



# Online interventions in consumer conflicts

The effect of type of information on prosocial conflict behaviour



Master Thesis

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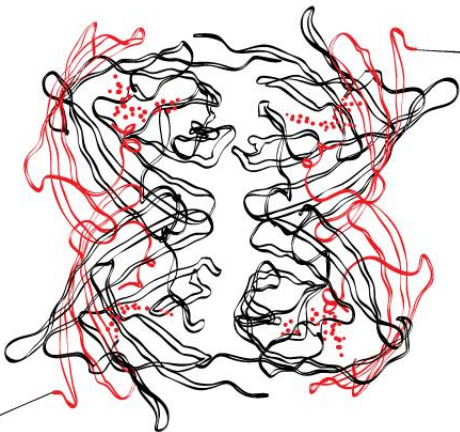
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## Samenvatting

Met de toename van aankopen via webshops neemt ook het aantal online consumentenconflicten toe. Mensen in een consumentenconflict zoeken vaak naar informatie en advies. Het doel van deze studie is de effecten te onderzoeken van legitimerende informatie versus social proof informatie op de mate van prosociaal gedrag. Het doel van prosociaal gedrag is namelijk het optimaliseren van uitkomsten voor zowel zichzelf als de wederpartij. Het onderzoek richt zich eveneens op de mediërende rol van positief affect in deze relatie. Bovendien komt het effect van asymmetrische afhankelijkheid aan bod als moderator van de relatie tussen positief affect en prosociaal gedrag.

Om dit te onderzoeken is een online experiment uitgevoerd met 197 participanten. Zij kochten een cadeaubon in de experimentele setting, waarbij een conflict ontstond doordat zij twee maal een ongeldige code ontvingen. Participanten ontvingen legitimerende informatie, dan wel sociaal proof informatie. Na het lezen van de informatie volgde interactie met de verkoper. Afhankelijkheidsasymmetrie werd gemanipuleerd door al dan niet de mogelijkheid te geven tot het schrijven van een publieke beoordeling over de verkoper. Doordat deze manipulatie niet slaagde in de studenten steekproef werden de analyses enkel uitgevoerd op de convenience steekproef.

Het huidige onderzoek voegt kennis toe aan bestaande literatuur over online consumentenconflicten. De resultaten impliceren dat social proof meer positief affect veroorzaakt dan legitimerende informatie. Positief affect kan prosociaal gedrag veroorzaken, mits er sprake is van weinig asymmetrische afhankelijkheid. Alhoewel participanten die meer positief affect rapporteerden ook meer negatief affect rapporteerden, was alleen positief affect gerelateerd aan actievere communicatie. Bovendien bleek het lezen van informatie, vergeleken met geen informatie lezen, participanten aan te zetten tot schrijven over anderen.

The mechanismen van social proof en legitimeren resulteerden eveneens in aanvullende kennis. Social proof, in tegenstelling tot legitimerende informatie veroorzaakte dat mensen zich minder alleen voelde staan, versterkte hun zelfvertrouwen, en maakte dat mensen zich gesteund en sterker voelden, wat in lijn is met eerdere bevindingen van Festinger (1954).

Er is meer onderzoek nodig om meer inzicht te krijgen in belevingen en gedrag binnen online consumentenconflicten. Een belangrijke vraag waar toekomstig onderzoek zich op kan richten is hoe verschillende typen van informatie mensen beïnvloeden en hoe prosociaal gedrag gestimuleerd kan worden. Het beantwoorden van deze vragen zou bijdragen aan de Nederlandse rechtshulp en hun doel om hun cliënten tot een bevredigende oplossing te leiden.

### Abstract

With the increasing usage of online webshops, online consumer conflicts also occur more often. People who experience this kind of conflict often look for information and advice. The purpose of this study is to investigate the effects of legitimizing information versus social proof information on the degree of prosocial behaviour. The goal of this prosocial behaviour is to maximise conflict outcomes for oneself as well as the opposing party. Moreover, positive affect is taken into account as a mediator of the effect of type of information on prosocial behaviour, and dependence asymmetry as a moderator of the relationship between positive affect and prosocial behaviour.

