focuses on expectancy violation as a persuasion inhibiting, as opposed to a persuasion facilitating, factor. It is examined whether expectancy violation in the form of a context-situation incongruence with the requesting situation would shift attention from the ESP towards the request, inhibiting a mindless heuristic response, and hence a neutralization of the ESP effect.

The fourth chapter summarizes the empirical results of the previous two chapters, and discusses the relevance of the findings to each other and to the research objectives elaborated on in Chapter 1. Theoretical and practical implications, as well as limitations and future directions are discussed.

Both empirical chapters are articles that will, or have already been, submitted for publication. Because the chapters are adapted from empirical articles, there is some overlap of information in their theoretical introductions. Since no research nowadays is conducted in isolation, but is always a team effort, the authors will always be referred to as "we."

Chapter 2: "Mind Full or Mindful?" A Generalization of the Emotional Seesaw Phenomenon to Cognitive Busyness

2.1. Introduction

Imagine you want to pick up someone from the city center. As you cannot find a parking space, you decide to park somewhere illegally. Rushing back to the car, you notice from far away a piece of paper behind the wiper of your car: a parking ticket. When you pick up the piece of paper, it turns out to be an advertisement for a hair growing shampoo. Most probably your mood will change from negative to positive and you will feel relief. Now imagine that exactly at this moment a student approaches you with a request to answer a 15 minute questionnaire. Would you comply? Dolinski and Nawrat (1998, Exp. 2) demonstrated that you probably would. The researchers frightened parking violators with commercial flyers resembling parking tickets. Participants who experienced fear-then-relief more often consented to fill out the questionnaire than did participants in the other groups (with real parking ticket, or without any ticket at all). The researchers noted that whenever a sudden change in the emotional dynamic occurs – from negative to positive or vice versa – an increase in compliant behaviour can be observed (Nawrat & Dolinski, 2001). They called this new Social Influence Technique (SIT) the Emotional Seesaw Phenomenon (ESP), thus extending what they previously referred to as the Fear-Then-Relief Technique (e.g., Dolinski, & Nawrat; 1998).

Dolinski (2001) defines the ESP as a situation in which a person experiences a certain emotion, but where the external stimulus that evoked and upheld the emotion suddenly disappears. Several experiments on this technique yielded not only increases in behavioural compliance, but also an impairment of cognitive functioning; for example, the detection of emotional faces and mental arithmetical calculations (Dolinski, Cieszek, Godlewski, & Zawadzki, 2000).

The present article focuses on the internal process that takes place when people are being confronted with an emotional seesaw, a situation characterized by its sudden and unexpected affective shift. An intriguing question that arises is what makes people comply without any overt pressure? The present research approaches this question from a cognitive-load perspective. Specifically, we suggest that the key feature of this influence technique is load-induced mindlessness, provoked by the inconsistency of the situation that hinders the allocation of cognitive resources to the outside world. We argue that the resistance against mindless compliance requires active attention, and when cognitive resources are allocated to the insight, heuristic-based compliance takes place. In the following, this theoretical assumption is first embedded in the current ESP literature and discussed with regard to social influence, dual process models, and mindfulness theory. Second, it is tested in five experiments.

2.1.1. *Social Influence Techniques*

In everyday life, humans are faced with situations where they are coerced into subscribing, acquiring, signing, and donating – behaviours that often are not compatible with current beliefs nor needs. Although these situations may differ in many aspects from each other, they all follow a certain procedural script and lead to an increased probability of compliant behaviour. These techniques are called social influence techniques (SITs), and although they vary in their procedure and underlying mechanism, the thing they have in common is that they all alter the susceptibility to persuasive attempts.

The likelihood of compliance to a request partially depends on how the request is embedded within a strategic behavioural script. Most of the techniques known so far are based on a scripted procedure composed of multiple sequential requests. More precisely, during the interaction the target question is presided by another one. Research has shown that a sequential requesting format enhances people's behavioural compliance (Burger, 1999; Cialdini & Goldstein, 2004). For example, the Foot-in-the-Door technique (Freedman & Fraser, 1966) starts with a small request only to gain compliance with a larger target request in the second step. The Door-in-the-Face technique (Cialdini et al., 1975), in contrast, confronts people with an extreme request, only to replace it with a smaller target request in the second step. Meta-analyses for both

techniques suggest that the probability of compliance raises significantly compared to a situation where the target request is asked straight away (Burger, 1999; Pascual & Gueguen, 2005).

2.1.2. *Mindlessness*

Many experiments have shown that the success of SIT's hinges on a specific state of mind known as mindlessness as opposed to mindfulness (Cialdini & Goldstein, 2004; Pollock et al., 1998; Dolinski, 2001). The concepts of mindfulness/mindlessness were first introduced by Langer, Blank and Chanowitz (1978). They defined mindfulness as a state of alertness and lively awareness which is expressed in active information processing, characterized by the creation of new categories and distinctions. Mindlessness, in contrast, was operationalized as minimal information processing, expressed in behavior that is rigid and rule-governed. People in a mindless processing mode are known to rely on categories and distinctions already formed as a result of past experience. The concepts of mindfulness/mindlessness are comparable to Schneider and Schiffrin's (1977) distinction between automatic and controlled processing and many other two-process models of information processing (e.g. Elaboration Likelihood Model: Petty & Cacioppo, 1986; Heuristic Systematic Model: Chaiken, Liberman, & Eagly, 1989; for overview see: Chaiken & Trope, 1999). The similarity between those dual process theories and the mindfulness/mindlessness framework is mainly based on the distinction between a fully conscious active mode of information processing (mindfulness or controlled processing) and a less conscious passive mode (mindlessness or automatic processing; Langer, 1992, presents a broader overview of similarities and differences between those concepts). The crucial difference between processing modes is that automatic/mindless processing requires little effort and operates fast and parallel in high workload situations, whereas controlled/mindful processing is slow and serial and requires substantial effort (Schneider & Fiske, 1982).

Proposed to be a continuum, mindfulness is not only a cognitive style but is also conceptualized as a dispositional variable that can be assessed through self-report questionnaires (Baer, Hopkins, Krietemeyer, Smith, & Toney 2006). In other words, individuals are assumed to differ in their natural tendency to respond mindfully or mindlessly. The tendency to use one or the other processing mode is induced not only by individual dispositions but also by situational

constraints. An individual working under situational constraints that limit his or her cognitive capacity may not be able to respond mindfully, but will be forced to engage in mindless behavior. This kind of situational constraint was labelled cognitive busyness (Gilbert & Hixon, 1991), or referred to as cognitive load (Ford & Kruglanski, 1995; Spears & Haslam, 1997). Gilbert and Hixon (1991) defined it as a situation that occurs when an individual simultaneously engages in tasks that consume cognitive resources. People under cognitive load are known to rely on heuristics while making decisions (Langer, 1992) and are prone to display all kinds of highly automatized behaviour such as stereotyping (Bodenhausen, 1990; Pendry & Macrae, 1994) or behavioural mimicry (Levelt & Kelter, 1982). Thus, when people are not able to execute controlled processing, automatic processing takes place.

The use of heuristics in social influence situations when motivation or ability to process is low is well documented (Petty & Brinol, 2009). Compared to systematic processing, heuristic processing is based on a validity judgment of the message rather than on the message content (Chaiken, 1980). Decisions are made by relying on accessible context information; for example, the identity of the source or other non-content cues (see also: Elaboration Likelihood Model, Petty & Cacioppo, 1980). If mental alertness is reduced, assimilation principles such as reciprocal concessions (Door-In-The-Face-Technique), commitment (Foot-In-The-Door-Technique), social validation, liking, scarcity, and authority guide behaviour and serve as mental shortcuts during decision making (Cialdini, 1993). Cialdini argues that heuristic processing, based on this assimilation principle, increases the likelihood of compliance.

In summary, it is known that mindless behavior in social situations occurs as a result of conscious attention to a subset of contextual cues (Langer, 1992). These cues are known to be able to activate different scripts, labels, and expectations that, in turn, focus attention on certain pieces of non-content information (in the case of SIT's on facial expressions, postures, contextual fit, and bodily actions of the requesting person) while diverting it from other information (such as content and possible costs of the request). Coming back to the example above concerning parking violators, we would assume that when they are approached by a student in that situation and asked for a donation, they rely on specific pieces of information (e.g., the requesting person is a student) and on their own expectancies (e.g., students are known to collect money for charitable reasons) and ignore other pieces of information (e.g., the justification of the request). Dolinski (2000) showed that in a post ESP interaction participants donated money without being given a

logical explanation: it did not matter whether a legitimate or a placebic reason was given. Because of reduced attention, participants relied on the simple rule (heuristic) that whenever a reason is provided it is reasonable to comply. Although the relation between mindlessness and heuristic processing during simple requests is well documented (Langer, et al., 1978; Burger, Messian, Patel, del Prado, & Anderson, 2004; Cialdini & Goldstein, 2004), the genesis of mindlessness remains unclear.

2.1.3. *Why Does the ESP Provoke Mindlessness?*

Dolinski's (2001) experiments enabled the researchers to reject interpretations based on participants' experience of good mood after the relief situation (negative-then-positive seesaw), negative emotions like shame and guilt, and the excitation-transfer model as underlying mechanism of the ESP. In essence, it can be extrapolated from that research that the sudden shift of emotions, be it from positive to negative or vice versa, induces mindlessness and in turn promotes behavioural compliance. Dolinski (2001) posited that a sudden withdrawal of the sources of one's emotion encourages people to think retrospectively about what has just happened and/or what could have happened. He claims that the concentration on the past and counterfactual thinking can cause a deficiency in cognitive resources left for solving current tasks. Furthermore, he argues that the shortage of cognitive resources makes people respond to external stimuli in an automatic and mindless manner. Dolinski's second hypothesis states that increased compliance is connected with the fact that every emotion generates its own specific behavior program. When this program suddenly proves to be inadequate under new, modified external circumstances, the participant begins to function mindlessly. Dolinski (2001) admits that the data collected so far is not sufficient to indicate which of the interpretations is applicable for the ESP.

The aim of the current work is to investigate the process underlying the mindlessness so often observed after an emotional seesaw. After the analysis of all emotional seesaw induction techniques used by Dolinski and colleagues (Dolinski & Nawrat, 1998; Dolinski, Cieszek, Godleswski, & Zawadzki, 2002; Nawrat & Dolinski, 2007; Dolinski, 2012), we isolated a common denominator, namely the expectancy-violating structure. Each ESP involves an

expectancy violation based on the fact that a person is dealing with one situation that is believed to be true (e.g., receiving a parking ticket for parking illegally), that unexpectedly turns out to be incorrect (e.g., finding an advertisement instead), leading consequently to "seesawing" emotions. Expectancy-violation theory was formulated to explain people's reactions to the unexpected behavior of other people and is mainly based on communication research (Burgoon, 1978). For the purpose of the present research, we generalize interpersonal expectancy-violation theory to the broader context of violations of accumulated beliefs and expectancies. In this conception, the crucial role of expectancies in producing seesawing emotions and compliance is as follows. Predictive expectancies let people know what to expect based upon previous interactions, social norms, or information from third parties (Burgoon, LePoire, and Rosenthal, 1995). A disconfirmation of expectancies suggests an inability to predict and therefore to navigate through life. How people feel about the expectancy violation is determined in part by the contrast between the expectancy and the outcome, the subjective importance of the expectancy itself and the valence of the violation (Burgoon, 1993). The greater the contrast between expectancy and outcome, the stronger the emotional response will be, and consequently, the greater the necessity for clarification. Violated expectancies can be seen as an indication that a belief and the associated pattern of behavior are no longer appropriate and that alterations to the routines and beliefs are needed. We assume a process of inconsistency resolution to be triggered after the ESP in order to restore predictive power. For this purpose, the attentional focus is shifted to the meaning of the violation, initiating a series of cognitive appraisals of the inconsistency (explaining inconsistency away: Förster, Higgins & Werth, 2004), setting in motion a casual reasoning process (Hutter & Crisp, 2005), integrating contradictory information within an established knowledge structure (Pendry & Macrae, 1999), and counterfactual thinking (Sanna & Turley, 1996): This processing limits, at this moment, attentional capacity to process the outside world. Many experiments have shown that unexpected information receives more cognitive processing than expected information (e.g., Hastie, 1984; Bargh & Thein, 1985). Baddeley (1996) as well as Macrae, Bodenhausen, Schloerscheidt, and Milne (1999) have shown it to be a resource-depleting process. Furthermore, expectancy violating behavior is known to trigger more effortful causal explanations than expectancy consistent behavior (Pyszczynski, & Greenberg, 1981, Hastie, 1984).

This is the reason why we agree with Dolinski's (2001) first hypothesis stated above, concerning retrospective thinking as underling mechanism of the ESP. We infer that the observed mindlessness after the ESP is a result of the human need for comprehension, anticipation, and adaptation. Therefore, the inconsistency resolution process might be seen as a form of adaptive anticipatory learning. People after the ESP focus on the inconsistency resolution process and other needs having to do with the environment are pushed into the cognitive background. From there, they still can exert some influence but they do not take the lead in regulating behavior and information processing. We believe that mindlessness increases when attention is allocated to the inner process and revoked from external stimuli. In other words, mindlessness occurs as attentional resources are increasingly committed to the stimuli causing the expectancy violation, resulting in a perceived absence of conscious attention being allocated to any other present stimuli. Such an introspective focus deteriorates cognitive processes such as those involving memory encoding, or perception of the environment. We predict that the attentional engagement on the experience after the emotional seesaw causes an attentional exclusion of other stimuli. By "inner" focus we do not mean the internal cognitive awareness of stimuli coming from the inside (physiological or emotional), but an attentional allocation to an inner mental process of comparison and information processing. In both cases, the emotional seesaw specifically and an expectancy violation more generally, a retrospective comparison occurs between what was predicted to happen and what actually occurred. We consider responding to the emotional seesaw setting as a manifestation of attentional resource depletion because of a retrospective comparison process, and compliance with small requests as a normative response.

2.1.4. *Overview of the Current Research*

On the basis of the aforementioned theories, we hypothesized that an expectancy violating component is the driving force behind the emotional seesaw phenomenon's impairment of cognitive functioning and, consequently, its influence on compliance. By adopting an "attention as a limited resource" perspective, the present research aims to delineate the key mechanism responsible for the effectiveness of this technique, thereby contributing to a broader understanding of the role of cognitive processes for persuasion. The main purpose of the present series of experiments is to test whether our theoretical assumption is consistent with the internal

processes that unfold from an ESP induction, especially focusing on the consequences of its expectancy violating structure, which to our knowledge has not been taken into account in the current literature. Prior research suggests two main hypotheses concerning the consequences of the ESP. First, we predicted that the ESP would impair efficient message processing as compared to an expectancy-conform situation. Second, we predicted that this hampered message processing will lead to higher behavioral compliance. Previous research indicated that these effects would appear disregarding the direction of the violation itself (i.e., positive-then-negative or vice versa). Former theoretical assumptions mainly focused on the affective shift as underlying mechanism, not taking into account the possibility to relate the observed consequences to its expectancy violating structure. We assumed that the expectancy violating structure of the ESP induces an attention-engaging inconsistency-resolution process that results in an absence of conscious attention being allocated to external stimuli. Based on this assumption we predicted that this external attention shortage should result in an impaired recall of situational information. This is why, in addition to these two hypotheses, third, we introduce a recall measure of situational information. In order to facilitate the comparison of our results across experiments, these three measures were held constant throughout all experiments below.

The present paper consists of five experiments designed to test these theoretical assumptions. The goal of the first experiment is to conceptually replicate previous findings using a new ESP induction technique based on an expectancy violating structure and thus fulfilling the needs of the current research. The goal of the second experiment is to challenge the hypothesis that an emotional shift is a necessary precondition of the observed consequences, by inducing an expectancy violation with low affective involvement. Experiments 3 and 4 examine whether cognitive busyness (Exp. 3) or cognitive load (Exp. 4), hypothesized consequences of an expectancy violation induced inconsistency resolution, provoke the same pattern of result as an ESP. In both experiments dispositional mindfulness is taken into account as moderating variable and the mediating properties of the measured level of inner focus are tested. Experiment 5 integrates the procedure from Experiment 1 with the measures used in Experiments 3 and 4 to show that the ESP promotes inner focus and thereby accounts for the observed consequences.

Throughout the present paper, analyses including age, gender, and education, as well as identity of the confederate, yielded no statistically significant main effects or interactions (unless

stated). These data are therefore not presented. All experiments were performed after participants gave informed consent.

2.2. Experiment 1

To test the assumption that an emotional seesaw induces a state of mindlessness, manifested in impaired cognitive functioning and subsequently in compliance with a request, an experiment was designed which involved an expectancy violation that induced seesawing emotions. For this purpose participants were required to traverse 4 experimental stages in two different experimental rooms. After the manipulation in the first room, participants were requested to change their location, with the goal of approaching them during the transition by a confederate allegedly not affiliated with the experiment. The main idea behind this experimental set up was to measure compliance in a situation that seemingly is not part of the experimental routine. Participants' levels of cognitive functioning were assessed afterwards in the second experimental room. The main purpose of the present study was to test whether people after an expectancy-violating event show impairment in cognitive functioning, measured as message processing (Hypothesis 1), a greater willingness to comply (Hypothesis 2) as well as a decline in information recall (Hypothesis 3).

2.2.1. Method

2.2.1.1. Participants

Seventy nine visitors of a public and university library in a large town in Germany (48 female, 31 male; M_{age}=24.29, SD_{age}= 3.97) voluntarily participated in the experiment. They were reimbursed with €1 and had the possibility to win €2.50, as described below.

2.2.1.2. Materials & Procedure

Stage 1. Participants were welcomed in Experimental Room 1 (ER1) on the first floor. They were asked to take part in a computer-based common knowledge quiz, consisting of multiple-choice questions, in Experimental Room 2 (ER2) on the third floor. They learned they could win up to €2.50 when answering the five questions. Then, they were instructed how to get there and to return immediately afterwards to ER1 in order to answer a questionnaire and to receive their payment.

Stage 2. In ER2, participants were randomly assigned to one of four groups: (1) negative emotion, (2) positive emotion, (3) negative-then-positive (seesaw), or (4) positive-then-negative (seesaw). Emotions were manipulated by the difficulty of the questions (positive mood induction through easy questions, negative mood induction through difficult questions). Furthermore, the emotions were intensified by immediate feedback after each question. The emotional seesaw was induced by an expectancy-incongruent payout scheme displayed on the computer screen at the end of the game. In the control groups (1 and 2), the proposed payout was congruent with common expectations: for every correct answer participants received € 0.50, for every incorrect 0 €. In the seesawing groups (3 and 4), the payout table was reversed: participants received 0 € for every correct answer and € 0.50 for every incorrect one. Given that common knowledge about gaming rules suggests a positive monetary outcome for correct answers, the violation of those expectancies was supposed to elicit an emotional seesaw (i.e., in the case of many correct answers, the high expectation of winning much was disappointed; in the case of few correct answers, the low expectation of winning little was surprisingly followed by the information of a high payout). The frequency of this belief and the difficulty of the questions were pretested and confirmed in a pilot study with 15 university students.

Stage 3. On their way back to ER1 one of two female petitioners blind to the experimental condition (allegedly not affiliated with the experiment) approached participants with a request to sign a nonsense petition. After introducing herself as a student of the university, the petitioner asked participants to sign a petition demanding that every student should have the right to choose which public transportation to use to go to university. Participants' reactions constituted DV1, Message Processing, and DV2, Compliance.

Message processing. To test the assumption that mindless participants are less likely to ask any questions about a nonsense request, the petitioner noted explicitly stated questions and comments in response to the nonsense petition.

Compliance. To test the hypothesis that people after an expectancy-violation induced emotional seesaw reveal compliant behavior, participants were asked to sign a nonsense petition. The petitioner also noted whether participants stopped when they were approached, whether they listened till the end of the message, whether they agreed to sign the petition, and finally whether they signed it. The first behavioral steps where treated as compliant behavior and analyzed only if no significant differences in the number of signatures on the petition were found.

Stage 4. Back in ER1 participants were asked to complete two questionnaires, one concerning the petition and the petitioner (DV3: Information Recall) and a second one concerning personal, demographic, and control questions.

Information Recall. In order to test whether people in the seesaw group would remember less information about the confederate and the petition itself than people who weren't put into a mindless mode, a 9-item multiple-choice questionnaire was used, including the option "I don't know" with each question. Example questions and response options are: *(1) Was the person who approached you: (a) male, (b) female, (c) I don't know; (2) The color of his/her hair was (a) black, (b) brunette, (c) blond, (d) red, (e) I don't know.* Participants were explicitly requested in the instructions not to speculate about the answer if not recalling the information. In order to reduce test score irregularities due to guessing and to obtain a precise measure of memory accuracy, the computation formula for the information recall index was derived from the two-high-threshold model of recognition memory (Snodgrass & Corwin, 1988). The measure derived from this model is called Discrimination Index (Pr) and is computed by subtracting the number of wrong responses from the number of correct ones. After having completed the questionnaires, participants received their payout and reimbursement and were debriefed and thanked for their participation.

2.2.2. Design

The design was a 2 ([final] emotional state: positive vs. negative) by 2 (experimental group: one emotion vs. emotional seesaw) between subjects factorial design. To analyze the

results a "1" was assigned for each affirmative behavior (asking questions, signing petition, correct answer), and a "0" for not displaying this behavior.

2.2.2. Results

Throughout the present paper, significance tests were conducted with $\alpha \leq .05$. The data of one participant in Experiment 1 was excluded from analysis because the petitioner had overlooked him. Although this situation occurred repeatedly in subsequent experiments, the pattern of results was never affected by the exclusion.

Preliminary analyses indicated no main effects of final emotional state Pillai`s Trace=.03, $F(3, 73) < 1$, $p = .52$, or interactions with experimental group throughout the present experiment (Pillai`s Trace= .09, $F(3, 73) = 2.34$, $p = .08$. therefore, only results collapsed across the experimental group, Pillai`s Trace= .26, $F(3, 73) = 8.73$, $p < .001$ are reported. For main effects of message processing, compliance, and information recall, see Table 1.

Message Processing. A Chi- Square test was used to test whether the difference in the proportion of persons who explicitly stated questions or critical comments in response to the nonsense petition was statistically significant. Results indicate that in line with Hypothesis 1, persons in the control groups (one emotion) tended to be more likely to comment on the petition than persons from the experimental groups (emotional seesaw): χ^2 (1*, n*=79)=*2.99, $p_{one\ tailed}$*=.04*, phi*= -.22.

Compliance. Confirming Hypothesis 2, participants in the experimental group were more likely to comply with the request than those in the control group, χ^2 (1, n=79)= 4.59, p<.05, *phi*=.27.

Information Recall. Also in line with our expectations (Hypothesis 3), mean information recall was significantly higher in the one emotion than in the seesaw groups, $F(1, 77) = 17.69$, $p < .001$, $\eta_p^2 = .19$.

The control questions revealed that 85% of participants in the control (one emotion) and 75% in the experimental group (emotional seesaw) correctly recalled the purpose of the petition; the difference was not significant χ^2 (1, *n*=79)= 1.13, *p*=.*57*, *phi*=.12.

Table 1. Participants who vocalized doubts and signed the petition (%) and the mean index of correctly recalled information in particular groups.

	Message Processing		Compliance		Information Recall			
	EG	CG	EG	CG	EG		CG	
Experiment	%	%	%	%	M	SD	M	SD
1	58.2	69.2	70.0	43.6	3.98	2.14	5.82	3.98
2	5.0	26.3	25.0	21.1	4.30	2.30	6.00	2.08
3	32.3	62.0	77.4	48.3	4.29	2.41	5.62	2.18
4	46.7	56.7	73.3	50.0	4.83	1.53	6.40	2.21
5	31.6	61.9	52.6	19.0	5.63	2.45	8.76	4.78

Note. EG = Experimental Group; CG = Control Group; higher values indicate higher propensity to comment on the petition (Message Processing), sign the petition (Compliance) and to remember information concerning petition and petitionist (Information Recall); the information recall indicator is a mean of all correctly recalled information minus false alarms.

2.2.3. Discussion

When it comes to the frequency of compliance with a nonsense request, as well as the verbal expression of participants' doubts, the results of this experiment are in line with results obtained by Dolinski and Nawrat (1998). They support earlier findings showing that participants display impaired message processing, which results in higher compliance to sign even a nonsense petition in response to a seesaw manipulation (positive-then-negative and negative-then-positive)

as opposed to the groups where only one emotion was evoked (positive and negative). Additionally, this experiment is the first to reveal a deteriorating impact of the ESP on information recall.

These results confirm our expectations: The ESP introduces a state of mindlessness which inhibits proper information processing, visible in a lack of comments or questions regarding a senseless petition. As we assume, this shallower information processing fosters heuristic deduction and consequently results in a predetermined response. Nevertheless, based on the results we believe that attention is not absent but partly disengaged from the ongoing scenario: A total lack of attention would not explain why 80% of participants remembered the whole sentence of the petition. It appears that they realized its meaning only when writing it down at the end of the experiment. This fact was not only reported post factum by the participants, but was also visible and audible during the writing (e.g., forehead slapping). The fact that participants remembered the exact wording of the sentence makes it unlikely that the reason for compliance was a complete attentional failure and an impaired comprehension. It appears as if they did not actively think about what they heard but just relied on contextual cues that triggered a familiar behavioral script (signing a student's petition). In this case we believe that the ESP does not impair completely the appraisal of a situation, only the application of the information in the appraisal. The reason why participants recall less information about the petition and the confederate is therefore not an impaired retrieval from memory but an impaired appraisal of information during the interaction. It seems that the ESP makes people both selective with regard to information input and inhibited with regard to processing it.

Another interesting finding is that similar consequences after the ESP were found independent of the direction of the emotional shift. As shown by Nawrat and Dolinski (2000, Exp. 3) and conceptually replicated in Experiment 1, the sudden withdrawal of a positive as well as a negative emotion leads to a similar outcome. Given that emotions of different valence (positive vs. negative) typically affect and guide behavior in opposite ways, the question arises whether it is the shift in the emotional dynamic that plays the central role in mindlessness induction after an emotional seesaw. In other words, would it be possible to achieve similar compliance in an expectancy violation situation with low emotional involvement? An affirmative outcome would promote expectancy violation as key for increased compliance.

2.3. Experiment 2

In addition to replicating the results of Experiment 1, Experiment 2 sought to extend them in two ways. First, by questioning the role of the changing emotional dynamic as being the underlying key factor in mindlessness induction. The second extension was exploring the role of the expectancy-violating structure on mindlessness induction. Because previous research did not reveal different consequences after emotional seesaw inductions in contrasting directions (positive-then-negative vs. negative-then-positive) we suspected that it is not the affective shift but the expectancy violating structure that drives the effect. Due to the fact that every expectancy violation elicits an affective response the goal of this experiment was to induce an expectancy violation that elicits only a moderate affective response. Therefore an expectancy violation was elicited by inducing an inconsistency between the experimental instructions and the later experimental situation.

We predicted to find a similar pattern of results as in Experiment 1, namely: less behavioral indicators for effective message processing (Hypothesis 1), a higher inclination towards compliant behavior (Hypothesis 2) and impaired information recall (Hypothesis 3) after an expectancy violating event.

2.3.1. Method

2.3.1.1. Participants & Design

Thirty nine visitors (21 female, 18 male; *M*age= 23.33 , *SD*age= 2.32) of a public and university library in a large town in Germany volunteered to take part in an experiment assessing cognitive abilities for a participation endowment of € 1, in addition to € 2 for being accurate on their judgment. The experiment had a single factor (experimental group: expectancy violating, *n*=19, vs. control group: expectancy congruent, *n*= 20) between-subjects design.

2.3.1.2. Materials & Procedure

Participants were randomly assigned to either the expectancy congruent or the expectancy violating group. The experimental design was in line with Experiment 1, assessing 3 dependent variables (message processing, compliance, information recall) in the exact same manner. In short, participants were invited to take part in a 4 stage experiment. The invitation took part in ER1, the manipulation was performed in ER2, on the transition back from ER2 to ER1 participants were approached by a confederate and asked to sign a nonsense petition, and message processing (DV1) and compliance (DV2) rates were determined. Finally in ER1 participants' level of information recall (DV3) was assessed through a questionnaire.

The only procedural step that was altered was the expectancy-violation induction in Step 2. To evoke an expectancy violation that elicits low emotional arousal, expectations were violated by exposing participants to conflicting cognitions. In order to keep emotional arousal as low as possible we abstained from questioning participants' own core beliefs, but instead provoked an expectancy violation by challenging their expectations concerning the experimental instruction. Participants were informed that geometrical figures would appear on the screen one by one, and they should count any red dots among them. The correct answer was incentivized with € 2. In the control group no expectancy violation occurred. Participants were exposed to only dots, some of which were red. In the expectancy violating group, participants' expectations were violated by asking them to count red dots, but then exposing them to different geometrical figures, containing also dots, but none of them in red color.[1]

Participants were individually invited to complete the task on a MacBook Pro Computer. The task was programmed in PsyScope (Cohen, MacWhinney, Flatt & Provost, 1993). To ensure that participants attended to the screen an X was projected for 1000 ms at the center of the screen immediately prior to the first target display, signaling the start of the sequence. The 15 target figures were displayed in color in the middle of the screen and presented for 1500 ms each.

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[1] It should be noted that in this experiment a second experimental condition (*N*=20) consisting of a different expectancy violation induction using a red square at the end of the trail as unexpected element (featuring the same color but different shape) was employed. This manipulation failed to evoke any differences between control and experimental group.

2.3.2. Results

Main effects for message processing, compliance and information recall are presented in Table 1.

Message Processing. Replicating Experiment 1, the percentage of critical comments and questions in response to the confederate's nonsense petition tended to be higher in the expectancy congruent than expectancy violating group, χ^2 (1, n=39)= 3.40, $p_{one\text{-}tailed}$=*.04*, phi= *-.30*.

Compliance. This time, we did not find an effect of the experimental group on participants' willingness to sign the nonsense petition, χ^2 (1, n=39)= 0.09, p=.77, *phi*=.05. Nevertheless, in the expectancy-violation group people were significantly more likely to listen to the complete message of the confederate without interrupting than people in the control group, χ^2(1, n=39)= 5.61, p<.05, phi=.44.

Information Recall. A one-way ANOVA was conducted to explore the impact of experimental group on the percentage of correctly recalled pieces of information. Participants in the expectancy-congruent group recalled significantly more facts than those in the expectancy-violating group, F(1,37)= 5.85, p< .05, η^2= .14.

2.3.3. Discussion

The experiment revealed a weaker but comparable outcome as Experiment 1, supporting expectancy violation as a key factor of the ESP. In short, we found impaired message processing, higher compliance to listen to the end of the petition, and deteriorated information recall. The lack of a difference in behavioral compliance to sign the nonsense petition between the groups could be explained by the small sample size, or the subtleness of the manipulation. In other words, we had expected that the manipulation would not evoke a big emotional response. We believe that a stronger affective response towards the violation will lead to more cognitive appraisal (Brosch, Scherer, Grandjean, & Sander, 2013). And the more cognitive appraisal the violation will receive the more mindless behavior it will evoke, in our case compliance. Although statistically not significant, more people signed the petition after going through an expectancy

violation than people in the control group. These findings suggest that the results of Experiment 1 do not depend on the presence of an emotional shift, but may be enhanced by one. However, the lack of a clear objective measure of participants' state of emotion after the expectancy violation could be considered a limitation of Experiment 2. Our assumptions about participants' emotional state after the expectancy violation were mainly based on observations and discussions with participants. Those observations never raised doubts about participants' moderate emotional response towards the expectancy violation.

Notwithstanding the above limitation, the pure fact of an expectancy violation seems to be an important element in producing mindless compliance. After the experiment, participants reported being occupied with questions concerning the expectancy violation itself, which supports the idea that an incongruence resolution process makes people more prone to display limitations in cognitive processing (impaired message processing and information recall). This inconsistency resolution process seems to diminish the amount of mental capacity (cognitive load) left for solving other tasks. It is well documented that when ability or motivation to process information is low, low-effort heuristics guide behavior (Chaiken, 1987; Petty & Cacioppo, 1986; Petty et.al., 2009). Yet the link between heuristic processing and compliant behavior is often stated but rarely tested experimentally (see Jensen et al., 2008). If cognitive load affects heuristic processing (for a review, see Petty et.al., 2009), and in case the notion holds true that heuristic processing facilitates compliance, then there should be an effect of cognitive load on compliance. In the subsequent experiments we tested this hypothesis. While doing so, we also took into account individual differences since previous research has identified their crucial role.

2.4. Experiment 3

The aim of the third experiment was to examine whether cognitive busyness – a hypothesized consequence of an expectancy-violation induced inconsistency resolution – is the driving force behind the previous findings. For this purpose, an experiment was designed in which cognitive busyness was manipulated by confronting participants with a new and thought-provoking newspaper article (high load) in contrast to a common-knowledge article (low load).

This load manipulation was considered as having procedural similarities to the ESP-induced inconsistency-resolution process. It does not restrict people to stay in a mindless mode, but allows for "choosing" and switching between processing modes, depending on personal dispositions and preferences. In other words, because there is no ongoing attention consuming task, for example, but instead, a story that people can choose to focus on, they may react mindfully or mindlessly, depending on personal dispositions. Based on this assumption we predicted dispositional mindfulness to have an influence on the susceptibility to this procedure. This influence could be mainly fostered by two factors connected to mindfulness. Namely, (a) mindful people are known to rely less on preformed categories and distinctions generated from past experience as compared to mindless people (Langer, 1978); this is why we believe mindless people to be more attached to and dependent on preformed expectancies. And (b) people scoring high on dispositional mindfulness are known to be more skilled in switching the focus of attention when the situation demands it, for instance, during changes in circumstances (Langer, 1989).

It has been debated whether it is possible to rely on self-reports of mindfulness because of potential reporting biases (Davidson, 2010). Therefore, we introduced a more objective behavioral indicator of mindfulness in addition to the questionnaire. Given that mindlessness is associated with a reduced state of attention (Langer, 1989), in the experimental room we prepared an unusual setup (a white carpet and a doormat), hypothesizing that mindful people would notice and react upon these odd circumstances as opposed to mindless people.

To test participants' cognitive busyness immediately after the induction of mindlessness, a further subtle behavioral measure was introduced, namely behavioral mimicry. For this purpose we observed participants' tendency to mimic a senseless behavior displayed by the experimenter while leaving the room. For this measure once again the carpet/doormat setup was used. Behavioral mimicry occurs especially when cognitive resources are highly taxed (Levelt & Kelter, 1982), which underlines its automatic character.

After the cognitive busyness induction, a modified 4-stages experimental setup was applied, using the same dependent measures as in the previous experiments. To test whether cognitive busyness leads to an internal focus and as a consequence increases the degree of an automatic-affirmative response to a request, participants' inner focus was assessed. Based on our

broadened hypotheses the procedure was slightly altered through the introduction of additional variables: In ER2 apart from the manipulation, behavioral mimicry, and a measure of dispositional and behavioral mindfulness were added; the assessment of message processing and compliance rates by a petitioner during the transition from ER2 to ER1 remained the same; and finally, a measure of self-reported inner focus was added in ER1 where the usual information recall measure was applied.

The following predictions corresponded to those of the previous experiments: impaired message processing (Hypothesis 1), higher compliance (Hypothesis 2), and deteriorated information recall (Hypothesis 3) in the high cognitive busyness as compared to the low cognitive busyness condition. Self-reported inner focus was hypothesized to mediate the relationship between cognitive busyness and compliance (Hypothesis 4). As delineated above, we also hypothesized that there is a relationship between cognitive busyness and compliance for participants low in dispositional mindfulness, but not for those high in dispositional mindfulness (Hypothesis 5). Finally, we hypothesized that even senseless behavioral mimicry will be high when cognitive busyness is high (Hypothesis 6).

2.4.1. Method

2.4.1.1. Participants & Design

A total of 62 undergraduate students of a large university in Germany (32 female, 28 male, M_{age}= 23.43, SD_{age}= 3.91) were randomly assigned to two groups. They received €3 for participation. The experiment had a single factor (experimental group: high cognitive busyness, n=31, vs. control group: low cognitive busyness, n= 31) between-subjects design. To analyze the results, again "1" was assigned for each affirmative behavior (behavioral mindfulness, behavioral mimicry, asking questions, signing the petition, answering correctly), and a "0" for not displaying this behavior. Two participants were excluded from further analysis because the petitioner had overlooked them.

2.4.1.2. Materials & Procedure

Stage 1. Participants were welcomed in the ER1 and asked to take part in a short experiment. They were accompanied to ER2 and instructed to return immediately after the experiment to ER1, in order to answer a questionnaire and receive their payout.

Stage 2. (a) Dispositional behavioral mindfulness was assessed by observing participants' behavior while entering ER2. By positioning a white plush carpet (typical of fancy living rooms) together with a doormat at the entrance of the experimental room we assessed participants' automatic behavioral mindfulness. As this experiment was conducted on a snowy week in December we hoped mindful people to notice the white carpet and clean their shoes before entering, or at least comment on this unusual scenario. Behavioral mindfulness was observed when participants: (1) wiped their feet before entering, (2) took a big step in order not to touch the white carpet, or (3) commented on the carpet. The lack of an observable reaction toward the doormat/carpet setup was treated as mindless behavior.

(b) To test the assumption that dispositional mindfulness moderates the relationship between cognitive load and compliance we administered the Mindfulness Attention Awareness Scale (MAAS) by Brown and Ryan (2003) in order to assess participants' dispositional mindfulness. The German translation by Kobarg (2007) was used, for which adequate reliability and good validity is reported. On a 5-point scale (1 – *almost always*, 5 – *hardly ever*) participants indicated the frequency of experiencing each of the 17 items of the scale. Sample items include (a) *I break or spill things because of carelessness, not paying attention, or thinking of something else,* (b) *I tend to walk quickly to get where I'm going without paying attention to what I experience along the way*. The sum score on this scale served as a measure of dispositional mindfulness, with higher scores indicating a higher propensity to behave mindfully. The reliability of the scale was good (α= .81; M_{sum}: 54.84, SD = 9.62). Furthermore, a version of the Langer Mindfulness Scale (LMS, Langer, 2004) was translated into German and administered to counterbalance possible biases towards the mindless behavior that is mainly emphasized in the MAAS. On a 5-point Likert scale (1 – *strongly disagree*, 5 – *strongly agree*) participants indicated their agreement with each of the 17 items (4 of the originally 21 items of the LMS were excluded from the translation, due to not making sense in German). Sample items include (a) *I have an open mind about everything, even things that challenge my core beliefs,* (b) *I like to figure out how things*

work. The LMS was used only to counterbalance the MAAS, the results are not included into the analyses do to a missing German adaptation (reliability: α= .85).

(c) Cognitive busyness induction: participants were randomly assigned to one of two groups: (1) cognitively demanding thought-provoking text, or (2) cognitively undemanding common-knowledge text. In the cognitively demanding group, participants were presented with a thought-provoking text in which the astonishing case of Prahlad Jani, an 82-year-old yogi who claims not having eaten nor drunk for the past 70 years, is discussed (see Appendix C). The text is a printout from an online version of a reliable German newspaper (www.spiegel.de). The text is written in a critical manner, stating the impossibility of the claim, but nevertheless acknowledging that the yogi was in hospital for an around-the-clock observation during a period of two weeks, and no evidence against his astonishing claims could be found. In the undemanding-text group, participants read an article from a German pharmacy newsletter stating the benefits of healthy eating habits, including common knowledge information about the advantages of vegetables and lean meat and disadvantages of fast food (see Appendix D).

(d) Behavioral Mimicry was assessed by observing participants' behavior leaving ER2. In order to test the assumption that participants under high cognitive load mimic the behavior of a confederate more often than participants under low cognitive load, participants' inclination to imitate the experimenter was assessed. This tendency was measured by observing participants' behavior while leaving ER1, presided by the confederate displaying a senseless behavior: wiping feet while exiting. Behavioral mimicry was observed if participants also wiped their feet while leaving the laboratory.

Stage 3. While walking to ER1, one of two female petitioners approached participants with a request to sign the same nonsense petition as in Experiments 1-2.

Stage 4. Back in ER1, participants were asked to complete (a) the same information-recall questionnaire as in Experiments 1-2. Furthermore, (b) a self-reported-inner focus scale and (c) a manipulation-check questionnaire were administered.

(b) Self-reported inner focus scale. To test whether cognitive load affects the degree of internal focus, and as a consequence increases the degree of an automatic affirmative response to a request, we assessed participants' inner focus by using a self-report scale. The self-reported

inner focus was operationalized as an index averaging the z-transformed scores of two items (r=.89) that asked participants to which extent they allocated their attention to the inside (in percent) and to which extent they focused on the outside surrounding while walking from ER2 to ER1 (recoded; measured on a 5-point scale, 1= *not at all;* 5= *very much*).

(c) Manipulation Check. To establish the power of the manipulation, participants rated the texts on 6 items such as interest, novelty, surprise, and thought induction (measured on a 5-point scale, 1= *not at all*; 5= *very much; α=.75*). Finally, participants received their payout and were debriefed and thanked.

2.4.2. Results

In the following results for the dependent variables are considered separately (for main effects [except behavioral mimicry] see Table 1).

The *manipulation check* revealed that as intended, participants rated the expectancy violating "yogi" text (experimental group) higher (M=3.54; SD=.59) than the common knowledge "healthy nutrition" text (control group; M=3.10; SD=.91) confirming a successful manipulation, $F(1,59)$= 4.97; p<.05.

Message Processing. In line with Hypothesis 1, explicitly stated objections, critical comments, and questions in response to the nonsense petition were more common in the control group than in the experimental group, χ^2 (1, n=60)= 5.35, p<.05, *phi*= -.30.

Compliance. Corroborating Hypothesis 2 participants who were in the high cognitive busyness group were more likely to comply with the request than those in the low cognitive busyness group, χ^2 (1, n=60)= 5.48, p<.05, *phi*= .30.

This relationship was mediated by self-reported inner focus (Hypothesis 4). To test the indirect effect of cognitive busyness via the potential mediating variable, namely self-reported inner focus, on compliance, we used a bootstrapping procedure (Bollen & Stine, 1990) as suggested by Preacher and Hayes (2004) by applying the PROCESS macro for SPSS provided by

Hayes. Using 10 000 bootstrap re-samples, the indirect effect of experimental condition on compliance via self-reported inner focus was estimated at *B*=.71, Boot *SE*= 1.79, 95% confidence interval (bias-corrected and accelerated; see Efron, 1988), *CI*: .22 to 1.78. Because zero is not included in the confidence interval, we conclude that self-reported inner focus mediates the relationship between cognitive load and compliance. As depicted in Figure 1, more load led to more self-reported inner focus, which in turn increased the probability for compliance.

Information Recall. As expected the number of correctly recalled pieces of information was significantly higher in the control group after reading a common-knowledge article than in the experimental group after reading an unexpected thought-provoking text (Hypothesis 3), $F(1, 58)=5.01$, $p< .05$, $\eta_p^2 = .08$.

We expected dispositional mindfulness to moderate the extent to which cognitive busyness (low vs. high) led subjects to recall more information about the petition and the confederate. A multiple regression model was used to investigate whether the association between cognitive busyness and information recall depends on the level of dispositional mindfulness (MAAS). With respect to dispositional mindfulness, we predicted that high levels of mindfulness result in better information recall. After z-transforming (*M*=0; *SD*= 1) experimental condition and dispositional mindfulness and computing the interaction term (Aiken & West, 1991), the two predictors and the interaction were entered into a simultaneous regression model. Replicating the ANOVA finding above, higher levels of cognitive busyness were negatively associated with higher levels of information recall (*B*=-.64, SE_b=.29, β=-.27, p<.05). No association was found between dispositional mindfulness and information recall (*B*=.23, SE_b=.29, β=.10, p=.44). More importantly, the interaction between cognitive busyness and dispositional mindfulness was significant (*B*=.71, SE_b=.29, β=.29, p=.05), suggesting that the effect of cognitive busyness on information recall is moderated by dispositional mindfulness. Simple slopes for the association between cognitive busyness and information recall were tested on three levels of dispositional mindfulness (-1 *SD*, *M*, + 1 *SD*). The simple slope for the influence of cognitive busyness on information recall 1 *SD* below the mean of MAAS (*B*=-1.35, SE_b=.42, β=-.57, p=.01) was significant and negative. The simple slope for 1 *SD* above the mean of dispositional mindfulness was not significant (*B*= .07, SE_b=.29, β = .03, p= .86). Figure 2 plots the simple slopes for the interaction. Decreases in the slope of the regression lines with increasing mindfulness scores show that the negative relation between cognitive busyness and information

recall becomes weaker with higher levels of dispositional mindfulness. In other words, information recall of participants high in dispositional mindfulness was independent of the experimental condition.

These analysis were re-run with the indicator of behavioral mindfulness as moderating variable, since both variables were correlated, r =.42. No moderating effect of behavioral mindfulness on the association between cognitive busyness and information recall was found.

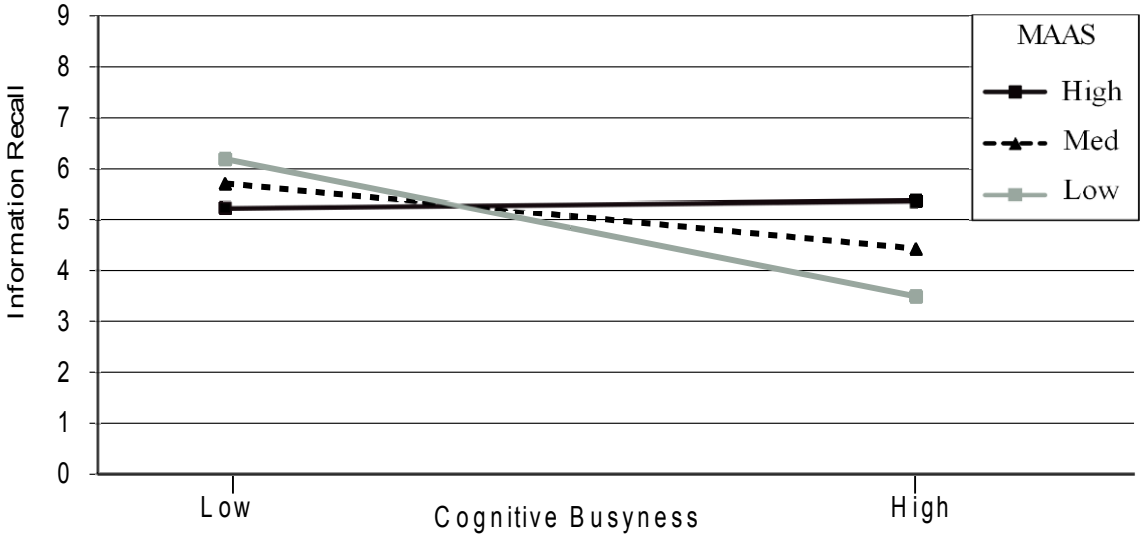

Figure 2. Regression lines of the relation between cognitive busyness (high vs. low) and information recall at high, medium and low (+1SD, mean, -1SD) sum scores of the Mindfulness Attention Awareness Scale (MAAS).

Behavioral Mimicry. Not confirming the predictions (Hypothesis 6), participants in the experimental group did not reveal more behavioral mimicry than those in the control group (29% vs. 38.7%) χ^2 (1, n=60)= 0.65, p=.42, phi= -.10.

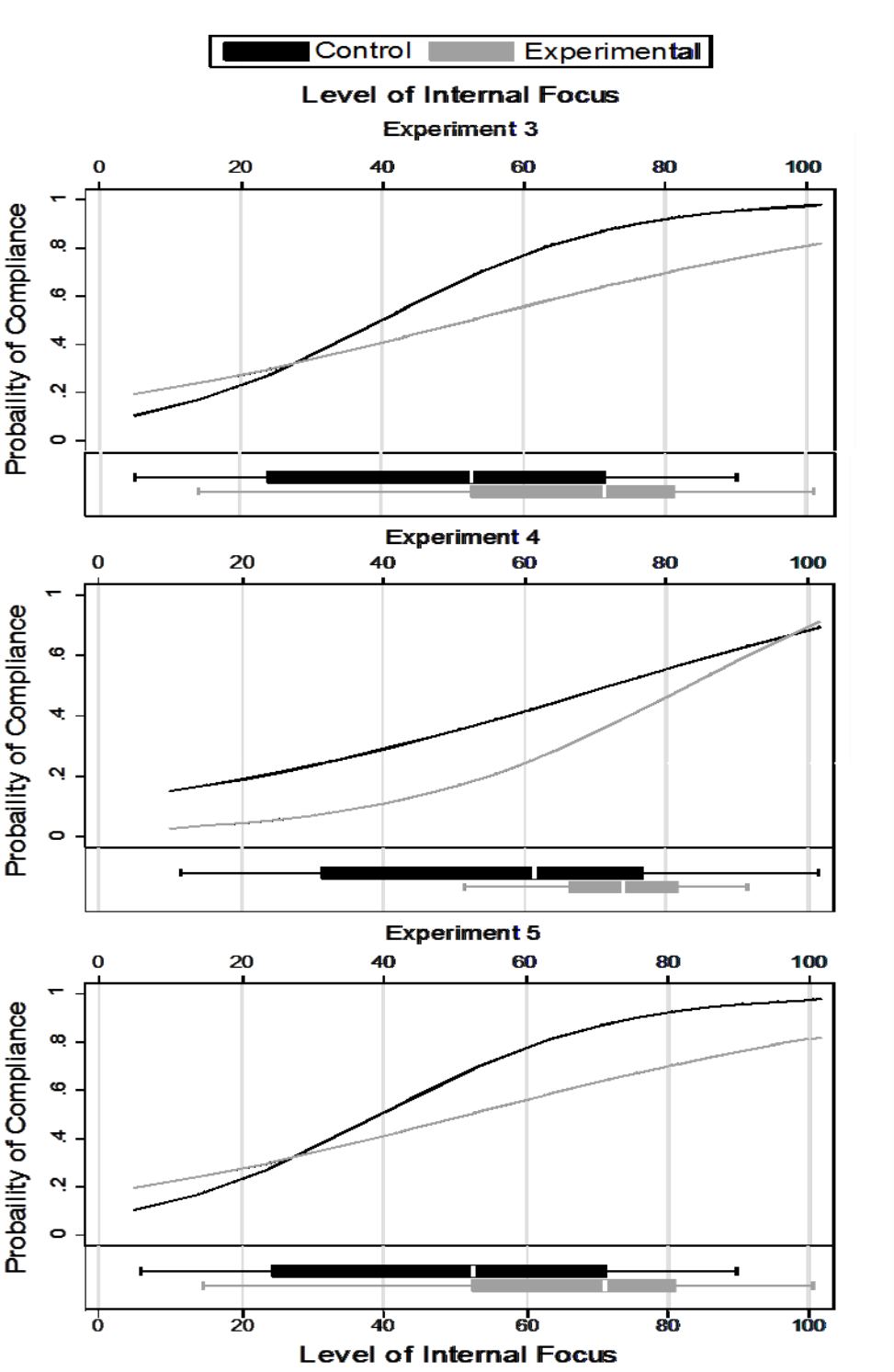

Figure 1. Experiments 3, 4 and 5: Logistic regression plots depicting the indirect effect of experimental group via self- reported inner focus on compliance separate for the experimental and the control group, with corresponding mean and distribution of the mediator at the bottom.

2.4.3. Discussion

Results demonstrate that increased cognitive busyness is significantly associated with an increase in compliance and a decrease in message processing and information recall. The structure of the results suggests that compliance can be increased by increasing the level of participants' inner focus. These findings are in line with our theoretical interpretation presented earlier, based on the assumption that the key role in the phenomenon analyzed in this study is that of the cognitive-busyness provoking introspective inconsistency-resolution process. The consequence of this inner focus is a shallower and more peripheral processing of information which leads people to be more likely to react based on mental shortcuts. In reference to the Elaboration Likelihood Model (Petty and Cacioppo, 1981) in this situation stimuli are filtered based upon a special constellation of attributes (e.g. appearance of confederate and context), prior to full perceptual processing. The consequence of the capacity limitation is an automatic response to a familiar input configuration – in our experiment this interpretation could be true in the case of compliance to a nonsense request.

The second visible consequence of a shallower information processing is impaired information recall. This conceptually replicates Gilbert's, Pelham's and Krull's (1988) findings that cognitive load does not inhibit the appraisal of a situation but the application of obtained information. Consistent with our hypothesis, mindfulness moderated this relationship. The higher an individual's level of mindfulness, the weaker the relationship between cognitive busyness and information recall. It appears that those participants who reported higher levels of dispositional mindfulness were able to switch more easily from mindless to mindful when circumstances demanded a change, were less involved in inconsistency resolution, or generally had their attentional focus allocated to the outside. Our data do not explain yet which of the factors played the most important role. With regard to this finding we can assume that the MAAS provided a viable measure for dispositional mindfulness. Because of the correlation between behavioral and dispositional mindfulness, we believe the current results less likely to be influenced by a general response bias (Davidson, 2010).

Another finding that requires attention is the lack of difference in behavioral mimicry between groups depending on cognitive busyness. The total rate of mimicry in both groups was only 34%. Participants following the experimenter out of the laboratory seemed very attentive at

this moment awaiting possible new instructions. This is why the existing behavioral mimicry in this case can possibly not be ascribed to cognitive busyness but to other reasons such as creating affiliation and rapport (Lakin & Chartrand, 2003). It could be that participants only started to think about what they read on the transit to the other experimental room. An interesting question is how message processing, compliance, information recall, and behavioral mimicry are influenced if participants are required by the task at hand to stay in an ongoing mindless mode.

2.5. Experiment 4

The aim of Experiment 4 was to replicate and extend the findings of Experiment 3 by forcing participants into a mindless mode. For this purpose, the experimental manipulation consisted of a classical cognitive-load manipulation. Participants were randomly assigned to groups asked to remember either a number with many or with few digits (corresponding to the high and low cognitive-load group). Thus, compared to Experiment 3, given that they had to remember their number in the high-load group, there was a higher need for participants to stay in a mindless inner-focused state, inhibiting mindful processing of surrounding information.

Our predictions were identical to those in Experiment 3 with two exceptions. First, we assumed that dispositional mindfulness would not moderate the relationship between cognitive load and information recall, because the manipulation prevented participants from behaving in line with their habitual cognitive style (mindless vs. mindful; Hypothesis 5). Second, we believed that behavioral mimicry should be mediated by how demanding participants would perceive the task. Therefore we hypothesized that behavioral mimicry would rise with a perceived higher level of task difficulty (Hypothesis 7).

2.5.1. Method

2.5.1.1. Participants & Design

A total of 60 undergraduate students (31 female, 29 male, M_{age}= 22.25, SD_{age}= 2.46) were randomly assigned to one of two groups (high load vs. low load) and received €3 for participation. The experiment had a single factor (experimental groups: high load, *n*=30, vs. control group: low load, *n*= 30) between-subjects design.

2.5.1.2. Procedure

The experimental setup followed the same script as Experiment 4 with a different cognitive load induction. After entering ER2 participants were requested to answer the dispositional mindfulness inventories (MAAS & LMS) and afterwards, instead of reading an article, they were told to remember their personal participation identification number (ID). Participants should remember either a five- or a two-digit number (corresponding to the high and low cognitive load group). As a cover story, participants were told the ID number was crucial for the final payout.

After entering ER1 after the petition, participants were asked to fill out a questionnaire. The first page contained one question that asked participants to state their personal ID number (manipulation check) and 4 questions that later on constituted the mediating variables for behavioral mimicry on the one hand and compliance on the other.

(a) Mediator of behavioral mimicry: As a possible mediating variable concerning mimicry, we assessed the cognitive demand of the load task in the manipulation-check questionnaire. Self-reported subjective effort (mediator) was operationalized as an index averaging the scores of two items (*r*=.69) that asked participants to which extent (1) it was difficult to remember this number und (2) how preoccupied they were about forgetting the number while walking from ER1 to ER2 (measured on a 5-point scale, 1= *not at all;* 5= *very much*).

(b) Mediator of compliance: As in Experiment 3, the mediator was operationalized as an index averaging the scores of two items (r=.36) that asked participants to which extent they allocated their attention to the inside (in percent) and to which extent they focused on the outside surrounding while walking from one room to the other (recoded; measured on a 5-point scale, 1= *not at all;* 5= *very much*).

At the end, participants were asked to recall their personal ID number, received their payout, were thanked and debriefed.

2.5.2. Results

Main effects for message processing, compliance and information recall can be found in Table 1.

Message Processing. Descriptively, explicitly stated objections, critical comments, and questions in response to the nonsense petition were more common in the control group than in the experimental group. However, this difference was not statistically significant, χ^2 (1, n=60)= .60, p= *.44*, *phi= -.10*.

Compliance. Participants in the high cognitive load group more often signed the nonsense petition compared to those in the low cognitive load group, χ^2 (1, n=60)= 3.45, $p_{one\ tailed}$= *.03*, *phi*= .24.

In line with Hypothesis 4 this relationship was mediated by participants' self-reported inner focus, *B*=.66, Boot *SE*=.39, 95% *CI*: .17-1.73. As can be seen in Figure 1, inner focus was higher in the high-load than low-load group, and this led to more inner focus and, in turn, a higher probability of compliance.

Information Recall. Congruent with Hypothesis 3, participants in the control group recalled more information about the petitioner than those in the experimental group, F(1, 58)=10.19, p< .01, η_p^2 = .15. This was also mediated by self-reported inner focus. The indirect effect of cognitive load on information recall via the potential mediating variable (*B*=-.55; Boot *SE*= .26) was estimated to lie between -1.22 and -.14, being significantly different from 0 (10,000

Bootstrap re-samples; 95% Bias-corrected and accelerated *CI*).The more focused to the inside participants reported to be, the less information about the petition and the petitioner they were able to recall.

In line with expectations (Hypothesis 5), the relation of condition and information recall was not moderated by dispositional mindfulness, as evidenced by the nonsignificance of the interaction: B=.10, SE_b=.27, β=.05, p=.70.

Behavioral Mimicry. In line with Hypothesis 6, participants in the experimental group revealed more mindless behavioral mimicry than people in the control group, χ^2 (1, n=60)= 10.00, $p< .01$, $phi= -.41$. In total 60% of participants mirrored the confederate's behavior in the experimental group compared to only 20% in the control group. As expected (Hypothesis 7) this effect was mediated by participants' self-reported subjective effort to remember the number. Results based on 10,000 bootstrapped re-samples indicated that subjective effort mediated the effect of experimental condition on behavioral mimicry (95% bias-corrected and accelerated *CI*: .10 - 2.38), indirect effect: B= 1.05, Boot SE= .57. As depicted in Figure 3 participants who indicated a higher level of subjective effort were more likely to wipe their feet while leaving, thus mimicking the experimenter's senseless behavior, and this was the case more in the experimental than control group.

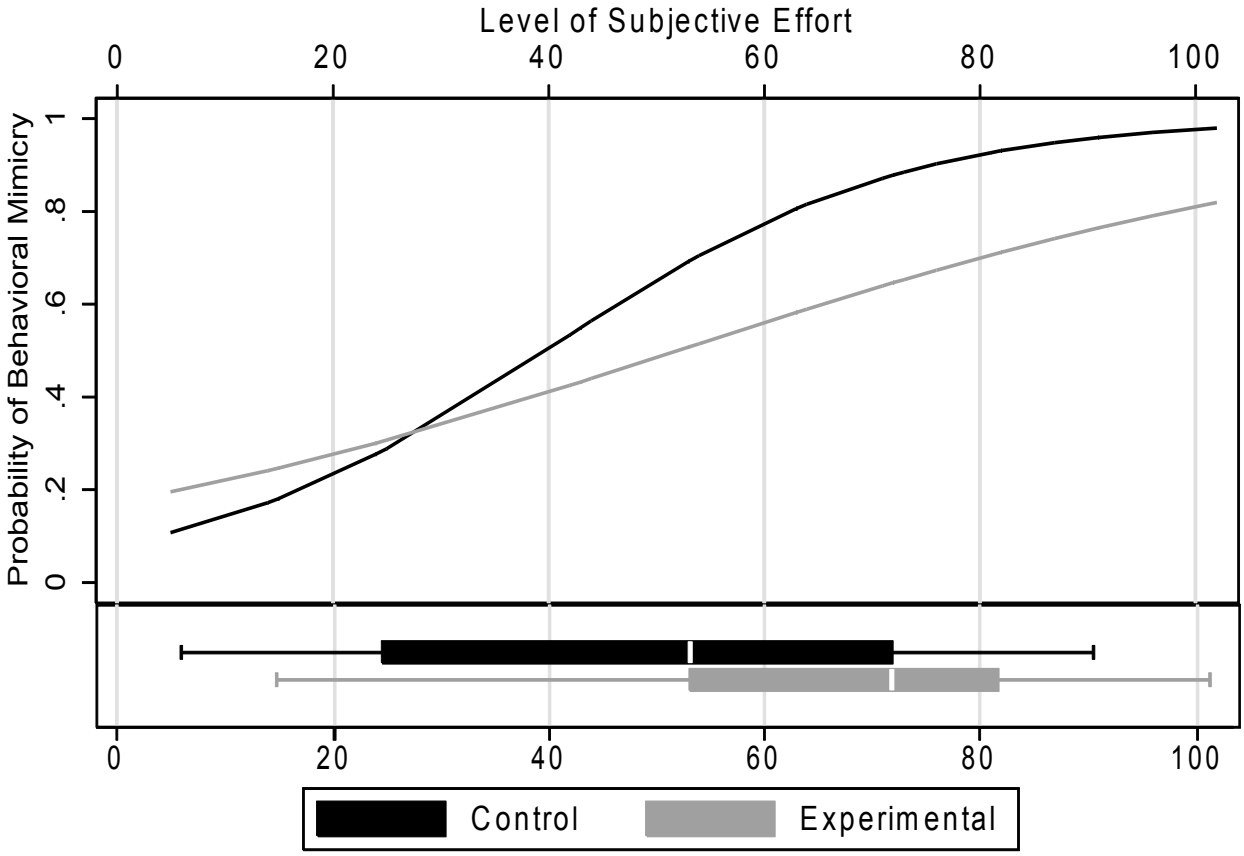

Figure 3. Logistic regression depicting the indirect effect of experimental group (cognitive busyness: high vs. low) via self-reported subjective effort on behavioral mimicry separate for the experimental and the control group, with corresponding distribution and mean of the mediator at the bottom.

2.5.3. Discussion

The results obtained were largely consistent with our expectations. We observed impairment of message processing and information recall and a facilitation of behavioral compliance. These findings are most parsimoniously explained by the idea that the same general mechanism underlies the effects found in all experiments. One essential difference between Experiments 3 and 4 was observed: there was no moderating effect of dispositional mindfulness in the latter. This experiment shows that reducing participants' systematic processing by a cognitive load induction fosters heuristic processing regardless of their level of dispositional mindfulness. Furthermore this study once again offers evidence that self-reported inner focus mediates compliance. The findings are consistent with the explanation that similar consequences

as those after the ESP are observed if participants relatively low in dispositional mindfulness choose an inner-focused state (Experiment 3) and if participants are forced into an inner-focused state, be they low in mindfulness, or not (Experiment 4).

The behavioral mimicry measure indicated the effectiveness of our cognitive load manipulation because mimicry is known to emerge especially when cognitive resources are highly taxed (Levelt & Kelter, 1982). As expected the cognitive load manipulation worked especially well for individuals who judged the task to be difficult.

While the results of Experiments 3-4 lend support to the idea that cognitive load induces mindless compliance, they do not necessarily confirm the validity of the interpretation for the ESP. If we are to gain confidence in such an interpretation, the same mediation should be demonstrated in an emotional seesaw group.

2.6. Experiment 5

The present experiment sought to bridge the manipulation of Experiment 1 with the mediation findings of Experiments 3 and 4 by directly assessing the mediating role of an ESP-induced self-reported inner focus on compliant behavior. For this purpose, Experiment 1 was replicated and supplemented with a measure of self-reported inner focus (analogous to Experiments 3 and 4). Also, we added a repeated measure of participants' current emotional state before and after the manipulation to assess whether the manipulations elicited the intended emotions and to explore the effect of the ESP on the final emotional state.

The predictions were similar to Experiments 1-4. Impaired message processing, elevated compliance, and less information recall should be observed in the experimental groups (Hypotheses 1-3). Additionally, the influence of the ESP on compliance should be mediated by

self-reported inner focus (Hypothesis 4). Finally, the valence of the final emotion should not influence the results (Hypothesis 5).

2.6.1. Method

2.6.1.1. Participants & Design

A sample of 41 students of a large German university were asked to participate in a 2 (final emotional state: positive vs. negative; n=20) × 2 (experimental group: one emotion vs. emotional seesaw; n=21) between subjects factorial design. There were 19 male and 21 female participants (M_{age}=22.33, SD_{age}=2.40). The same incentive for participation was used as in Experiment 1: the chance to win € 2.50 and € 1 participation endowment. Participants were randomly assigned to one of four groups. One participant was removed from the analysis due to having been overlooked by the petitioner.

2.6.1.2. Materials & Procedure

Once again participants were requested to traverse two experimental rooms during the experiment. In the first one, the initial emotional state (T1) was measured on a 5-point Likert-type scale (1 = *very good*; 5 = *very bad*). Subsequently participants were randomly assigned to the computer-based experimental manipulation (answer five questions: easy vs. difficult; expectancy violating vs. expectancy congruent payout scheme) and requested in the experimental instructions to immediately depart afterwards to the second experimental room. On their way to the ER2 they were approached by a male confederate and asked to sign the petition. In the second experimental room, participants' current emotional state T2, their self-reported inner focus (a), and their level of informational recall (b) were assessed through a paper and pencil questionnaire. The *self-reported inner focus scale* (r= .87) and all other details of the procedure were identical to the Experiment 5 with three exceptions: the *information recall questionnaire* (DV3) was extended from 9 to 12 items, and neither dispositional mindfulness, nor behavioral mimicry were assessed.

2.6.2. Results

A mixed between-within subjects analysis of variance was conducted to assess the impact of the final emotional state (positive vs. negative) and the experimental group (one emotion vs. emotional seesaw) on participants current emotional state prior to the intervention (T1) and following the intervention (T2). The dependence was reflected in a significant final emotional state × experimental group × time interaction in an overall ANOVA with a repeated measure on the last factor, $F(1,33)=4.80$; $p<.05$, $\eta_p^2=.13$. Further analyses indicated that significant changes in the current emotional state were reported only in the one-emotion groups, interaction: $F(1,17)=10.93$; $p<.01$, $\eta_p^2=.39$. After answering the easy questions participants' emotional state improved from *T1* ($M=2.09$; $SD=.70$) to *T2* ($M=1.53$;$SD=.45$), but for participants who were asked to answer difficult questions, the emotional state deteriorated from *T1* ($M=2.38$, $SD=.52$) to *T2* ($M=3.08$, $SD=.68$). No emotional changes from T1 to T2 were found in the seesaw groups, all $Fs \leq 1$.

Although the manipulation was successful, replicating Experiment 1, preliminary analysis showed no statistically significant influence of the induced final emotional state Pillai`s Trace= .12, $F(3, 34) = 1.57$, $p = .22$. nor interaction with experimental group on the combined dependent variables (message processing, compliance, information recall) Pillai`s Trace= .05, $F(3, 34) = .64$, $p = .60$. Replicating Experiment 1, a statistically significant difference between the control and the seesaw groups on the combined dependent variables was found, Pillai`s Trace= .32, $F(3, 34) = 5.39$, $p < .001$. Therefore, only results collapsed across the experimental group are reported For main effects of message processing, compliance, and information recall, see Table 1.

Message Processing. In line with Hypothesis 1, a Chi-square test indicated that more participants in the control group asked questions concerning the petition than in the ESP group, $\chi^2 (1, n=40)=3.68$, $p=.05$, $phi=-.30$. This supports the idea that message processing after an emotional seesaw is impaired.

Compliance. In line with Hypothesis 2, more participants signed the nonsense petition in the seesaw group than in the control group, $\chi^2 (1, n=40)= 4.95$, $p<.05$, $phi=.35$.

To determine whether the level of self-reported inner focus mediated the impact of the ESP on compliance we performed a mediation analysis with 10,000 bootstrap resamples. As

expected there was a significant mediation of self-reported inner focus, 95% *CI* [.31, 8.24]; *B*=1.63, Boot *SE*=2.16. As depicted in Figure 1 the level of self-reported inner focus was higher in the experimental than in the control group and respectively the higher the level of self-reported inner focus, the higher the probability for compliance.

Information Recall. Again corroborating Hypothesis 3, the information recall indicator yielded a significant effect, $F(1,38)=6.56$, $p<.05$, $\eta_p^2 = .15$. Participants who were exposed to only one emotion scored higher in the information recall test than participants after the emotional seesaw, indicating once again a depletion in information storage or retrieval.

2.6.3. Summary of Findings

First, Experiment 5 provided evidence that the procedure elicited the intended emotions. An interesting finding is that the emotions changed in the intended direction in the control groups, indicating a successful emotion induction, but remained stable in the ESP groups. This could explain why the direction of the emotional seesaw (positive-then-negative vs. negative-then-positive) did not influenced the findings. The findings replicate the emotional-seesaw effect demonstrated in Experiment 1. The decrease in message processing and the increase in compliance relative to the control group indicate that a higher inclination towards persuasion occurred apparently because of shallower information processing. As in all previous experiments, compliance with a request was the dominant response even if the request was inappropriate. This experiment also provided evidence for the hypothesis that the internal focus induced by an expectancy-inconsistent event mediated the relationship between the ESP and compliance. Findings are in line with the idea that the same basic principle influenced the appraisal of obtained information in much the same way in the cognitive busyness/load as in ESP-induced situations.

2.7. General Discussion

The primary purpose of the present research was to investigate the process that unfolds after an Emotional Seesaw Phenomenon (ESP). Previous research on the ESP had indicated that the fostered affective shift promotes a temporary state of mindlessness, leaving the individual momentarily vulnerable to requests (Dolinski & Nawrat, 1998; Dolinski, et. al., 2002). In the present paper, we suggest that (a) it is not the affective shift per se, but its expectancy-violating structure that promotes the effect and (b) that the expectancy violation itself provokes the allocation of attention to the inside, which consumes cognitive resources and thereby fosters mindless responses. Finally, (c) dispositional mindfulness plays a significant role in the vulnerability to this particular social influence technique.

To test these assumptions five experiments were conducted. The first experiment extended previous findings by using a new ESP induction technique based on an expectancy-violating structure. The second experiment challenged the notion that an emotional shift is a necessary precondition for the observed consequences, by inducing an expectancy violation with low affective involvement. Experiments 3 and 4 were designed to test whether inner focus (induced through cognitive busyness [Ex. 3] or cognitive load [Ex.4]) – a hypothesized consequence of the ESP, can induce the same pattern of results as evidenced in Experiments 1 and 2. Dispositional mindfulness was assessed as intervening variable. Experiment 5 integrated the procedure from Experiment 1 with the measures used in Experiments 3 and 4 to show that the ESP promotes inner focus and thereby an inclination toward compliant responses.

Taken together, we found that participants in the experimental groups displayed impaired message processing (Exp.1-3, 5) and a higher inclination towards compliant behavior (Exp. 1, 3-5), but also less information recall (Exp.1-5). This was the case not only for the withdrawal of negative as well as positive emotions in emotional seesaw groups (Exp. 1 and 5), but also for expectancy violations with low affective involvement (Exp. 2), lending support to the hypothesis that it is the belief-inconsistent structure of the ESP that plays the key role in this phenomenon. The results of Experiments 3 and 4 revealed, as hypothesized, that similar consequences as those after the ESP are observed if participants relatively low in dispositional mindfulness choose an

inner-focused state (Exp.3) and if participants are forced into an inner-focused state (Exp. 4), be they low or high in dispositional mindfulness. Furthermore Exp. 5 revealed not only that the ESP fosters an internal focus that results in a higher susceptibility to compliant behavior, but also that participants' emotional status after an ESP does not change from pre to post measure. In the following, consequences of the ESP are addressed separately for each dependent variable. Implications of our findings for the understanding of the concepts of expectancy violation as well as the roles of affect and mindfulness in relation to the ESP are discussed.

2.7.1. Consequences of the ESP

It has long been known that persuasive messages accompanied by a distraction before the persuasion attempt are more effective than messages without distraction (Festinger & Maccoby, 1964). This appears true also for the ESP. The expectancy-violating structure of this technique seems to divert attention away from the content of the request towards the encountered inconsistency between belief and reality. This assumption is supported by our measured behavioral consequences of the emotional seesaw phenomenon, namely, impaired message processing, enhanced compliance, and hampered information recall.

Message Processing. We conceptualized message processing as the understanding of the content of a nonsense petition and operationalized it as the number of comments and questions concerning the senselessness of this request. In 4 out of 5 experiments the ability to engage in effortful and effective processing of information was hampered by the experimental manipulation that tied up cognitive resources required to understand the content of the message. In other words, it seems as if the cognitive resources required to process the content of the petition exceeded the cognitive resources available to the individual at this moment. The impaired message processing was mainly visible through the lack of questions and critical comments towards the petition content, lending support to the attention-consuming inconsistency resolution process as underlying mechanism. These results are supported also by earlier findings presented by Dolinski and Nawrat (1998, Exp. 5) showing that people after the ESP who were approached with a weird request for money donation hardly ever asked any questions about the aim and the organization behind this charity request.

Compliance. On a behavioral level, we consistently found that participants displayed a higher inclination towards compliant behavior by signing a senseless petition. Based on the assumption that the ESP provokes an internal focus, the question that has to be asked is: Why is the automatic tendency, when reacting mindlessly in the present situation, that to comply? Two possible explanations can be found in the current literature: heuristic processing and a hardwired tendency to cooperate.

Regarding the first option, as stated in the introduction, research has shown that people in a mindless processing mode do not invest much thought into deciding about their response when presented with a request (Langer, et. al., 1978). The reaction towards the request reflects most often an automatic information-processing scheme via mental shortcuts, rather than a thoughtful consideration of relevant information (Cialdini, 2001). In such situations, decisions are made by relying on accessible context information, for example, the identity of the source or other non-content cues. This is especially true for face-to-face requests requiring a fast response (Langer, 1989). In the present experiments, participants' face to face decision could have been based on the source knowledge (that students normally collect signatures for a justifiable reason), rather than on a conscious elaboration of the petition content.

Regarding the second option, Levinson claims (2006) that people, as "social animals" develop cognitive abilities and dispositions geared towards cooperation. These tendencies can be found also in linguistics (Basket & Freedle, 1974). An affirmative response towards a request is not only a desired answer, but also a very easy one to produce. A "no" requires more cognitive processing as it has to be most often accompanied by a corresponding explanation. Levinson (2006) sustains the idea that a "no" comes always after a longer pause, due to the fact that the innate tendency to cooperate has to be overwritten. This line of thinking also goes in line with Gilbert (1991) who suggests that the initial process tends to be favored in the decision output (compliance) if someone is unable to devote cognitive resources in order to suppress this unwanted initial tendency. In case of the ESP it is possible that the evoked internal attentional focus did prevent the suppression of the initial tendency to cooperate.

It is beyond the scope of current research and existing data to decide between these two options. In line with our hypothesis both are triggered by an attentional resource depletion, in one

case fostering automatic behavior guided by heuristic decision rules and in the second one the inability to suppress the innate tendency towards cooperative behavior.

Although both mentioned consequences (message processing and compliance) point into the direction of our internal focus hypothesis as underlying mechanism they have to be considered with caution. The way a person processes or encodes information and what she actually does in response to it are two different things (Logan & Cowan, 1984). Analyzing only the overt behavioral measures (message processing and compliance) does not necessarily provide insight into the way information was processed. In our experiments it could be the case that a person perfectly understood the request but was too shy to veto. This is why the main difference between the so far known consequences of the ESP and our work is that apart from just measuring overt behavioral responses, analyses of memory encoding were introduced (information recall).

Information Recall. In all 5 experiments the recall of information connected to the petitioner was worse in the experimental than in the control groups. Although participants of the ESP group spent on average more time with the petitioner (because of signing the petition) they remembered fewer visual characteristics of the petitioner. The attention absorbing internal focus was primarily seen in an inability to engage and sustain attention on the ongoing scenario despite being free to do so. The post ESP information processing of non-expectancy relevant information seems to be less likely to involve conscious elaboration that results in the transfer of information into working memory, as evidenced by the poor information recall.

Furthermore as already discussed in Experiment 1 we believe attention was not completely absent but in parts disengaged from the ongoing scenario, do to an ulterior located attentional focus. Data concerning memory for the request showed that the ESP did not impair completely the appraisal of a situation, only the application of the information in the appraisal. This was especially salient when participants were asked to recall the exact wording of the petition. Most of participants reported to realize the meaning of the sentence for the first time while being asked to write it down.

2.7.2. Expectancy Violation and the ESP

In the analysis of former induction techniques and in our experiments we showed that each ESP is fostered by an expectancy violation. Based on these observations we claim that every ESP follows an expectancy violating structure, but not every expectancy violation evokes an emotional seesaw. In a typical ESP scenario one thing is believed to be true (expectancy) evoking one emotion and suddenly turning out to be inadequate (violation) eliciting the opposite affective state. An expectancy violation that does not embrace an emotional seesaw could be a situation with an outcome worse/better than expected. This kind of expectancy violation does not include an emotional shift, but an aggravation of one emotional state. Consequences of this kind of situation are so far unknown, future research is therefore highly recommended.

So far it is known that an expectancy violating event receives more cognitive processing than expected information (e.g., Hastie, 1984; Bargh & Thein, 1985). Research has shown that the attentional focus is shifted to the meaning of the violation, initiating a series of cognitive appraisals of the inconsistency in order to sustain the expectancy (e.g. Förster, Higgins & Werth, 2004; Hutter & Crisp, 2005) or to update the existing expectancy (e.g. Pendry & Macrae, 1999; Sanna & Turley, 1996), limiting, in this moment, attentional capacity to process the outside world. Our results support these findings. We have shown (Experiment 5), that an expectancy violation results in an allocation of attention to the inside and through that a limitation of attentional capacity to process the outside world visible through mindless compliance, as well as impaired message processing and information recall. Based on our data we can not say which type of inconsistency resolution took place during the internal focus state (expectancy sustention or expectancy upgrade). We believe that the type of inconsistency resolution is determined by personal disposition and in part by the situation itself.

Furthermore Vachon, Hughes and Jones (2012) presented evidence that favored the expectancy violation account over the novelty detection account, underlining the importance of expectancies in everyday life. In their experiments they have shown that when a stimulus is novel but does not violate expectancies it does not necessarily capture attention and through that disrupt cognitive performance. In contrast a stimulus that is not novel can as a consequence disrupt ongoing cognition if it violates expectancies. These results are consistent with our findings (Experiments 1, 2, & 5). As Vachon and colleagues (2012) we have shown that an

expectancy violation (manipulation) captured the attention more than a potentially novel situation visible mainly through a poor recall of information associated with the new situation (petition).

In summary we have shown that expectancy violation theory encompasses the emotional seesaw phenomenon, by not only sharing the structure but also the consequences, namely the inconsistency resolution process (visible through the allocation of attention to the inside) and the impaired allocation of attention to the outside (visible through impaired message processing and information recall as well as higher inclination toward compliant behavior).

2.7.3. The Role of Affect in the ESP

Although we showed in Experiment 2 that the influence of the emotional shift on post ESP consequences is not crucial, we nevertheless believe that affect intensity but not valence plays an important role in the observed outcomes. By provoking an expectancy violation with low emotional involvement in Experiment 2 we were able to replicate the same pattern of results as in Experiment 1, but to a less pronounced extent. This could be so, because in Experiment 1 a firmly established belief was violated (correct answers should be incentivized instead of punished) and in Experiment 2 only a belief based on experimental instructions (nonoccurrence of red dots although implied in instruction). We believe that the subjective importance of the expectancy itself influenced the intensity of the affective response and through that the extent to which the consequences were manifested. As Afifi and Metts (1998) showed, the intensity of the post expectancy violation affect depends mainly on two factors. The first one is called the *violation expectedness*, defined as the extent to which the violation outcome varies from the expectancy itself; and second is *violation importance*, characterized as the impact that this violation will have on the individual. The bigger the gap between expectancy and reality, and the more subjectively important the expectancy is, the stronger the emotional response to the outcome should be. Research on emotion and attention (Brosch, Scherer, Grandjean, & Sander; 2013) has shown that the more intense the affective response, the more cognitive appraisal it will receive. In other words, the more affectively loaded a stimulus is, the more extensive cognitive processing it will evoke. In our experiments the degree of cognitive processing in response to the expectancy violation was visible in the self-reported inner focus and the observed behavioral

consequences (hampered message processing and information recall, more behavioral compliance). Furthermore, research has shown that once the attention is drawn by affective stimuli it may dwell longer on the stimuli and facilitate the processing of subsequent stimuli connected to the emotion evoking situation (Borsch & Van Bavel, 2012). This why we believe that the role of affect in regulating behavior after the ESP is the one of not evoking, but regulating the intensity of the observed consequences.

Another interesting finding associated with the relationship between expectancy violation and affect was found in Experiment 5, namely the expectancy violation valence (EVV). The EVV is defined as the extent to which the violation is interpreted as something positive or negative (Afifi & Metts, 1998). In Experiment 5 we measured participants' emotional state pre and post an ESP intervention. In the control groups, where just one emotion was induced, an elevated or decreased emotional state was reported after a positive or respectively negative emotion induction (pre-post comparison). In the case of the ESP groups where the initially induced emotion was withdrawn by the expectancy violation no changes in the emotional dynamic was observed – the pre measure did not differ from the post measure. How people feel after an expectancy violation is so far explained by two competing theories. Decision affect theory (DAT: Mellers, Schwartz, Ho, & Ritov, 1997) on the one hand proposes that people feel displeasure when the outcome is worse than the counterfactual alternative and feel better when the outcome exceeds the expectancy. Consistency theory (CT: Aronson, 1968; Festinger, 1957; Heider, 1958) on the other hand proposes that people always feel displeasure when their expectations are violated because the violation suggests an inability to predict. So far there is experimental evidence that supports both theories (for an overview see: Shepperd, & McNulty, 2002). The outcome of Experiment 5 does give a hint to what might happen during the inner focus state reported in our experiments. Afifi and Metts (1998) claim that an expectancy violation always results in a cognitive arousal and an initiation of a series of interpretations and evaluations that aid an individual in coping with the unexpected outcome. Because the post measure in Experiment 5 was assessed after the walk from one room to the other (not immediately after the manipulation), we believe this to be a sign that during the self-reported inner focus an inconsistency resolution took place that restored the affective status quo.

2.7.4. Dispositional Mindfulness and the ESP

Mindfulness has been shown to have many positive effects on psychological (e.g., depression, anxiety) and physical health (e.g. chronic pain) (Bear, 2003, Brown & Ryan, 2003; Brown, Ryan & Creswell, 2007). As evidenced by our data, mindfulness also has a positive influence on expectancy violation resistance. In Experiment 3 we were able to show that people with high levels of dispositional mindfulness remembered more information about the petition and the petitioner herself than individuals low in dispositional mindfulness in the expectancy violation condition. Based on mindfulness philosophy (Kabat-Zinn, 1994) and current empirical research (Bishop et al., 2004, Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008) mindfulness embraces two main factors, (1) a*wareness*: the ability to regulate attention, the orientation towards present or immediate experience, and (2) *acceptance*: an attitude of acceptance and nonjudgment towards experience. We believe those two factors to be crucial for the expectancy violation resistance. On the one hand the acceptance factor makes mindful people receptive to see things as they actually are and be therefore less attached to their expectancies. On the other hand the awareness factor makes people more oriented to the present experience rather than caught up in the internal stories related to the expectancy violation. A person high in dispositional mindfulness tends to attend to and accept all experiences, which allows an individual to respond effectively rather than react habitually to the experience (Bishop et al. 2004). A third aspect that might be important in the ESP resistance is that mindfulness is negatively correlated with emotional reactivity (Ortner, Kilner, & Zelazo, 2007) and is associated with improved emotion regulation (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008; Masicampo & Baumeister, 2007; Shapiro, Carlson, Astin, & Freedman, 2006). Because of the important role of affect in the ESP (see paragraph "The role of affect in the ESP") the ability to down regulate the emotions caused by the expectancy violation can explain the resistance. Because the moderating effect of dispositional mindfulness was found only in Experiment 3, we cannot be sure which of the factors connected to mindfulness is responsible for expectancy violation resistance. An interesting question is how dispositional mindfulness in general is related to SITs and whether mindfulness training can increase "SIT immunity".

2.7.5. The ESP, other SITs and its Boundary Conditions

One may wonder whether previous findings and theorizing concerning Social Influence Techniques (SITs) can be generalized to the ESP. This would be very difficult due to many factors that distinguish the ESP from other SITs. First, the ESP does not involve a sequential requesting procedure that is said to provoke self-regulatory resource depletion. Experiments have shown that compliance techniques that involve a series of requests (e.g. multiple decision moments in Foot-in-the-Door and Door-in-the-Face techniques) work because the act of responding to the initial request consumes self-regulatory resources, which in turn foster the use of decisional heuristics (Self-Regulatory Resource Depletion Theory [SRRDT]: Baumeister, Bratslavsky, Muraven, & Tice, 1998; Baumeister & Vohs, 2003; Jannsen, Fennis, Pruyn, & Vohs, 2008; Fennis, Janssen, & Vohs 2009). Dolinski and colleagues (2000) demonstrated that the reverse is true for the ESP. Concretely, they showed that by asking a cognitively demanding question after the ESP, participants' cognitive functioning shifted from mindless to mindful, thus *reducing* compliant behavior. SRRDT would instead predict that a further cognitively demanding question would increase self-regulatory depletion and consequently *increase* compliant behavior. Second, although the effectiveness of SITs also involves, as in the case of the ESP, a certain extent of mindlessness in producing compliance, it most importantly hinges on the quality of the interaction in the first stage. Because requester and requestee meet the first time during the target request, explanations based on assimilation principles such as consistency or reciprocity (Cialdini, 1993), conversational engagement (Dolinski, Nawrat, & Rudak, 2001; Howard, 1990), or augmentation of similarity and liking (Gopinath & Nyer, 2009) are not applicable to the ESP.

The common factor in those techniques is that compliance is increased when people rely on compliance-promoting cues rather than deliberating on the merits of the request. In our experiments we managed to show that an attention shortage (mindlessness) fostered by the internal focus after an expectancy violation is a main mechanism allowing for the cue-based heuristic response towards a request. And exactly this introspective focus could be a common denominator in all techniques for inducing the necessary mindlessness. It is possible that both, the Foot-in-the-Door, as well as the Door-In-the-Face techniques also make people focus on the first request or respectively the difference between the first and the second one and themselves, rather than on the content of the second target request.

As for every one of the so far known SITs there are also limiting conditions for the effectiveness of the ESP. First, we have shown that when people are motivated and able to pay attention to the present moment and are high in dispositional mindfulness, the influence of the technique is diminished. Second, Dolinski and colleagues (2002) have shown that the influence of the ESP is eliminated when people are cued to engage in mindful responding towards the request. This is consistent with the view that compliance is diminished in the presence of cues that trigger deliberation (Pollock, Smith, Knowles, & Bruce, 1998). This is why we believe that minor changes in the request (e.g. size of the request), the context (e.g. framing), or the requesting person itself (e.g. body language) could evoke a different response. Therefore future studies should investigate cues that may eliminate this effect. Another possible limitation of the effectiveness of this technique could be time. We believe the inconsistency resolution process triggered by the ESP to be temporary, hence also its influence on compliance. The time span is probably dependent on the intensity of the ESP: the bigger the affective response to the expectancy violation the longer it will receive cognitive processing.

2.7.6. Limitations and Future Directions

The experiments have a number of limitations. First, due to the sensitivity of the ESP effect, the mediator (internal focus) was assessed after the dependent variable (compliance) and not immediately after the manipulation. Based on previous research we know that the inclusion of a measure directly after the ESP would actually undermine the success of the manipulation designed to affect the dependent variable (Dolinski et al., 2002). Furthermore we used different ways to manipulate the mediator. We first established the existence of the causal effect of the treatment on the dependent variable via the mediator in a first experiment (Exp. 3). Then in two subsequent experiments (Exp. 4 and 5) the mediator was affected through different manipulations and its effects on the outcome variable were estimated. A further weakness of the methodology is that the mediation findings are based solely on self-reports and therefore can potentially suffer from reporting biases (Exp. 3-5). Nevertheless it is important to mention that stating their level of inner focus, participants were not aware of the fact that the petition was senseless and part of the experiment, which could have prevented participants to state a higher level of inner focus in order to explain their behavior. Another important point is that mediation conclusions also are

dependent on sample size. Due to the complexity of the experiments and its serial approach (30 minutes per participant) sample size was kept fairly small. It has to be taken into account that the smaller the sample size the more likely mediation (when present) is to be labelled full as opposed to partial (Rucker, Preacher, Tormala, & Petty, 2011). Also, because the emotional valence was assessed after the walk from one room to the other we cannot be sure that the affective state remained stable and unaffected by the petitioner or the transition from one room to the other (Exp. 5). Third, mindfulness levels were only taken into account in the cognitive busyness (Exp. 3) and cognitive load (Exp. 4) experiments and not in the ESP experiments themselves. This is why the influence of mindfulness on ESP sensitivity remains speculative.

This series of experiments has several implications for future research. Questions which remain open are: What are the consequences of an expectancy violation without an emotional seesaw? What is the affective state immediately after an ESP? What exactly happens during the internal focus? And under which situational circumstances does the ESP fail to evoke compliance? Furthermore in future research it may be useful to include not only affective evaluations, but also physiological measures of affective reaction. Such measures would allow to further examine how affective reactions affect the sequence of processes that unfold from the ESP.

2.7.7. ESP Revised

Despite these limitations the findings provide a number of valuable insights. Based on the experience from our experiments and the analysis of earlier induction techniques used in former research we believe that the following conditions have to be met to induce a strong emotional seesaw: (a) situational information must be salient and in the attentional focus; (b) the situation must be capable of inducing an outcome related expectancy; (c) the primary expectancy has to be relevant and subjectively unambiguous in the first place; and (d) the real situational outcome must be discrepant from the content based expectancy. Under conditions of high motivation (relevant expectancy) and sufficient processing resources, the discrepancy between expectancy and reality may either (a) bias the cognitive processing towards an expectancy content consistent interpretation through rationalization and thus leading to an expectancy sustention or (b) serve as

a reality based source of comparison against the former expectancy, leading towards an expectancy upgrade. Which of these two possibilities is more likely to occur depends probably mainly on participants' openness towards new information (dispositional mindfulness) and the level of importance of the expectancy itself. The lower a person's openness towards new information and the higher participants' emotional attachment towards the expectancy content the more probable that rationalization of incoming expectancy discrepant information will occur. The expectancy upgrade as well as the expectancy sustention are cognitively effortful operations that create meaning in the ongoing process of social information processing, absorbing through that a substantial part of a person's attentional focus. Based on the data so far we cannot say whether these assumptions reflect reality nor which kind of discrepancy processing was more frequent. What we can say is that the ESP does induce an increased level of introspective attentional focus. Based on self-reports of internal focus (Experiments 3-5) we can say that participants after the ESP reported higher levels of inner focus and that this level of inner focus mediated the influence of the ESP on compliance. In line with our predictions the more the attention was focused on the inside the higher was the probability of compliance. We believe that the ESP setting increased the introspective focus, which in turn influenced subsequent information processing by drawing inferences from a non-expectancy relevant situation based on available and applicable heuristics.

The five studies presented in this article provide consistent evidence that complements and extends the ESP literature by demonstrating that both its expectancy violating structure as well as individual differences (dispositional mindfulness) influence information processing as well as compliance sensitivity. We managed to show that the emotional seesaw is an emotion activating expectancy violation that induces a decrease in processing capacity which therefore leads to less efficient memory processing, inhibiting a mindful state of mind. Based on these findings we believe that the ESP fosters prioritized processing of expectancy inconsistent information, with the purpose of information upgrade or sustention, for future predictability and anticipation of behavior. To this aim, simplified and pre-established routines are applied in order to save cognitive capacity, leading to compliance in social norm dominated situations.

Chapter 3: From Mindlessness Induction to Mindlessness Reduction! Exploring the influence of situation-context misfit on Resistance to Persuasion after the Emotional Seesaw Phenomenon

3.1. Introduction

If you were asked to decide on the first glance (without having any further information) from whom you would like to purchase a product or service, a person with long hair in a bright colored batik print t-shirt, or a formally dressed person in a suit, the correct answer should always be: "it depends". You would probably feel more comfortable buying your biological fruits and veggies on your weekly trip to your city's farmers market from the "Hippie" but rather resign your tax computation to the "Yuppie". In such a situation your trust allocation concerning the product or service would, to a certain extent, depend on what you expect to be a proper context-situation fit. You would probably grant the situation a second look when being faced with a Yuppie selling rhubarb at your local farmers market. Research so far has shown that information that violates our expectancies attracts attention and receives through that more cognitive processing (e.g., Hastie, 1984; Bargh & Thein, 1985). This means, you would probably analyze more in depth what the Yuppie has to say concerning the rhubarb rather than just automatically pull out your money while hearing the word "ecologically friendly" – a thing you would possibly do, when being faced with the stereotypical Hippie at the market. Automatic decision making depends exactly on using small cues and your expectancies concerning the situation without thoroughly analyzing all available information (e.g. farmers market + hippie + ecologically friendly = affirmative purchase decision). The effectiveness of many Social Influence Techniques (SITs) hinges exactly on this kind of inhibited information processing. Through a variety of different requesting scripts and underlying mechanisms those techniques evoke peripheral information processing and through that automatic (mindless) decision making which acts upon some basic heuristic principles, while increasing the odds of compliance. This is also true for the

Emotional Seesaw Phenomenon (ESP). In 5 experiments we have shown that the technique at hand depends on a situation that is believed to be true (expectancy), then suddenly turning out to be inadequate (violation) causing a fast change of emotions. In our experiments the invoked mechanism, underlying the effectiveness of this technique, is believed to be an introspective process triggered as a result of the expectancy violation. During this introspective process the attention is shifted to the meaning of the violation and evoked from other stimuli, like for example the target request. The decision then (whether to comply or not) is based on a shallow analysis of situational cues. Therefore certain characteristics of the requester as well as the request itself have a tremendous influence on compliance in conditions of mindlessness (Chaiken, 1987; Petty & Cacioppo, 1986; Sengupta & Johar, 2001). The purpose of this experiment is to go on step further and shift the focus from the mindlessness induction technique (ESP) to a possible mindlessness reduction during the requesting phase, based on the same expectancy violating principle. Although we argue that an ESP based expectancy violation leads to increased mindlessness and hence compliance to familiar situations – because of its attention absorbing nature – we hypothesize that when this structure is repeated in connection to the compliance setting, an attention reallocation might occur causing a disruption of the ESPs influence on compliance. More precisely we believe that a detection of a misfit between situation and context in the requesting situation (e.g. the rhubarb selling Yuppie on a farmers market) should lead to a more careful processing of the plea and therefore a decreased effectiveness of mindlessness based decision heuristics brought about by the ESP in the first place. In the following, we review the relevant literature concerning persuasion facilitating factors and turn to possible persuasion resistance factors which are relatively understudied and a primary focus of this experiment. In doing so, we suggest that an expectancy violation, in this chapter also referred to as *context-situation misfit,* might act as a mindful processing enhancing – hence persuasion limiting factor. Finally, we report the findings of our experiment concerning the influence of a context-situation misfit connected to the persuasive attempt, on message processing, compliance and information recall, compare its results with findings from a related study (Experiment 5, Chapter 2) and discuss the implications of the results.

3.1.1. Ways to increase compliance susceptibility

Susceptibility to compliance hinges mainly on three factors and their interactions: (1) the level of elaboration and argument value, (2) use of heuristic principles, and (3) individual differences. Subsequently these factors are discussed separately.

First, the success of gaining compliance after a request depends most often on the quality of an argument and the extent to which the argument is elaborated (Petty and Cacioppo, 1986). If the argument value of the request is high a mindful central rout elaboration is beneficial. In this case peripheral cues have a minor influence on the decision outcome. The impact of peripheral cues increases when conscious processing decreases (mindless or automatic processing). Thus, this kind of processing is beneficial when the value of the argument in the request is low. Social Influence Techniques are often applied to impair mindful consideration of the request in cases of low argument quality. Those techniques use different requesting scripts that cumulate in a mindless processing of the target request. Like in the case of the ESP, where its expectancy violating structure revokes attention from the target request. One should bear in mind that although mindlessness is a necessary condition for heuristic based compliance, it is not sufficient.

Second, in situations when ability to process the target request is impaired peripheral cues become important determinants for compliance susceptibility. Cues that drive people towards compliance are called *alpha strategies* (Knowles & Linn, 2003). There are many alpha strategies that people draw upon when in a state of mindlessness. Cialdini (1993) identified six of those persuasion principles: (a) reciprocation, (b) scarcity, (c) authority, (d) commitment, (e) consensus, and (f) liking. In our previous experiments mindlessness was a product of the ESP and compliance a heuristic response to it (see Chapter 2, Exp. 1 and 5). This means that the available cue combination of requester, request and context apparently sufficed to induce a heuristic based compliance reaction. A heuristic rule that the participants resorted to in our experiments so far could be the principle of liking. People rely often on the heuristic that the more we like someone we have a meaningful relation with, the greater our willingness to comply with a request (Cialdini & Goldstein, 2004). Burger et al. (2001) have shown that under conditions of mindlessness this rule is also applied when the request comes from a stranger. The question that arises is why should participants in our ESP experiments so far liked our petitionist? We believe two factors being responsible for increased liking and hence influence on compliance. A first

factor enhancing compliance could be perceived similarity between petitionist and requestee. Research has shown that this perceived similarity aids liking and consequently alters the targets vulnerability towards persuasion (Similarity Attraction Effect, Berger, 1975). The enhanced interpersonal affection makes resistance against persuasion more difficult (Gopinath & Nyer, 2009), even if perceived similarity is induced through superficial shared identity markers like same names or birthdays (Burger, Messian, Patel, del Prado, & Anderson, 2004; Garner, 2005). A different way to underline similarity between petitionist and requestee is to dress in a way that is similar to their target (Emswiller, Deaux, & Willits, 1971). The manner of dressing may lead to assumptions about the requesters' political and social values, social class, taste and behavioral intent, which the requested then may consider in terms of similarity to his own. In our previous experiments all petitionists as well as all participants of the experiment were students. Because they not only looked like students, but also conducted the petition at the university, the probability of them being a student, hence being perceived as similar to the requested, was very high. A second factor possibly provoking increased liking was the familiarity of the situation. At universities students raising money or asking to sign a petition, for world or university enhancing reasons, is very common and therefore familiar. Research has shown that the mere exposure to a novel stimulus is a sufficient condition for the enhancement of attitudes towards it (Bornstein, 1989; Harrison, 1977; Zajonc, 1968). This means, that the more the participants of our study were exposed to charitable petitions at the university – what is highly probable – the more familiar they appeared to them- hence also more likable.

Third, individual differences are also known to influence persuasion susceptibility (Kaptein, Markopoulos, Aarts, & de Ruyter, 2009). Research has shown that people with a low need for cognition are more prone to use the peripheral route of message elaboration (Cacioppo and Petty, 1982). The sex of the requester is another characteristic that is immediately apparent to the requested and might have an influence on the compliance susceptibility. Research has shown that women in general are more susceptible to persuasion, because of the female tendency to be more relationship oriented than males (Cross & Madson, 1997). In our previous experiments however the gender of the dyads never played an important role in the compliance setting. It is nevertheless possible that sex differences arise when combined with an altered appearance of the petitionist because we hypothesize that by the inadequacy between context and situation, attention is shifted to the request itself and now other decision rules may apply. In an experiment

by Judd, Bull, and Gahagan (1975) a male marketing researcher dressed "smartly" was more successful in gaining compliance of randomly approached women compared to dressed "casually", whereas this effect was not found in males. Because of this finding gender should be included in the analysis.

3.1.2. Ways to decrease compliance susceptibility

As rich as the literature is in examples of alpha strategies, it is poor in examples of strategies diminishing their influence. In the previous chapter we have shown that dispositional mindfulness can be a factor that counteracts heuristic based compliance by making people more present oriented. Based on mindfulness research, we know that mindful individuals tend to attend to current experiences and respond therefore effectively rather than habitually to it (Bishop et al. 2004). This is why raising the requested person's level of mindfulness – dispositional or current state – should lead to a decrease in compliance susceptibility. Dolinski, Cieszek, Godleswki, and Zawadzki (2002) showed that the influence of the ESP diminishes when people are cued to engage in mindful processing. Their way to accomplish it was by asking people a cognitively effortful question in between the ESP and the target request.

We argue that an expectancy violation connected to the persuasive attempt can also be a persuasion resistance strategy, because it disrupts the induced mindlessness and directs attention towards the persuasive message. In such a situation the quality of the persuasive message (in our case the nonsense petition) would exert a major influence on the subsequent attitude towards the request and not superficial "peripheral" aspects of the situation itself. In other words we believe that the internal focus caused by the ESP is disrupted and shifted towards the requesting situation, diminishing through that its mediating effect on compliance.

3.1.3. The present experiment

In the present experiment the question whether an expectancy violation may lead to more resistance towards persuasion in previously depleted individuals (by an ESP) is examined. So far

we have shown in previous experiments that if the structure of the request is conventional and the situation familiar, no attention is paid to the semantic of the request after the ESP (see Experiment 5). In order to induce an expectancy violation connected to the persuasive attempt without altering to much of the previously used procedure, we decided to create a misfit between situation and context. People infer characteristics or group membership from a stranger not only from how the person looks like, but also in which context the person is currently encountered. This means that we could categorize the objectively same person in worn down, randomly mixed clothes as homeless when seeing him sitting on the pavement, or as an artist when meeting him in a fancy art gallery. These context characteristics that communicate group membership are called ambient identity cues (Cheryan, Plaut, Davies, and Steele, 2009). We believe that if the identity of the to evaluating person is incompatible with the ambient identity cues it will attract the attention of the evaluating person. To this aim we decided to keep the identity cues (university setting) as well as the persuasive message content and structure (nonsense petition concerning public transportation) consistent with Experiment 5 and alter the appearance of the petitionist in order to obtain a misfit between situation and context.

So far participants (Experiments 1-5, Chapter 2) were faced with a familiar situation (a student collecting signatures on a petition at the university or university library) where context (university) as well as situation (student collecting signatures) matched expectancies. To test the validity of the predictions, we altered the appearance of the requester in a way that would be easily discriminated by the average student participant. Suits have been symbolic for social power and status throughout history and have been used as a way to differentiate from others. Therefore in this experiment the requester in the university setting was dressed very formally in a suit in contrast to a typically collegiately – jeans t-shirt dressed individual. The overall purpose of this experiment is to investigate the influence of a context/situation misfit connected to the persuasive attempt after the ESP. In this study the same response measures were assessed as in the previous experiments, including message processing, compliance, and information recall. As reference point of the effectiveness of the ESP and its consequences, we used data collected in Experiment 5 presented in Chapter 2. In the following section we shortly present the hypotheses and results of our reference data (Experiment 5) and introduce the new hypotheses for Experiment 6 and for its comparison with Experiment 5.

3.2. Goals and Hypotheses of Experiments 5 and 6

3.2.1. Experiment 5

The goal of Experiment 5 was to investigate the processes that unfold after the ESP and its influence on message processing, compliance and information recall. The ESP was administered in form of an expectancy violation that caused an affective shift (from positive to negative, or vice versa) before the persuasive attempt. In the control group only one emotion was induced (positive or negative). Following hypotheses were tested:

Hypothesis 5.1.: The ESP will inhibit message processing.

Hypothesis 5.2.: The ESP will facilitate compliance to a senseless request.

Hypothesis 5.3: The ESP will diminish information recall concerning the petition and the petitionist.

Hypothesis 5.4.: Self- reported inner focus will mediate the relationship between the ESP and compliance.

The findings revealed a decrease in message processing (verbalized doubts and concerns in response to the petition) and information recall (of information concerning the petition and the petitionist), as well as an increase in compliant behavior (signatures on a senseless petition) after the ESP, relative to the control group (were only one emotion was induced). Furthermore this experiment provided evidence that the internal focus induced by the ESP mediated the relationship between the ESP and compliance.

3.2.2. Experiment 6

The current experiment seeks to investigate the influence of an expectancy violation connected to the persuasive attempt, after an ESP. In other words we try to neutralize the effect of

the ESP (expectancy violation before persuasive attempt) shown in Experiment 5 by another expectancy violation (in form of a context-situation misfit) connected to the persuasive attempt. We believe that the expectancy violation connected to the persuasive attempt will revoke the attention from the ESP (measured as self-reported inner focus) and redirect it towards the petitionist and the persuasive message facilitating a mindful consideration of the petition. Below we specify our hypotheses.

Hypothesis 6.1.: The ESP will not affect message processing.

Hypothesis 6.2.: The ESP will not affect compliance susceptibility.

Hypothesis 6.3.: The ESP will not affect information recall.

Hypothesis 6.4.: Self- reported inner focus will not mediate the relationship between the ESP and compliance.

Hypothesis 6.5.: Women will show more compliant behavior disregarding the condition.

3.2.3. Comparison between Experiment 5 and 6

We believe, that the context-situation misfit connected to the persuasive attempt will not only have a greater influence on mindlessness reduction in the ESP groups, but also on the control groups where participants haven't been depleted beforehand but are reacting towards the petition depending on their dispositional processing style (mindless or mindful). Therefore we believe that the expectancy violation connected to the persuasive attempt might be especially beneficial for participants whose general disposition points more into the mindless direction.

Hypothesis 6.6.: Participants in Experiment 6 will exhibit a better message processing and information recall as well as less compliant behavior as participants of Experiment 5, disregarding the condition.

In the following the design and the results of this experiment are presented and in a second step compared to data obtained from Experiment 5.

3.3. Method

3.3.1. Participants & Design

A total of 40 undergraduate students (21 female, M_{age}= 22.75, SD_{age}= 3.30) of a large German university were invited to take part in a 2 (final emotional state: positive vs. negative; n=20) × 2 (experimental group: one emotion vs. emotional seesaw; n=20) × 2 (gender: female vs. male) experiment. Participants received €1 participation endowment and a possibility to win up to €2.50 extra was granted as described below. Participants were randomly assigned – through a prearranged order to one of four groups.

3.3.2.Materials & Procedure

In line with Experiments 5, participants were requested to traverse 4 experimental stages. The (1) welcome in experimental room 1 (ER1), the (2) computer based manipulation in experimental room 2 (ER2), the (3) encounter with the petitionist on the transition between rooms where (DV1) message processing and (DV2) compliance were assessed, and finally the last stage in ER2 where (4) participants' (mediator) self-reported inner focus and level of (DV3) information recall (see Appendix E) were assessed. At the beginning of stage 2 (T1) and stage 4 (T2) participants' current emotional state was assessed on a 5-point Likert-type scale (1=*very good*; 5= *very bad*). To reiterate, participants were invited in stage 2 to take part in a computer quiz consisting of 5 questions (emotion induction: easy vs. difficult questions; condition: expectancy violating vs. expectancy congruent payout scheme). The self-reported inner focus scale (r=.83) was once again a z-transformed index averaging two questions, one concerning participants' allocation of attention to the inside (in percent) and one concerning participants allocation of attention to the outside (recoded; measured on a 5-point scale, 1= *not at all;* 5= *very much*). All details of the procedure including daytime, location, and experimenters were identical with Experiment 5. The only exception was the apparel of the petitionist (see Appendix F). In this experiment the male petitionist (blind to the experimental condition) was dressed in a suit and a

white shirt. Important to mention is that this experiment was conducted one day after Experiment 5.

3.4. Results

Again a mixed between-within subjects analysis of variance was conducted to assess the impact of the final emotional state (positive vs. negative) and the experimental group (one emotion vs. emotional seesaw) on participants' current emotional state prior to the intervention (T1) and following the intervention (T2). The dependence was reflected in a significant final emotional state × experimental group × time interaction in an overall ANOVA with repeated measures on the last factor, $F(1,36)=5.98$, $p<.05$, $\eta_p^2=.14$. Further analyses indicated that significant changes in the current emotional state were reported only in the one-emotion groups × time, interaction: $F(1,18)=8.76$, $p<.01$, $\eta_p^2=.33$. After answering the easy questions (positive emotional state) participants' emotional state improved from *T1* to *T2* but for participants who were asked to answer difficult questions (negative emotional state), the emotional state deteriorated from *T1* to *T2*. No emotional changes from T1 to T2 were found in the seesaw groups, all $Fs \leq 1$. This pattern of results is identical to the one obtained in Experiment 5. For mean differences between T1 and T2 see Figure 4.

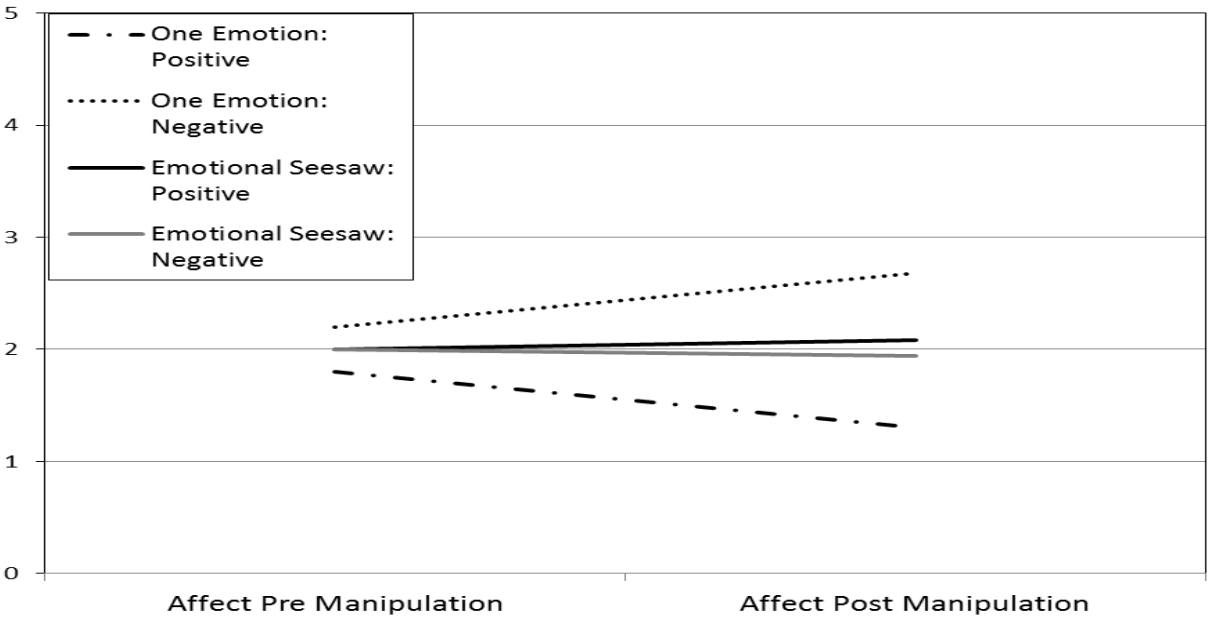

Figure 4. Mean current affective state before and after the manipulation separate for all four conditions with lower means indicating a more positive affective state.

An initial 2 (final emotional state: positive vs. negative) × 2 (condition: one emotion vs. emotional seesaw) × 2 (gender: male vs. female) MANOVA was performed on the combined three dependent variables (message processing, compliance and information recall). For mean percentage values of message processing, compliance and information recall see Figure 5. Higher values indicate higher propensity to comment on the petition (message processing), sign the petition (compliance) and to remember information concerning the petitionist and petition (information recall). The MANOVA yielded a significant emotional state × condition × gender effect, Pillai's Trace= .25, $F(3, 30) = 3.36$, $p < .05$. Further analysis indicated that the 3 way interaction was mainly driven by the significant interaction of condition × gender, Pillai's Trace= .24, $F(3, 30) = 3.09$, $p < .05$. This means, that man and women displayed different behavior in the experimental as well as in the control group. Therefore the condition × gender interaction was examined further by splitting the dataset by gender and performing nonparametric tests (Chi square) for message processing and compliance, and an ANOVA for information recall. In other words we report separate analysis for men and women (if differences are found) examining the influence of experimental group on message processing, compliance and information recall. Preliminary analysis indicated no main effects or further interactions of final emotional state, condition, or gender on the combined dependent variables, all Fs< 1.19, all ps >.33.

Message Processing. Hypothesis 1 expected the lack of differences between the experimental (40%) and the control group (30%) when it comes to the frequency of vocalized concerns or doubts in response to the senselessness of the petition, $\chi^2(1, n=40)=.44$, $p=.51$, *phi*=.11. Gender did not influenced message processing, $\chi^2(1, n=40)=.80$, $p=.37$.

Compliance. When it comes to compliance, the amount of signatures on the senseless petition was different for men and women. Male participants revealed more behavioral compliance in the one-emotion (44%) rather than in the seesaw groups (10%), $\chi^2(1, n=19)=2.90$, $p_{one\text{-}tailed}<.05$, *phi*=-.39. Female participants revealed the opposite pattern of results, they complied more often after an emotional seesaw (70%) as compared to the control group (18%), $\chi^2(1, n=21)=5.74$, $p<.05$, *phi*=.52.

In order to determine whether the level of self-reported inner focus mediates the impact of the ESP on compliance a mediation analysis was performed. We used a bootstrapping procedure (Bollen & Stine, 1990) based on 10,000 bootstrap resamples as suggested by Preacher and Hayes

(2004) by applying the PROCESS macro for SPSS provided by Hayes. The true indirect effect was estimated to lie between -.38 and 1.35. Because zero is included in the 95% confidence interval, we can conclude that as predicted (Hypothesis 4) in contrast to Experiment 5, compliance was not mediated by the self-reported internal focus.

With regard to the influence of gender on compliance, females' higher susceptibility (Hypothesis 5) could not be confirmed. Although more women (43%) than men (26%) signed the petition, this difference did not reach conventional standards of significance $\chi^2(1, n=40)=1.20$, $p=.27$, $phi=.17$.

Information Recall. Also information recall was different in men and women. In line with Hypothesis 3 male participants' information recall did not differ between groups $F(1,19)<1$; $p=.59$. Worth noticing is, that although not statistically significant male participants in the seesaw condition (M= 8.40; SD=1.65) recalled about one item more than those in the control group (M=7.44; SD=5.20). Female participants on the other hand recalled less information in the seesaw (M= 6.20; SD= 4.83) as compared to the control group (M= 9.36; SD=3.20), F(1, 20)= 3.19; $p_{one\text{-}tailed}<.05$, $phi=-.39$.

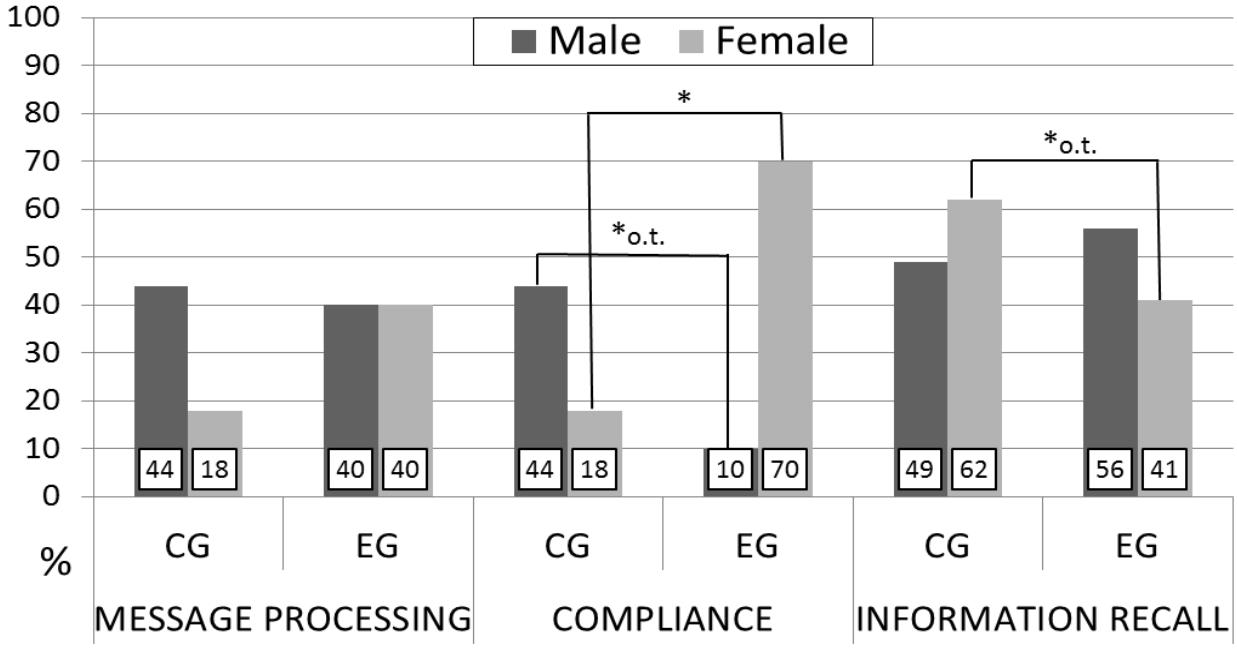

Figure 5. Mean values of message processing, compliance and information recall separate for male and female participants, as well as the control (CG) and experimental (EG) group. Significant differences at p<.05 are market by a *, one tailed differences as *o.t

Comparison between Experiment 5 and 6

In order to test the hypothesis that participants of Experiment 6 will react in general more mindful than participants in Experiment 5, disregarding the condition, an ANOVA was conducted on the combined dependent variables message processing, compliance and information recall. Contrary to hypothesis 6.6. no significant main effect of experiment (5 vs. 6) on the combined dependent variables was found $F< 1$, $p>.72$. When examined separately only a significant difference was found for message processing. Participants of the control group of Experiment 6 commented less on the nonsense petition than participants of Experiment 5, $\chi^2(1, n=41)=4.19$, $p<.05$, $phi=-.32$. Figure 6 shows mean values of message processing, compliance and information recall separate for the control and the experimental group for Experiment 5 and 6.

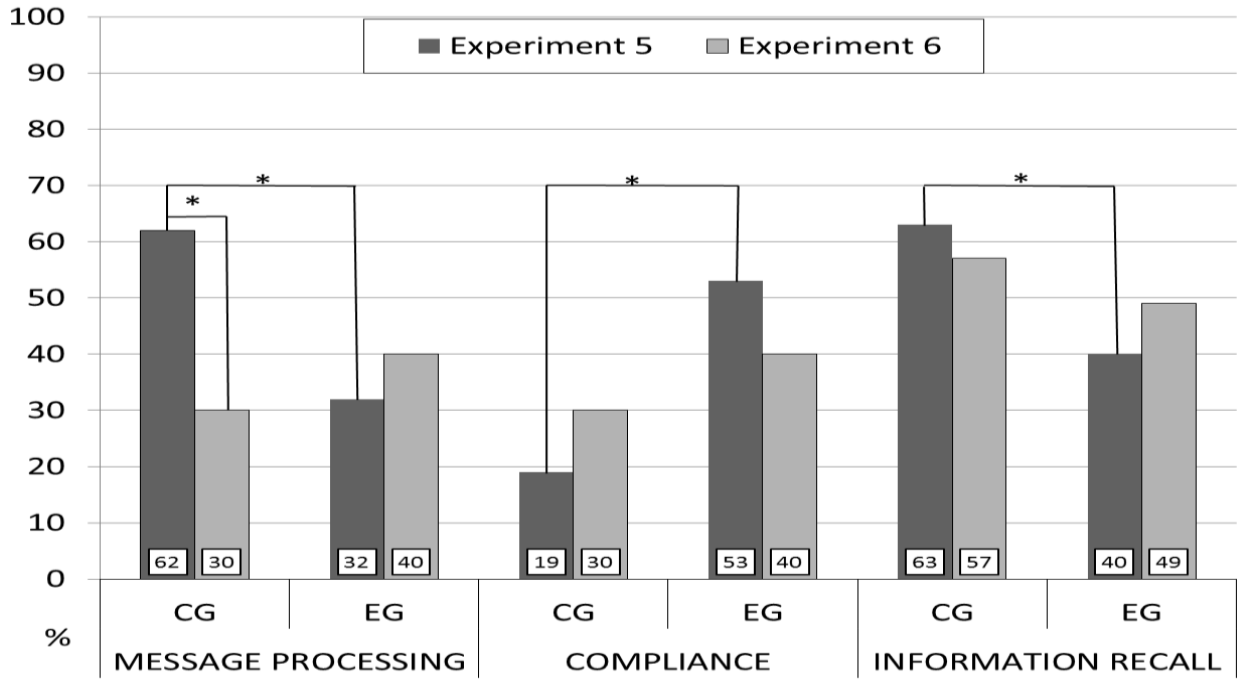

Figure 6. Mean values of message processing, compliance and information recall separate for Experiment 5 and Experiment 6, as well as the control (CG) and experimental (EG) group. Significant differences at $p<.05$ are market by a *, one tailed differences as *o.t.

3.5. Discussion

The present experiment was designed to further analyze the influence of an expectancy violation connected with the target request on persuasion resistance. Overall the effect of the technique was ascribed to the fact that an expectancy violation in form of a context-situation misfit in connection with the requesting situation itself, would lead to a shift in attention from the ESP towards the request, impairing a mindless heuristic response. We hypothesized that this would lead to a level of message processing, compliance, and information recall similar to the control group, hence a neutralization of the ESP effect found in Experiment 5. The experimental data partly provided the hypothesized results, namely a level of message processing similar to the control group and no mediating effect of inner focus on compliance. When examined in detail the measures do constantly produce opposing results for each gender and in general contradict the general hypothesis that the expectancy violation connected to the persuasive attempt neutralized the effect of the ESP. In the following section we try to explain the contradicting results.

3.5.1. Gender differences

In contrast to former research (for a meta-analysis see Eagly & Carli, 1981) and our hypothesis that women generally tend to be more compliant then men, this tendency was not found in our experiment. Eagly and Carli (1981) hypothesized that the obtained sex differences in the social influence literature were affected by the sex of the researchers associated with the experiment. In a meta-analysis which found this difference, most researchers (around 80%) in the included studies were male. For those male researchers larger effects were found than for female researchers. Eagly and Carly hypothesized that male researchers may be more likely than female researchers to obtain female compliance. In line with this assumption female participants were more complaint than male participants in ESP groups. However, for control groups the reversed pattern was observed.

Contrary to our former experiments male participants after the ESP displayed less compliant behavior than other men in the control group and did show a tendency to remember more information connected to the petition and the petitionist than their counterparts in the control group. We assumed, that the misfit between context and situation would foster a more

elaborated (mindful) processing of information and therefore a message processing, compliance and information recall rate similar to the control group. We believe that the obtained data in Experiment 6 can be ascribed to two contrasting explanations. One explanation hinges on the possibility that expectancy violation backfired and converted mindlessness brought by the ESP into a hyper mindfulness (compared to the average mindfulness in the control group). This would explain why fewer male participants after the ESP signed the petition and remembered slightly more details connected to the petition. However this explanation cannot account for the reverse pattern found in female participants. A second – and more plausible explanation – could be that the misfit between context and situation lead, as predicted, to a shift of attention from the ESP towards the expectancy violating persuasive attempt. Our primary reasoning was based on the assumption that the expectancy violation will shift participants' attentional focus from an internal focus (on the ESP) to an external one (on the request) inhibiting the effect of internal focus on compliance. Our predictions however seem not to be fully met as evidenced by our data. It seems like the attention, was redirected on the requesting situation as assumed, but hasn't brought about the predicted mindful consideration of the request message. It might be the case, that because the expectancy violation was a visual one (petitionist in a suit at the university), all attention was directed towards the visual aspect of the context-situation misfit and revoked from the auditory part of it, hence the nonsense petition itself. Vachon, Hughes and Jones (2012) have shown, that an auditory expectancy violation lead to a disruption of a focal visually presented recall task. This means that participants' attention was captured by the auditory expectancy violation and revoked from the visual part of the experiment. This is why we believe that participants after the ESP have been still in a mindless mode of processing. Instead of being internally focused on the ESP as in Experiment 5, participants' attention was shifted to the visual components of the context-situation misfit and revoked from the auditory part of the petition, hence the message content.

We believe that the visual cues connected with the apparel of the petitionist lead to an automatic negative response towards the request after the ESP – hence noncompliance. This could be so because as a group, men are more likely than women to commit murder, assault or other violent crimes to other men (Myers, 2002). Consequently men can perceive other men subconsciously as more dangerous, which might lead to automatic associations between gender and a negative potency. Research for example has shown, that man are less likely than women to show in-group bias, hence a bigger preference for their own gender (Rudman & Goodwin, 2004).

Males and females alike report greater liking for women than men (the "women are wonderful effect" see Eagly & Mladinic, 1994). Rudman and Goodwin (2004) argue that it is possible that implicit male threat beliefs concerning other males might hinder an automatic pro-male evaluation. We believe that for the same reason this might have inhibited the positive evaluation of our petitionist and lead to an automatic negative response towards the petition, irrespective of its content. Although this tendency was not visible in Experiment 5 (the same male petitionist) this could be so because the petitionist in the previous experiment was automatically categorized as in-group (student), hence not dangerous. In the present experiment the petitionists' apparel might have facilitated his automatic categorization as out-group.

A further aspect that may have influenced the male threat perception towards the petitionist could be the perceived asymmetries in power. Being dressed in a suit can evoke the impression of higher status and consequently more power. Doyle (1997) argues that a perceived asymmetry in power will automatically trigger a perception of threat. Another aspect that supports the perceived threat hypothesis is provided by the information recall data obtained from male participants. Although the difference between the ESP and the control group was not significant, males after the ESP remembered one information item connected to the petitionists' appearance more than their counterparts in the control group. It is known, that potentially threatening stimuli are rapidly processed without the need for higher level cognition (Eysenck, 1992). This is evolutionary important because a fast identification of such stimuli allows for an immediate activation of a defense response without the need of conscious elaboration. Furthermore, stimuli that are perceived as threatening selectively attract attention (Hawton, Salkovskis, Kirk, & Clark; 1989). This could explain why male participants in the ESP group remembered more information concerning the appearance of the petitionist – the threat evoking stimuli – than their counterparts in the control group.

Another aspect that supports the assumption that participants have been still in a mindless mode of processing is reflected in the data collected from female participants. Female participants in the ESP group complied more often, and remembered less information than their counterparts in the control group. This data underlines the mindless aspect of this behavior. The question that arises is why did female participants comply mindlessly although no cues underlining similarity or familiarity have been present. A possible explanation could be ascribed to enhanced attractiveness of the petitionist wearing a suit. Although using the same requester in

both studies (Experiments 5 and 6) was an attempt to minimize the possibility, a smarter apparel might have altered perceived attractiveness. Physical attractiveness was demonstrated to be a predictor of interpersonal liking, hence as already described in the introduction a strong compliance facilitating heuristic. Research on physical attraction has demonstrated it to positively influence behavioral responses to many different domains, like helping behavior (Benson, Karabenick , & Lerner, 1976; Harell, 1978), compliance (Harris and Bays, 1973) or tipping (Lynn & Simon, 2000).

Summarizing we can say that the context situation misfit connected to the persuasive attempt might have redirected the attention form the ESP towards the visual aspect of the expectancy violation (petitionist) and revoked it from the auditory part (petition). The automatic evaluation of the petitionist may have been influenced differently because male and female participants have interpreted the petitionists' physical appearance differently. When "smartly" dressed, females' greater agreeability towards the request may have resulted out of an altered perceived attraction towards the petitionist. Males inhibited response towards the petitionists plea might have been an automatic response towards a perceived threat. Finally we should highlight that the data in general is puzzling and our post hoc interpretations have a speculative character, therefore confirmatory research is highly recommended.

3.5.2. Further findings

Although corroborating our hypothesis *self-reported inner focus* did not mediate behavioral compliance, we believe that this is due to other reasons then predicted. First of all, as already discussed, the compliance and information recall data point into the direction of still persisting mindless processing of information. Because of the small sample size and the opposing data for man and women it is hard to say why inner focus did not mediate the ESPs influence on compliance, although mindless processing was still lingering. In the case of our data, high levels of self-reported inner focus may have fostered compliance in females, but inhibited it in males. This is why statistically the mediating effect of inner focus may have been neutralized. Because of the small sample size it is impossible to compute the mediation analysis separate for

man and women. Also other factors like the level of threat perception or liking could have been stronger predictors for a compliant response, neutralizing or interacting with the internal focus.

Also message processing might have delivered a false positive while pointing into the direction of our first hypothesis. Considering the overall data from previous experiments it might be the case that the lack of difference between control and ESP group could have been also ascribed to a different factor, like for example shyness to veto rather than only impaired message processing.

Another question that arises is why haven´t we found differences between Experiments 5 and 6? In the beginning we predicted that the expectancy violation connected to the persuasive attempt (Exp.6) will make participants of both conditions, the ESP as well as the control group, more mindful, hence alter message processing, and information recall and retain behavioral compliance. This enhanced mindfulness was hypothesized to differentiate the data between Experiment 5 and 6. Based on the data from Experiment 6 we believe that in the ESP group the expectancy violation connected to the persuasive attempt sustained mindless processing by redirecting participants attention towards the visual aspect of the inconsistency. This is why no difference was found between the ESP groups from Experiment 5 and 6. Following this logic, participants of the control group in Experiment 6 should also display more signs of mindless behavior than control group participants in Experiment 5, due to the redirection of attention towards the inconsistency. When comparing data from both control groups we can see that corroborating our theory participants in Experiment 6 displayed less message processing and information recall as well as more behavioral compliance as their counterparts in Experiment 5. A significant difference however was found only in message processing. This might be so due to the small sample size or the subtleness of the expectancy violation.

3.5.3. Limitations and Further Directions

In sum, the results support the idea that participants of the ESP group have been still mindless during the interaction with the petitionist. However, we can only speculate where the mindlessness stems from. It might be the case that as described above, participants attention was shifted towards the visual aspect of the context-situation misfit, but on the other hand it also

could be the case that the context-situation misfit was to subtle and remained undetected leaving participants in the ESP condition in a state of mindlessness. Because the manipulation variable may not have been salient enough we cannot reject the hypothesis of the expectancy violation as a possible resistance factor. In order to clarify the role of the expectancy violation connected to the persuasive attempt more experiments should be conducted using different kinds of expectancy violations. Also different social influence techniques (like foot-in-the door, or door-in-the-face) could be used in order to evoke the primary mindlessness. In order to test the hypothesis, that the attention was directed towards the visual part of the expectancy violation, an experiment with an acoustic expectancy violation should be designed. This could be done, by using an unconventional message structure, or by using a petitionist with a gender atypical pitch of voice (e.g. male with female voice).

Because gender differences apparently play an important role in this kind of experiment a more balanced gender dyad experimental script should be used in the future, or at least a gender neutral expectancy violation. While the difference in compliance and information recall rates for men and women can be partially explained by the different perception of a male petitionist, the question remains as to why this relationship was not found in previous experiments. A possible explanation could be the classification of the petitionist as being an in-group (Experiment 5) or out-group (Experiment 6) member. To test this hypothesis and to further understand which cue characteristics foster which kind of automatic behavioral response, measures assessing perceived similarity, liking and threat should be included. Another reason why these results should be considered with caution is the small sample size. A further inhibiting aspect of this experiment is that reference data was part of a different experiment (Exp.5) and not assessed in the current one. This can be especially harmful when, as in our case, all hypotheses predict null effects, hence a neutralization of an effect that is not shown to appear in the same experiment. Due to the complexity of the experiment we used previous data as reference of the effectiveness of the ESP, reasoning that the data from Experiment 5 was assessed only one day before and in the exact same manner (same petitionist, daytime and place). A replication of this study with a different expectancy violation manipulation, a bigger sample size, a control group without expectancy violation and some additional perception measures would be a start to get more insight into the effects of the expectancy violation connected to the persuasive attempt as possible persuasion resistance factor.

3.5.4. Conclusion

The current study cannot provide certainty on the role of an expectancy violation in form of a context-situation misfit on persuasion resistance. We believe our assumptions were not confirmed because participants still displayed signs of mindless processing. Although our assumptions were not confirmed, the study does provide some interesting insight into how individual differences in perception evoke opposing behavioral responses towards the same objective reality. In our experiment the different perception of the petitionists' appearance within our university context may have prompted different automatic associations for men and women, which moderated the compliance response. It seems that the physical appearance of the petitionist made different automatic decision rules salient, in the case of men possibly the noncompliance to threat, in women compliance towards enhanced liking. The results seem to indicate that mindlessness brought by the ESP or the context-situation misfit still affected participants' information processing and through that behavioral responses towards the nonsense petition. Furthermore this data implies that expectancy violations might be sensory specific, to say if visual cues are violated, all attention is directed to the visual aspects of the violation. Going back to the example from the beginning, we might grant the rhubarb selling Yuppie at a local farmers market a second look, but it is questionable whether we will listen more carefully to what he has to say. To elucidate this issue, researchers should be more sensitive towards the composition of the sensory modalities of the expectancy violation setting. Furthermore based on our findings and the reviewed literature concerning persuasion experiments we suggest that gender should always be considered in the experimental setup and in data analysis.

Chapter 4: Final Discussion

Everyday thousands of micro-environments, interpersonal encounters and intrapersonal processes compete for our attention, behavioral involvement and sometimes even our money. Human cognitive processing resources are limited, and so conscious attention necessarily focuses on the most subjectively important stimulus, while other happenings are, at best, superficially processed (Miller, 1956). Such shallow processing is rule governed - if specific stimulus characteristics a, b and c are present, attention should be redirected, or behavior X should be automatically displayed – and is done without deliberately analyzing all available information. Rules may be unique to the individual or culture, while others are fairly universal, but all are highly adaptive, effortless and fast. Common examples include: 'if something is moving fast, direct your attention towards it;' 'if you don´t know what to do, do what the majority does;' or 'trust authority figures.' This "autopilot" behavior enables us, for example, to talk on the phone while walking home from work, without being hit by a car.

The job of marketing experts and other professional persuaders is to design Social Influence Techniques that use automatic processing rules (heuristics) in order to facilitate behavioral compliance. The effectiveness of those techniques is based on two interdependent factors. First, and as previously indicated, there are some general rules and consequent behaviors that people revert to when automatic processing resources are depleted. Research has shown that those decision rules, although sometimes leading to erroneous behavior, are generally highly adaptive and, in some situations, may even lead to more accurate decision making (Gigerenzer and Gaissmaier, 2011). The second rule addresses how to nudge people into heuristic processing thereby increasing the odds for the desired behavior. Because rule governed behavior is often rational and wrought of enhanced utility, the only way to diminish the influence of SIT´s is through understanding its roots, and potentially counteracting those underlying automaticity inducing processes, preventing us from being "*mindlessly polite*".

The Emotional Seesaw Phenomenon (ESP) is such SIT, and the main focus of this dissertation. Former research by Dolinski and colleagues (e.g. 1998) has shown that a sudden shift in affect from negative to positive or vice versa may induce automatic (mindless)

processing, leading towards higher compliance rates in compliance promoting requesting situations. Experiments revealed that cognitive processing is impaired in post ESP conditions. Although prior research explored the ESP, the underlying automaticity evoking processes hadn't been elucidated thus far. This dissertation offeres further analysis of the ESP, its consequences and its underlying mechanism.

Overall we ascribed the effectiveness of the technique to the structure of the ESP. Firstly, we observed that every ESP consists of an expectancy violation. This means that the first emotion is evoked by one situation that is believed to be true (expectancy), which then suddenly and unexpectedly turns out to be incorrect (violation), leading to seesawing emotions. Expectancies are very important in everyday life. They not only guide our perception, information processing and behavior but also allow us to anticipate how other people and the world, in general, will behave (Burgoon, LePoire, and Rosenthal, 1995). Research has shown that situations, or individuals, that violate expectancies receive more extensive cognitive processing in order to restore an individual's power to predict (e.g., Hastie, 1984; Bargh & Thein, 1985). Based on this research we hypothesized that the expectancy violation evoked by the ESP attracts an individual's internal attention. We argued that this attentional absorption reduces working memory capacity (comparable to cognitive load), leading to a shallower information processing. We proffered that the inconsistency fostered shallow processing would lead to increases in behavioral compliance, through reliance on compliance enhancing heuristics, in compliance promoting circumstances. In Chapter 2 we presented five experiments that were designed in order to test this hypothesis sequentially. The experiment in Chapter 3 was then a first attempt to disrupt the ESPs' effect on compliance. We used the novel knowledge about expectancy violations and their attention-absorbing characteristics to find an ESP neutralizing strategy.

The goal of this final chapter is to shortly outline the rationale behind this dissertation and its experiments, and summarize our empirical findings. Furthermore, we discuss theoretical and practical implications of our studies, and specify possible limitations and future directions.

4.1. Overview of empirical studies and findings

The aim of the first experiment was to replicate and to extend previous findings concerning the consequences of the ESP in a controlled lab environment. It focused on the induction of an expectancy violation. To this end, we created a situation in which the change of emotions was the effect of an outcome-related expectancy violation. Subjects participated in a common knowledge multiple-choice task, in which the difficulty of the questions (easy vs. difficult) determined participants` initial emotional valences (positive in the easy version, negative in the difficult version) by immediate feedback after each response. A payout matrix after the task was used to support expectations (incentive for giving correct answers) or to provoke an emotional seesaw (incentive for giving incorrect answers). Results support earlier findings showing that subjects in the ESP condition displayed impaired message processing as compared to the control condition. And this impaired processing resulted in higher compliance to sign even a nonsense petition. This experiment also revealed the deteriorating effects of the ESP on information recall, confirming our hypothesis that the ESP inhibits information processing.

The goal of the second experiment was to explore whether the increased compliance found in ESP conditions resulted from the dynamic of the emotional shift or whether the very fact that an expectancy violation occurred is sufficient to provoke the observed outcomes. For this purpose, an expectancy incongruent situation with low emotional involvement was designed, and participants' expectancies were violated through exposure to conflicting cognitions. The experiment revealed a weaker, but comparable outcome, supporting the expectancy violation as the key facet of the ESP.

The third experiment aimed to examine whether cognitive busyness- a hypothesized consequence of an expectancy violation induced inconsistency resolution- is the driving force behind the previous findings. For this purpose, cognitive busyness was manipulated by confronting participants with a novel thought- provoking, article (high load) in contrast to a common- knowledge article (low load). This kind of cognitive load manipulation was considered procedurally similar to the ESP induced inconsistency resolution process. Because the cohesive story was not an ongoing attention consuming task, it did not restrict people to remain in a

mindless-processing mode, but rather, allowed for switching between processing modes (mindful vs. mindless) depending on individual dispositions and preferences. The results revealed a pattern similar to that of the previous findings, namely impaired message processing and information recall resulting in a higher propensity to reveal compliant behavior. Furthermore, impaired information recall was significantly related to cognitive busyness in participants with low to medium levels of dispositional mindfulness, but not in those with relatively high levels. Individual tendencies to respond to new information with introspective thinking mediated the relationship between cognitive busyness and compliance, as well as information recall. Taken together, this pattern supports our reasoning that similar reactions as those after the ESP can be observed if participants, relatively low to medium in dispositional mindfulness, are given a situationally induced reason to be mindless.

The aim of Experiment 4 was to replicate and extend the findings of Experiment 3, by forcing participants into prolonged mindlessness. To this end, the experimental manipulation involved a classical cognitive load manipulation. Participants were randomly assigned to remember either a five- or a two-digit number (representing high and low cognitive-load conditions respectively). Thus, in contrast to the transient mindlessness of Experiment 3, given that subjects had to remember a long number in the high load condition, participants experienced a greater need to stay in a mindless inner-focused state, inhibiting the mindful processing of surrounding information. Results were congruent with the findings of Experiment 3, but with one essential difference: there was no moderating effect of dispositional mindfulness. In other words, taken together, Experiments 3 and 4 indicate similarities in the "mindless" consequences that follow after exposure to an ESP, regardless of whether participants low in dispositional mindfulness choose an inner- focused state or whether participants are forced into an inner-focused state, irrespective of trait mindfulness.

Experiment 5 sought to bridge Experiment 1 (Induction of Expectancy Violation) with the findings of Experiments 3 (Transient Mindlessness) and 4 (Prolonged Mindlessness) by directly assessing the role of an ESP induced inner focus on compliant behavior. Researchers replicated the induction of an expectancy violation used in the first experiment, and added a measure of self-reported inner focus used in the Transient and Prolonged Mindlessness experiments. To assess whether the violation effectively elicited the intended emotions, participants' self-reported their emotional states before and after the manipulation. Results reflected the emotional seesaw

effect exhibited in Experiment 1; the experimental (ESP) condition indicated a decrease in message processing and information recall, and an increase in compliance relative to the control condition. Findings demonstrated that the researchers' Emotional Seesaw procedure prevented mindful consideration of the request and ultimately evoked compliance, which was mediated by participants' level of inner focus. Experiment 5 demonstrates that the ESP promotes introspection. Such introspection leads to a shallower and more peripheral processing of information, which, in turn, leads people to rely on mental shortcuts (heuristics) for evaluating requests.

The sixth and final experiment shifted the focus from the ESP and its expectancy violating structure to the possibility of reducing mindlessness rooted in the same expectancy violating principle. It was hypothesized that using a context-situation discordance as the expectancy violating stimuli connected to a persuasive attempt would redirect the attention from the ESP (inner focus) to the persuasive message itself. This would then decrease heuristic-based compliance. But the study did not provide sufficient evidence to confirm the expectancy violation as the factor inhibiting automatic processing. The results did, however, indicate that mindless processing was still present, highlighting differences in automatic decision rules between men and women. Furthermore, the results indicated that the expectancy violation might be sensory specific, meaning that if the expectancy violation were primarily visual in nature then attention would only be directed towards its visual aspect.

4.2. Theoretical implications and generalizability to other SITs

The present research both contributes to and has implications for the specific theory and application of the ESP, and expands general knowledge on expectancy violation theory and social influence. As a whole, results of the six studies indicate that the ESP fosters prioritized processing of expectancy inconsistent information, visible through a greater inclination to base compliant behavior on available heuristics. Heuristic interpretations and responses towards stimuli might be gender specific. In other words, certain objectively identical stimuli may evoke different behavioral responses in men and women. We showed that the order of evoked affective

states is not crucial for the observed consequences of an ESP, although the intensity of the affective response is. We believe that the more emotionally charged the expectancy violation is, the more cognitive processing it will receive. This degree of cognitive involvement might be reflected through self-reported inner focus, as was measured in the third, fourth and fifth experiment. The more an individual reported having an inner-focus, the higher the probability of compliance following a request. After an ESP, inner-focused individuals not only complied more often, but also displayed inhibited information processing indicated through a lack of verbalized comments about the nonsense request and impaired recall of request associated information. Presented research underscored the important role of expectancies in everyday life visible through the mindless consequences they have when upheaved, and dispositional mindfulness may moderate compliance resistance after an expectancy violation.

As elaborated on in Chapter 2 (The ESP, other SITs and its Boundary Conditions), there are many factors that differentiate the ESP from other SITs, especially from the sequential techniques (Foot-In-The-Door, Door-In-The-Face & Low-Ball- Procedure). This makes the generalizability of our findings a bit uncertain. Sequential techniques base their efficacy mainly on *alpha strategies* (α) like reciprocity and commitment, in order to bolster compliance tendencies by providing reasons or incentives for compliance. The empirical study of influence has focused mainly on alpha (approach) strategies. *Omega strategies* (ω) on the other hand diminish persuasion resistance (Knowles &Linn, 2004), and have been widely understudied in the social influence literature. Davis and Knowles (1999) argue that many persuasive attempts evoke an *approach- avoidance* tendency, meaning that on the one hand, individuals' natural desire to be persuaded is restricted by the expense, or the effort or commitment, that is required to comply. This expense then acts as an organic resistance to compliance. We believe this mechanism to be especially applicable in compliance postulating requesting situations. Humans as social animals are believed to have dispositions geared towards cooperation (Levinson, 2006). In order to suppress this tendency, cognitive effort must be expended. In light of this, we suggest that the attentional engagement (as inner focus), elicited by the ESP, prevented the individuals from consciously attending to the persuasive message, or from suppressing the innate tendency to cooperate, or both. We argue that cognitive load might be a paragon omega strategy, and, therefore, act as a resistance reducing factor. The working mechanism of cognitive load in this influence setting is comparable to an already identified omega factor, *distraction*. Petty, Wells

and Brock (1976) argue that distraction might interfere with any thought that the recipients had about a message, including critical ones or counterarguments. Petty and Cacioppo (1986) additionally asserted that distraction moves people from central route to peripheral route processing. It is for these reasons that we argue that the ESP is primarily an *omega strategy* - a strategy that disrupts or inhibits resistance towards compliance, and, as such, is comparable with strategies like the *Disrupt- Than- Reframe* (Davis & Kowles, 1999) or the *Pique Techniques* (Santos, Leve, & Pratkanis,1994). The Disrupt-Than-Reframe technique first disrupts resistance by using an atypical sale or request scheme (ω strategy: "The price for X is 300 pennies"), and later fosters compliance through providing additional reasons for compliance (α strategy: "That's 3 dollars- it's a bargain": reframing). The Pique Techniques (Santos, Leve, & Pratkanis, 1994) also uses an unusual request (e.g. asking for 17 cents) in order to capture attention and disrupt a rejection tendency. The researchers hypothesized that through the surprising request the individual's rejection script is disrupted and replaced by a mindful consideration of the following arguments. Burger, Hornisher, Martin, Newman and Pringle (2007), however, showed that the Pique Techniques inhibits a thoughtful weighing of arguments when presented with a request.

The aforementioned findings are consistent with our theoretical approach. We believe that surprising or expectancy violating situations attract attention as a result of their atypical nature. This attentional engagement leads to automatic processing because of an over engagement of working memory (cognitive load), which diverts our minds from resistance. We postulate that the probability of compliance (p_c) induced through SITs is principally a function of the resistance reducing (ω) and approach increasing (α) forces [$p \equiv f(\alpha; \omega)$]. The compliance threshold is different for every individual, and largely depends on personal characteristics explained in Chapter 1 ("To Whom"- target characteristics). The resistance threshold can be met by increasing omega forces (e.g. increasing automatic processing through cognitive load: Emotional Seesaw Phenomenon) or alpha forces (e.g. using reciprocity rules: Door-In-The- Face), or a combination of both (e.g. Disrupt-Than-Reframe). We believe that the omega force that many SITs restore to in order to obtain compliance can be conceptualized as a cognitive load that causes automatic information processing, which diverts attention from resistance. This heuristic seeking cognitive load can be induced in a variety of ways: through a surprising story (Exp. 3), an atypical request scheme (Disrupt-Than-Reframe and Pique Technique), occupation of working memory by a sequence of numbers (Exp. 4) or by the induced inner focus after the Emotional Seesaw

Phenomenon (Exp.5).

4.3. Limitations, future directions and practical implications

We recognize that our individual experiments are not free of limitations, as discussed in respective chapters. More generally, because these experiments were conducted in a controlled lab environment, it is possible that some characteristics of the ESPs' effects on compliance may have been amplified beyond what would be found in everyday interactions.

The first of these potentially augmenting characteristics was mentioned in the first chapter ("Why" are persuasion rules important when studying SITs?). We pointed out that SITs do not intrinsically increase compliance inclination, but rather induce automatic processing, which alters susceptibility to compliance only when compliance promoting heuristic cues are available. Because we created a compliance promoting context in our experiments, the extent to which the amount of compliant responses was displayed by participants might be slightly elevated as compared to naturalistic settings, where situational cues cannot be controlled to the same extent.

The second characteristic of the experiments that might have distorted compliance rates is based on the fact that participants of these studies were recruited at the university shortly before the actual experiment took place. This could have activated a process similar to one experienced with the Foot-In-The-Door procedure (Freedman & Fraser, 1966). Agreeing to take part in the experiment might have modified momentary self-perception ("I am somebody who helps, when I am asked to"). In order exhibit syntonic behavior with the current self-view, participants may have been more inclined to manifest compliant behavior, regardless of the experimental condition.

The third aspect that might have enhanced compliance rates is that the experiments were conducted exclusively on a university student sample. It might be the case that university students have more a pro-social disposition, and corresponding greater propensity to comply, relative to the normal population.

In sum, the described three factors might have elevated all (both control and experimental) compliance rates in our experiments as compared to those that would be found organically in the general population. Given that we assume that the psychological factors embodied in our lab experiments mimic those at work in real world compliance contexts, we do not doubt the external validity of our laboratory findings. We just point out that levels of compliance exhibited in the lab might be elevated.

We also admit that many of the present interpretations are still of a speculative nature and should be experimentally addressed in the future. Of note is the inadequacy resolution process that we hypothesized to happen during the ESP induced internal focus. We posited that during this introspective focus, the expectancy violation might bias the cognitive processing towards an expectancy upgrade through integration of new information, or an expectancy sustention through rationalization. We believe that how the expectancy violation is handled depends mostly on the subjective importance of the expectancy itself and on individual characteristics (e.g. dispositional mindfulness). Another still puzzling finding that should receive further elaboration is the role of the affective response generated by the ESP. So far there are two competing hypotheses. The first suggestion argues that the affect is intensified in the direction of the violation (Decision Affect Theory: Mellers, Schwartz, Ho, & Ritov, 1997). The other proposition points out that an expectancy violation always elicits negative affect because it undermines the individual's ability to predict (Consistency Theory: Aronson, 1968; Festinger, 1957; Heider, 1958). Our findings have shown no affect alterations relative to pre-ESP conditions; but we speculate that because of a time delay in post ESP affect measurement, any affect alteration might have been neutralized in an inconsistency resolution process. Another aspect also worth exploring is whether expectancy violations might induce sensory specific processing. In other words, is attention allocated to the modality specific aspect of the violation (e.g. after visual expectancy violation, more processing of visual stimuli connected to the violation rather than acoustic)? Finally, it would be interesting to discover whether different kinds of cognitive load (e.g. purely cognitive or affective) influence resistance in a different way. Our findings both open many new questions and research possibilities, and suggest some possible practical implications.

First of all we should mention that relative to the other SITs, the ESP appears more effective in inducing compliance because it does not raise suspicions of manipulation. That is to say, because the ESP induction can be displayed independent from the compliance agent,

compliance targets will not be alerted to persuasive attempts. The suspicion of manipulation is a huge compliance preventing factor.

Marketing experts should bear in mind that expectancy violations attract attention and, thusly, subsequent contradictory information will be analyzed more thoroughly. In our era of product abundance, attention capture might be a decisive factor for purchase. The same logic might benefit social campaigns or safety information. Everyday, we are bombarded with millions of messages, many of which pass unnoticed. But one should remember that if an expectancy violating road sign is put up in order to mark a dangerous passage on the street, this intervention might divert the drivers' attention from the street itself. Extreme caution must be taken to ensure that safety related expectancy violations are not to be used when attention capture might be harmful.

The second interesting aspect of expectancy violations is that they reduce resistance through attention reallocation, as observed after the ESP. Resistance reduction is seen during hypnotic induction. The *Eriksonian Confusion Technique* (Erickson, Rossi, & Rossi, 1976) is rooted in the observation that hypnosis clients, like influence situation targets, display an approach-avoidance tendency towards the act of hypnosis. Most of the clients want to undergo hypnosis, but are also afraid of it. This aroused fear inhibits induction of a hypnotic state. Erickson confuses his clients by using ambiguous words, complex sentences, or interruptions of patterns by introducing unexpected or confusing elements (similar to common expectancy violations, like not shaking the client's hand, or shaking it very long) in order to divert attention from resistance. The resistance inhibition brought about by expectancy violations might be also applicable in other domains, for example, in therapeutic processes where resistance or fear of change inhibits other beneficial psychological processes.

4.4 Conclusion

In general the research presented in this dissertation highlights the significant role of expectancies in our everyday lives. Expectancies guide our attention and behavior, and even bias our perception towards expectancy consistent interpretations of information. The importance of

these expectancies are easily seen when they are violated. Immediately following a violation, at least for our cognition, the world ceases to exist and only the violation becomes worth our perceptual system's full attention. While this is not inherently harmful, problems arise from this phenomenon when marketing specialists and fund raisers exploit our distorted minds. And life itself may become more dangerous when not attended to properly.

In this dissertation we showed that the Emotional Seesaw Phenomenon, one of many known Social Influence Techniques, induces through its expectancy violating structure and consequently the need of information upgrade, a moment of attentional distortion. This attentional distortion- a kind of cognitive load- fosters a shallower processing of information, which leads to complaint behavior, in the presence of compliance promoting peripheral cues. Thus, in this regard the ESP is not unique, but similar to other SITs using the same mechanism. However, we should also be aware of the comforts presented by our findings, which also show that being mindful, or more accepting towards new experiences, might thwart this occasionally harmful attentional absorption.

Finally, we admit that a life without expectancies seems impossible and should not even be a goal. But openness towards new information and the acceptance of the fact that not everything in life follows a pre-learned pattern might be beneficial not only for our physiological and psychological health, but sometimes also for our wallets. We advocate that in the acceptance of Professor Ellen Langer's advice, "*finding peace in the uncertainty of daily life*," harmful instances of mindless politeness may be prevented.

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Appendix A: Questions used in Experiments 1, 5 and 6.

Difficult questions (schwere Fragen):

1. Unter welchem Staatsmann erreichte das römische Reich seine größte Ausdehnung? (c)
   a. Tiberius
   b. Nero
   c. Trajan
   d. Cäsar

2. In welchem Land steht der Hadrianswall? (b)
   a. Frankreich
   b. Großbritannien
   c. Norwegen
   d. Belgien

3. Wie viele Knochen hat ein Mensch (a)
   a. 206
   b. 226
   c. 246
   d. 256

4. Welches Metall ist in Messing enthalten? (a)
   a. Zink
   b. Zinn
   c. Gold
   d. Kobalt

5. Welcher ist der größte mittelamerikanische Staat? (d)
   a. Guatemala
   b. Honduras
   c. Panama
   d. Nicaragua

Easy questions (leichte Fragen):

1. Welches Land ist für seine Tulpenzucht bekannt? (c)
   a. Frankreich
   b. Polen
   c. Holland
   d. Schweden

2. Welche Tiere haben Facettenaugen? (b)
    a. Fische
    b. Insekten
    c. Säugetiere
    d. Vögel

3. Welcher Planet unseres Sonnensystems ist von einem Ring umgeben? (d)
    a. Pluto
    b. Erde
    c. Mars
    d. Saturn

4. Wodurch werden Säuren neutralisiert (c)
    a. Wasser
    b. Salz
    c. Basen
    d. Öl

5. Kastagnetten sind?(c)
    a. Ein indisches Gewürz
    b. Ein italienischer Nachtisch
    c. Ein spanisches Rhythmusinstrument
    d. Ein französischer Wein

Appendix B: Information Recall questionnaire (Experiments 1-4)

Friedrich-
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Fragebogen

Vielen Dank für die Teilnahme an unserem Experiment!

Die Teilnahme an dieser Untersuchung ist vollkommen freiwillig. Die Auswertung erfolgt anonym und keine der von Ihnen gegebenen Antworten kann mit Ihnen in Verbindung gebracht werden. Die von uns erhobenen Daten werden ausschließlich für Forschungszwecke verwendet.

Bitte nehmen Sie sich ausreichend Zeit, lesen Sie die Fragen sorgfältig und antworten Sie ausschließlich gemäß Ihrer eigenen Erinnerungen. Raten Sie bitte nicht, falls Sie sich an etwas nicht erinnern können kreuzen Sie die Option „ weiß nicht“ an. Das Ausfüllen des Fragebogens dauert lediglich ca. 3 Minuten.

Angaben zur Person:

Alter: _____

Geschlecht: ◯ männlich ◯ weiblich

Höchster Bildungsabschluss: ◯ keinen Schulabschluss ◯ Haupt-/Realschulabschluss ◯ Abitur
◯ abgeschlossenes Studium ◯ abgeschlossene Ausbildung

Nach Beendigung des ersten Teils des Experimentes im Experimentalraum 1 und auf dem Weg in den hierher, wurden Sie von einer Person gebeten eine Petition zu unterschreiben. Versuchen Sie sich an diese Situation zu erinnern.

Petition

Haben Sie die Petition unterschrieben? ◯ ja ◯nein

Wenn „nein“, wieso nicht?

_____
_____

Was war das Hauptanliegen der Petition?

◯ Fahrradwege ◯ öffentliche Verkehrsmittel ◯ Mensaessen ◯ Semesterbeitrag ◯ weiß nicht

Was wollte die Petition erreichen? _____

_____

◯ weiß nicht

Person

War die Person die Sie angesprochen hat

◯ männlich ◯ weiblich ◯ weiß nicht

Welche Frisur hatte der Petitionsleiter?

Haarlänge:

◯ lang ◯ mittel ◯ kurz ◯ weiß nicht

Haarfarbe:

◯ schwarz ◯ braun ◯ blond ◯ rot ◯ weiß nicht

Farbe der Oberkörperbekleidung:

◯ schwarz ◯ weiß ◯ blau ◯ rot ◯ weiß nicht

Art der Unterbekleidung:

◯ lange Hose ◯ kurze Hose ◯ Rock ◯ Kleid ◯ weiß nicht

Andere Merkmale

Brille:	◯ ja	◯ nein	◯ weiß nicht
Gesichtspeercing:	◯ ja	◯ nein	◯ weiß nicht
Bart:	◯ ja	◯ nein	◯ weiß nicht
Sichtbares Tattoo:	◯ ja	◯ nein	◯ weiß nicht

Haben Sie die Person bzw. das Unterschreiben der Petition als Teil des Experiments wahrgenommen?

◯ ja ◯ nein

Um was, Ihrer Meinung nach, geht es in dieser Untersuchung?

_____

◯ weiß nicht

Appendix C: Cognitively demanding text (Experiment 3)

70 Jahre ohne Nahrung, Ärzte knöpfen sich angeblichen Wunder-Yogi vor.

Ist er ein Wunder oder doch bloß ein Scharlatan? Der 83-jährige Yogi Prahlad Jani aus Indien behauptet, seit über 70 Jahren nichts mehr gegessen und getrunken zu haben - dank Meditation und göttlichem Segen. Indische Ärzte wollen den rätselhaften Yogi nun untersuchen. Es ist nicht das erste Mal.

Ahmedabad - Ein extrem asketisch lebender Hindu ist aufgrund seiner Fähigkeiten nun zum wiederholten Male Studienobjekt indischer Ärzte geworden. Der 83-jährige Yogi Prahlad Jani behauptet, seit mehr als 70 Jahren weder Nahrung noch Wasser zu sich genommen zu haben. Jetzt liegt Jani in einem Krankenhaus im westindischen Ahmedabad.

Der Yogi ist aber nicht etwa krank, er unterzieht sich dort lediglich einer Reihe von medizinischen Tests. Offenbar wollen Experten nun endlich die Wahrheit über das biologische Wunder ans Licht bringen. Dabei werde der Yogi rund um die Uhr beobachtet, sagte der Direktor des Defence Institute of Physiology & Allied Sciences des nationalen Verteidigungsinstituts, Govindasamy Ilavazhagan, am Mittwoch.

Zudem erhofften sich die Forscher von der Untersuchung des Asketen, Hilfe bei der Ausarbeitung von "Überlebensstrategien bei Naturkatastrophen, unter extremen Stressbedingungen oder bei Raumfahrtmissionen auf den Mond oder den Mars", sagte Ilavazhagan. Unter anderem planen die Mediziner, Janis Körper durch einen Scanner zu schieben, sein Gehirn und seine Herztätigkeit zu untersuchen und sein Blut zu testen. Der bärtige Hindu wurde den Angaben zufolge bereits vergangenen Donnerstag eingeliefert. Seitdem habe er keinen Tropfen Wasser getrunken, nichts gegessen und sei nicht zur Toilette gegangen, sagte Ilavazhagan.

Angeblicher Wunder-Yogi: 70 Jahre Nulldiät?

Interessant sei unter anderem die Frage, woher Jani seine Energie gewinne. Der Yogi selbst habe angegeben, aus Meditation Kraft zu schöpfen. Zudem habe ihn eine Gottheit gesegnet, als er acht Jahre alt gewesen sei. Seitdem brauche er nichts mehr zu essen. Die Ergebnisse der umfangreichen Untersuchungen werden in zwei Monaten erwartet.

Bereits 2003 medizinisch untersucht:

Bereits im Jahr 2003 sorgte der Yogi für Aufsehen und Berichte in der Presse. Damals schon verbrachte er zehn Tage lang in einem indischen Krankenhaus, unter ständiger Videobeobachtung nahm er weder Nahrung noch Flüssigkeit zu sich. Wie die BBC berichtete, durfte Jani lediglich 100 Milliliter Wasser zum Ausspülen seines Mundes benutzen, welches er anschließend wieder ausspuckte. Die Ärzte konnten anschließend keine Verschlechterung seines Zustands feststellen. Seine medizinischen Testergebnisse waren normal. Jani hatte jedoch damals während des Versuchs leicht an Gewicht verloren.

Damals hieß es, Jani ernähre sich seit seinem achten Lebensjahr von aus einem Loch im Gaumen strömender Flüssigkeit, die Nahrungs- und Flüssigkeitsaufnahme ersetze. Die Ärzte hätten den Austritt von Flüssigkeit aus einem Gaumenloch bestätigt, diese aber nicht analysieren können, hieß es. Die genauen Ergebnisse des Versuchs von 2003 wurden offenbar nicht bekannt, wie Esowatch berichtet. Die Vereinigung Indian Rationalist International bezeichnet Jani als "Dorfscharlatan".

Während normalgewichtige Menschen nach Expertenschätzungen im Extremfall bis zu rund 60 Tage ohne Nahrung überleben können - Flüssigkeitsaufnahme vorausgesetzt -, führt Flüssigkeitsentzug - abhängig von den Umweltbedingungen - schon nach wenigen Tagen zum Tod.

Quelle: www.spiegel.online.de

Appendix D: Cognitively undemanding text (Experiment 3)

Gesunde Ernährung: Basis für ein gesundes Leben

Nur wer sich ausgewogen ernährt, bleibt langfristig gesund, beweglich und geistig fit

"Du bist, was Du isst", heißt es im Volksmund. Wer sich für gesunde Ernährung interessiert und einen sinnvollen Ernährungsplan aufstellen möchte, hat es manchmal schwer, sich zu entscheiden. Ein schier unüberschaubares Angebot in den Geschäften verwirrt den Verbraucher ebenso wie die ständig neuen Lebensmittel, Mineralwasser und Nahrungsergänzungsmittel, für die intensiv Werbung gemacht wird. Hinzu kommen Berichte über Gammelfleisch und andere Lebensmittelskandale.

Geschmäcker sind verschieden

Kinder mögen andere Speisen als Erwachsene. Ältere Menschen haben einen anderen Energiebedarf als junge Menschen, die körperlich arbeiten oder viel Sport treiben. Wer abnehmen möchte oder Diabetiker ist, muss andere Regeln beachten als ein Mensch, der Untergewicht hat. Und nicht jeder möchte vegetarisch leben und künftig nur noch im Bioladen einkaufen.

Dem Stand der Ernährungswissenschaft entsprechen die Empfehlungen der Deutschen Gesellschaft für Ernährung e.V. (DGE) in Bonn, die eine dreidimensionale Lebensmittelpyramide entworfen hat. Dieses Modell basiert auf fundierten wissenschaftlichen Erkenntnissen und berücksichtigt unter anderem die zehn Regeln der DGE für die Zufuhr von Nährstoffen. Das Modell wurde in enger Zusammenarbeit mit Vertretern des aid infodienst, dem Bundesverbraucherministerium sowie Wissenschaftlern und Experten aus der Praxis entwickelt.

Ernährungsphysiologisch sinnvolle Lebensmittel

Die Ernährungspyramide zeigt, welche Lebensmittel als ernährungsphysiologisch empfehlenswert eingeordnet werden wie etwa Obst, Gemüse, Fisch, fettarme Milchprodukte, fettarmes Fleisch, Rapsöl, Trink- und Mineralwasser. Als weniger wertvoll gelten unter anderem Engerydrinks, Limonaden, Süßigkeiten, Schmalz, Butter, Eier oder fettreiche Fleischwaren. Diese Lebensmittel sollten laut DGE nur in Maßen verzehrt werden.

Wie in vielen anderen Lebensbereichen gilt es auch bei der Ernährung, das rechte Maß zu finden - passend zum jeweiligen Alter, Energiebedarf und Gesundheitszustand. Denn mit einer sinnvoll zusammengestellten Ernährung (mit oder auch ohne Kalorientabelle) kann das Wunschgewicht erreicht und langfristig gehalten werden. Zudem lassen sich so Krankheiten verhindern und Krankheitsabläufe unter Umständen positiv beeinflussen.

Quelle: www.apotheken-umschau.de/Ernaehrung

Appendix E: Information Recall questionnaire (Experiment 6)

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Fragebogen

Vielen Dank für die Teilnahme an unserem Experiment!

Die Teilnahme an dieser Untersuchung ist vollkommen freiwillig. Die Auswertung erfolgt anonym und keine der von Ihnen gegebenen Antworten kann mit Ihnen in Verbindung gebracht werden. Die von uns erhobenen Daten werden ausschließlich für Forschungszwecke verwendet.

Bitte nehmen Sie sich ausreichend Zeit, lesen Sie die Fragen sorgfältig und antworten Sie ausschließlich gemäß Ihrer eigenen Erinnerungen. Raten Sie bitte nicht, falls Sie sich an etwas nicht erinnern können kreuzen Sie die Option „ weiß nicht“ an. Das Ausfüllen des Fragebogens dauert lediglich ca. 3 Minuten

---

Angaben zur Person:

Alter: _____

Geschlecht: O männlich O weiblich

Höchster Bildungsabschluss: O keinen Schulabschluss O Haupt-/Realschulabschluss O Abitur

O abgeschlossenes Studium O abgeschlossene Ausbildung

Nach Beendigung des ersten Teils des Experimentes im Experimentalraum 1 und auf dem Weg hierher, wurden Sie von einer Person gebeten eine Petition zu unterschreiben. Versuchen Sie sich an diese Situation zu erinnern.

Petition

Haben Sie die Petition unterschrieben? O ja O nein

Wenn „nein“, wieso nicht?

_____

_____

Was war das Hauptanliegen der Petition?

O Fahrradwege O öffentliche Verkehrsmittel O Mensaessen O Semesterbeitrag O weiß nicht

Was wollte die Petition erreichen? _____

_____

O weiß nicht

Person

War die Person, die Sie angesprochen hat

O männlich O weiblich O weiß nicht

Welche Frisur hatte diese Person?

Haarlänge:

O lang O glatzköpfig O mittel O kurz O weiß nicht

Haarfarbe:

O schwarz O braun O blond O rot O weiß nicht

Art der Oberkörperbekleidung 1:

O Jackett O Jacke O Mantel O Pullover O weiß nicht

Farbe der Oberkörperbekleidung 1:

O schwarz O braun O blau O grau O weiß nicht

Art der Oberkörperbekleidung 2:

O Bluse O Hemd O Sweatshirt O T-Shirt O weiß nicht

Art der Unterbekleidung:

O lange Hose O kurze Hose O Rock O Jeans O weiß nicht

Weitere Merkmale

Brille:	O **ja**	O **nein**	O **weiß nicht**
Gesichtspeercing:	O **ja**	O **nein**	O **weiß nicht**
Bart:	O **ja**	O **nein**	O **weiß nicht**
Sichtbares Tattoo:	O **ja**	O **nein**	O **weiß nicht**
Krawatte:	O **ja**	O **nein**	O **weiß nicht**
Fliege:	O **ja**	O **nein**	O **weiß nicht**
Halskette:	O **ja**	O **nein**	O **weiß nicht**
Ehering:	O **ja**	O **nein**	O **weiß nicht**

Haben Sie die Person bzw. das Unterschreiben der Petition als Teil des Experiments wahrgenommen?

O **ja** O **nein**

Um was, Ihrer Meinung nach, geht es in dieser Untersuchung?

_____

O **weiß nicht**

Appendix F: Appearance of Petitionist in Experiments 5 and 6

Male Petitionist Experiment 5	Male Petitionist Experiment 6

Summary of Findings

"Mindlessly polite"

Cognitive Busyness Reduces Compliance Resistance In Social Influence Settings

The primary purpose of the present research is to investigate the process that unfolds after an Emotional Seesaw Phenomenon (ESP). The ESP is a relatively new Social Influence Technique that is defined as a situation, in which a person experiences a certain emotion, but where the external stimulus that evoked and upheld the emotion suddenly disappears (Dolinski; 2001). Previous research on the ESP indicated that the fostered affective shift (negative to positive or vice versa) promotes a temporary state of mindlessness, leaving the individual momentarily vulnerable to requests (Dolinski & Nawrat, 1998; Dolinski, et. al., 2002). Despite extensive previous research, the underlying automaticity-evoking processes couldn't be elucidated so far. Therefore the present dissertation is designed to further analyze the ESP, its consequences and underlying mechanism. We suggest that (a) it is not the affective shift per se, but its expectancy-violating structure that promotes the effect, (b) the expectancy violation itself provokes the allocation of attention to the inside, which consumes cognitive resources (cognitive busyness), and (c) that this induced cognitive busyness alters compliance susceptibility through the use of heuristic principles and the reduction of resistance towards compliance itself. Finally (d) dispositional mindfulness plays a significant role in the vulnerability to this particular social influence technique.

In the introductory Chapter (Chapter 1) a broader overview of theoretical concepts of persuasion and social influence in general as well as the ESP in specific is presented, providing the basic reasoning and theoretical foundation for the research presented in this dissertation.

Chapter 2 focuses on the internal process that takes place when people are being confronted with an ESP. The present research approaches this question from a cognitive-load perspective. Specifically, we suggest that the key feature of this influence technique is load-induced mindlessness, provoked by the inconsistency of the situation that hinders the allocation of cognitive resources to the outside world. To test these assumptions five experiments were

conducted. The first experiment extends previous findings by using a new ESP induction technique based on an expectancy-violating structure. The second experiment challenges the notion that an emotional shift is a necessary precondition for the observed consequences, by inducing an expectancy violation with low affective involvement. Experiments 3 and 4 are designed to test whether inner focus (induced through cognitive busyness [Ex. 3] or cognitive load [Ex.4]) – a hypothesized consequence of the ESP – can induce the same pattern of results as evidenced in Experiments 1 and 2. Dispositional mindfulness is assessed as an intervening variable. Experiment 5 integrates the procedure from Experiment 1 with the measures used in Experiments 3 and 4 to show that the ESP promotes inner focus and thereby inclination toward compliant responses.

Taken together, we found that participants in the experimental groups displayed impaired message processing (Exp.1-3, 5) and a higher inclination towards compliant behavior (Exp. 1, 3-5), as well as less information recall (Exp.1-5). This was the case not only for the withdrawal of negative and positive emotions in emotional seesaw groups (Exp. 1 and 5), but also for expectancy violations with low affective involvement (Exp. 2), providing support to the hypothesis that it is the belief-inconsistent structure of the ESP that plays the key role in this phenomenon. The results of Experiments 3 and 4 revealed, as hypothesized, that similar consequences as those after the ESP are observed if participants that are relatively low in dispositional mindfulness, choose an inner-focused state (Exp.3), and if participants are forced into an inner-focused state (Exp. 4), disregarding their level of dispositional mindfulness. Furthermore Exp. 5 reveals not only that the ESP fosters an internal focus that results in a higher susceptibility to compliant behavior, but also that participants' emotional status after an ESP does not change from pre to post measure.

The general discussion elaborates on the implication of these findings for the understanding of expectancy violation theory as well as the roles of affect and dispositional mindfulness in relation to the ESP. Furthermore limitations and future directions are discussed and a new revised theory of ESP is provided.

In Chapter 3 an experiment is discussed that focuses on a possible way to disrupt the ESPs effect on compliance. The aim of the experiment was to shift the focus from the ESP and its expectancy violating structure – as a mindlessness induction technique – to a possible

mindlessness reduction based on the same expectancy violating principle. We hypothesized that expectancy violating stimuli in form of a context-situation misfit connected to the persuasive attempt might redirect the attention from the ESP (inner focus) to the persuasive message itself, thus leading to a decrease in heuristic based compliance. The current study however does not provide certainty on the role of the expectancy violation as an automatic processing inhibiting factor. The results indicate that mindless processing was still present, this time making automatic decision rules salient in different ways for men and women. Furthermore the results indicate that the expectancy violation might be sensory specific. This means, that if the expectancy violation is visual in nature the attention will be directed only toward its visual aspect.

Chapter 4 shortly outlines the rationale behind this dissertation and the experiments and summarizes the empirical findings of both empirical chapters. Furthermore theoretical and practical implications as well as possible limitations and future directions are discussed. Based on our findings, we generally conclude, that the attentional engagement after an expectancy violation leads to automatic processing because of an overengagement of working memory (cognitive busyness), thereby diverting our mind from resistance and fostering heuristic based compliance, when compliance promoting cues are present. Thus, in this regard we believe that the ESP is not unique, but comparable to other Social Influence Techniques that base their effectiveness on a similar working mechanism.

Zusammenfassung der Ergebnisse

„Unachtsam freundlich“

Kognitive Belastung vermindert Resistenz gegenüber Nachgiebigkeit in Situationen des sozialen Einflusses.

Die vorliegende Arbeit befasst sich mit den Prozessen die der Emotionalen Wippe (Emotional Seesaw Phenomenon) zu Grunde liegen. Die Emotionale Wippe (EW) ist eine relativ neue Technik des sozialen Einflusses und wird als eine Situation definiert, in der eine Emotion hervorgerufen wird (z.B. Angst), der externe, emotionshervorrufende und aufrechterhaltende Stimulus jedoch plötzlich entschwindet (Dolinski, 2001). Dies hat meistens einen affektiven Umschwung zur Folge (z.B. Erleichterung). Vorangehende Forschung hat gezeigt, dass die so hervorgerufene EW (von negativ zu positiv, oder vice versa) einen temporären Zustand von Unachtsamkeit (mindlessness) auslöst, welcher eine erhöhte Nachgiebigkeit (compliance) gegenüber Bitten und Aufforderungen nach sich zieht (Dolinski & Nawrat, 1998; Dolinski et al., 2002). Trotz umfangreicher Forschung zu diesem Thema, konnte der Unachtsamkeit auslösende Mechanismus noch nicht geklärt werden. Deshalb wurden die nachfolgenden Studien so konzipiert, um die EW selbst, den zugrundeliegenden Mechanismus, sowie weitere Konsequenzen dieses affektiven Umschwungs zu beleuchten. In dieser Dissertation behaupten wir, dass (a) der Effekt nicht durch den affektiven Umschwung selbst, sondern durch seine erwartungsverletzende Struktur ausgelöst wird, (b) die Erwartungsverletzung eine Aufmerksamkeitsumleitung nach innen bewirkt, welche einen großen Anteil der dem Individuum zur Verfügung stehenden kognitiven Ressourcen beansprucht (kognitive Belastung), und (c) diese so entstandene kognitive Belastung Nachgiebigkeit gegenüber Bitten erhöht, indem sie die Nutzung von Fügsamkeit fördernden Urteilsheuristiken verstärkt und den Widerstand gegenüber Nachgiebigkeit vermindert. Außerdem führen wir an, dass (d) erhöhte Achtsamkeit als Disposition eine wichtige Rolle in der Vulnerabilität gegenüber dieser Technik spielt.

Das einleitende Kapitel (Kapitel 1) befasst sich vorwiegend mit allgemeinen theoretischen Konzepten zum Thema Persuasion und sozialem Einfluss und geht im Detail auf den aktuellen Forschungsstand zum Thema Emotionale Wippe ein. In diesem Kapitel setzen wir uns außerdem

sowohl mit den Gründen als auch den theoretischen Grundlagen für die in der Dissertation angestrebte Forschung auseinander.

Der Schwerpunkt des zweiten Kapitels liegt vor allem auf der empirischen Untersuchung der durch die Emotionale Wippe hervorgerufenen intrapersonellen Prozesse. Unser Forschungsansatz befasst sich mit dieser Frage aus der Sicht der Theorie kognitiver Belastung und der damit verbundenen gehemmten Informationsverarbeitungsprozesse. Im Detail schlagen wir vor, dass der Wirkmechanismus dieser Technik des sozialen Einflusses auf der durch Auslastung des Arbeitsgedächtnisses hervorgerufenen Unachtsamkeit beruht. Wir behaupten, dass die wahrgenommene Inkonsistenz zwischen Erwartung und Realität und die damit verbundene Aufmerksamkeitsabsorption die uneingeschränkte Verarbeitung von auswertigen Reizen hemmt. Diese Behauptungen werden durch fünf Experimente gestützt.

Das erste Experiment repliziert und erweitert bisherige Befunde, indem es sich einer neuartigen Induktion der EW bedient, die auf einer erwartungsverletzenden Struktur basiert. Das zweite Experiment hinterfragt die Behauptung, dass der affektive Umschwung eine erforderliche Voraussetzung für das Eintreten der EW-typischen Konsequenzen ist. Dies geschieht abermals unter der Verwendung einer erwartungsinkonsistenten Struktur, mit dem Unterschied, dass diese wahrgenommene Inkonsistenz in diesem Fall von geringer persönlicher Bedeutung ist und somit nur eine minimale affektive Reaktion zur Folge hatte. Experimente 3 und 4 wurden konzipiert, um zu testen, ob eine gezielt induzierte, nach innen gerichtete Aufmerksamkeit (durch kognitive Beschäftigung [Experiment 3] bzw. kognitive Belastung [Experiment 4])] – der Vermutete Wirkmechanismus der EW – ein ähnliches Ergebnismuster wie in den Experimenten 1 und 2 hervorrufen kann. Dispositionelle Achtsamkeit wurde darüber hinaus als möglicher, den Einfluss moderierender Faktor erhoben. Abschließend integriert das fünfte Experiment die EW-Induktion aus Experiment 1 mit den in den Experimenten 3 und 4 verwendeten Maßen, um zu zeigen, dass die EW eine Aufmerksamkeitsverschiebung nach innen fördert und dadurch nachgiebiges Verhalten begünstigt.

Als Ganzes betrachtet legen die Ergebnisse der Experimente dar, dass Personen, die eine EW durchlaufen eine eingeschränkte Informationsverarbeitung (Experimente 1, 2, 3 & 5) als auch eine erhöhte Neigung, sich nachgiebig gegenüber einer sinnfreien Bitte zu verhalten, (Experimente 1, 3, 4 & 5) aufweisen. Zudem wurde eine verminderte Erinnerungsleistung in

Bezug auf das „Anfrageszenario“ festgestellt. Nicht nur die Rücknahme einer negativen und einer positiven Emotion in den EW-Bedingungen (Experimente 1 und 5) führte zu den beschriebenen Ergebnissen, sondern auch die auf einer kognitiven Erwartungsverletzung basierende Manipulation mit niedriger emotionaler Involviertheit (Experiment2) lieferte ähnliche Befunde. Dies unterstützt abermals die Behauptung, dass es vor allem die erwartungsinkonsistente Struktur ist, die diesem Phänomenon zu Grunde liegt. Die Ergebnisse aus den Experimenten 3 und 4 bestätigen die Annahme, dass EW-ähnliche Konsequenzen beobachtbar sind, wenn Teilnehmer mit einer niedrigen bis moderaten Ausprägung dispositioneller Achtsamkeit die Aufmerksamkeitsausrichtung nach innen wählen (Experiment 3) oder der nach innen gerichtete Fokus bei allen Teilnehmern gleichermaßen durch die Anforderungen des Experiments erzwungen wird (Experiment 4). Weiterhin macht Experiment 5 abschließend deutlich, dass die EW nicht nur eine Verschiebung der Aufmerksamkeit nach innen bewirkt, was eine erhöhte Nachgiebigkeit mit sich zieht, sondern auch dass die Teilnehmer des Experiments keine Veränderung in ihrem emotionalen Befinden von der Prä-EW- zur Post- EW-Messung aufwiesen.

In der abschließenden Diskussion werden die Implikationen der Ergebnisse für theoretische Konzepte der Erwartungs-Verletzungs-Theorie (Expectancy-Violation-Theory), der Rolle des Affektes und der dispositionellen Achtsamkeit für die EW-Theorie erörtert. Weiterhin werden Einschränkungen der Experimente als auch Ansatzpunkte für weitere Forschungsmöglichkeiten besprochen. Darüber hinaus wird ein neues, auf den Grundlagen unserer Forschung basierendes überarbeitetes Konzept der EW angeführt.

Kapitel 3 befasst sich mit möglichen Faktoren die den Einfluss der EW auf erhöhte Nachgiebigkeit verhindern. Das Ziel des in diesem Kapitel vorgestellten Experiments war es, den Fokus von der EW und seiner aufmerksamkeitsabsorbierenden Eigenschaft auf eine mögliche Aufmerksamkeitsreallokation zu lenken, die auf dem gleichen Wirkprinzip beruht. Dabei stellten wir die Hypothese auf, dass ein erwartungsverletzender Stimulus in Form einer inadäquaten Situation/Kontext-Paarung zur Umlenkung der Aufmerksamkeit von der EW („innerer Fokus“) auf die sinnfreie Anfrage selbst führen würde, welches dann eine Verminderung der Nachgiebigkeit gegenüber der Aufforderung zur Folge haben sollte. Diese Behauptung konnte jedoch nicht mit Sicherheit nachgewiesen werden. Die Ergebnisse deuten darauf hin, dass die durch die EW hervorgerufene Unachtsamkeit während der Petition noch anwesend war und diesmal heuristische Entscheidungsregeln für Männer und Frauen verschieden salient machte.

Außerdem lassen die Ergebnisse vermuten, dass ein erwartungsinadäquater Stimulus eine sensorisch spezifische Verarbeitung hervorruft. Das heißt, dass wenn der inadäquate Stimulus visueller Natur ist, die Aufmerksamkeit vor allem auf damit verbundene visuelle Reize gerichtet wird.

Das abschließende Kapitel 4 fasst kurz das Rational für diese Dissertation als auch die Ergebnisse der beiden empirischen Kapitel zusammen. Des Weiteren werden deren theoretische und praktische Implikationen aufgeführt sowie mögliche Einschränkungen und weiterführende Forschungsfragen erörtert. Basierend auf unseren Ergebnissen kann man zusammenfassend sagen, dass die Aufmerksamkeitsfokussierung nach innen und die dadurch verursachte kognitive Belastung als Folge einer erwartungsverletzenden Situation zu automatischer (unachtsamer) Informationsverarbeitung führt. Dies führt anschließend zu einer Verringerung der Resistenz gegenüber Nachgiebigkeit sowie zu einer Steigerung des Gebrauchs heuristischer Kriterien zur Entscheidungsfindung. Daraus folgt erhöhte Nachgiebigkeit gegenüber Bitten und Aufforderungen in Anwesenheit Nachgiebigkeit fördernder peripherer Stimuli. Daher glauben wir, dass die EW in Ihrem Wirkprinzip keine Ausnahme ist, sondern auf ähnlichen Prinzipien beruht wie andere Techniken des sozialen Einflusses.

Wissenschaftlicher Werdegang

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Ehrenwörtliche Erklärung

Hiermit erkläre ich, dass mir die Promotionsordnung der Fakultät für Sozial- und Verhaltenswissenschaften an der Friedrich- Schiller- Universität Jena bekannt ist.

Weiterhin erkläre ich, dass ich die vorliegende Dissertation selbst und ohne unzulässige Hilfe Dritter angefertigt habe. Keine weiteren Personen waren bei der Auswahl und Auswertung des Materials beteiligt. Alle benutzten Hilfsmittel und Quellen sind in der Arbeit angegeben.

Ich habe weder die Hilfe eines Promotionsberaters in Anspruch genommen, noch haben Dritte unmittelbar oder mittelbare geldwerte Leistungen von mir für Arbeiten erhalten, die im Zusammenhang mit dem Inhalt der Dissertation stehen.

Die Arbeit wurde weder im In- noch im Ausland in gleicher oder ähnlicher Form einer anderen Prüfungsbehörde vorgelegt. Ich habe weder früher noch gegenwärtig an einer anderen Hochschule eine Dissertation eingereicht.

Ich versichere, dass ich nach bestem Wissen und Gewissen die Wahrheit gesagt habe und nichts verschwiegen habe.

Jena, den 19.06.2014

Magdalena Kaczmarek