An online experiment was conducted with 197 participants buying a giftcard in the experimental setting. A conflict was staged by delivering a non-valid code twice. Dependence asymmetry was manipulated by either or not providing the possibility to write a public review of the seller. This manipulation did not succeed in the student sample, therefore analysis were conducted solely on the convenience sample. Participants received legitimizing information or social proof information. Next, they interacted with the seller.

In conclusion, the current research adds to existing knowledge in intrapersonal processes within online consumer conflicts. The results seem to indicate that social proof causes more positive affect than legitimizing information. This positive affect can cause prosocial behaviour, though only in case of low asymmetrical dependency. However participants who reported higher positive affect also reported more negative affect, only positive affect was related to more active communication behaviour. Furthermore, reading information, versus not reading information encouraged participants to write more about social others.

Moreover, the mechanisms of social proof and legitimizing differentiated on several aspects. Whereas social proof made participants feel less on their own in the conflict, legitimizing did not. Confidence was also strengthened by social proof. Furthermore, social proof seemed to make people feel supported and stronger, which is in line with Festinger (1954).

Further research on information processes within consumer conflicts is recommended, to provide more insight in experiences and behaviour in these situations. An important remaining question is how people could be influenced by different types of information and how prosocial behaviour can be stimulated. Answering these questions would provide important knowledge to Dutch legal aid to help both their clients and sellers to reach a satisfying solution.

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## 1. Theoretical Framework

People who experience legal problems often look for information and advice (Barendrecht, Kistemaker, Scholten, Schrader, & Wrzesinska, 2014). In the Netherlands, agencies such as the Legal Aid Board (Raad voor Rechtsbijstand), Legal Services Counters (Juridisch Loket), and Social Counsel (Sociale Raadsliden) provide knowledge to citizens, with the main aim of empowering them (Legal Aid Board, 2013).

A type of legal problem that often occurs is consumer conflict (Legal Aid Board, 2013). Consumer conflicts arise when people purchase products, and feel dissatisfied about the quality of the product or service. In 2012, for example, this type of conflict covered 17% of the problems of people turning to legal aid for help (Legal Aid Board, 2013). Increasingly, and following the strong rise in online purchases (Dinner, Van Heerde, & Neslin, 2014), consumer conflicts take place in an online environment. Also, if the contact with the retailer does not lead to a satisfying solution, people can explore possible solutions to their problem online.

Websites providing information concerning consumer conflict can be divided into two main categories. The first category consists of official websites of legal agencies, consumer advises websites and websites of public-service television programs about consumer issues. These websites offer mainly information about rights and duties concerning the conflict (Barendrecht et al., 2014). As such, they help the consumer build their case against the seller. The provision of this formal and objective information can be considered a form of *legitimizing* (Giebels, 2000).

A second type of information comes from similar others and is called *social proof* (Cialdini, 2001). Internet forums, review sites, as well as social media provide a platform where consumers exchange information about their experiences (Amblee, & Bui, 2011). Using social proof, consumers experiencing a conflict can learn about practice of peers and validate their view (Cialdini, 2001). The motivation to do so derives from a basic instinct to evaluate opinions (Festinger, 1954). Social proof information at these sites hence seemingly offer possibilities of dealing with the situation and associated outcomes.

These two different types of online resources are mostly designed to help consumers by providing information (Barendrecht et al., 2014) or by providing a platform to share experiences (Annett-Hitchcock & Xu, 2015). However, little research has been done on the effect of these types of information. One effect that has shown useful to analyse is the degree of prosocial behaviour displayed by conflict parties (De Dreu, Weingart, & Kwon, 2000).

Prosocial behaviour, as opposed to egoistic behaviour, contains cooperative behaviour, such as making and reciprocating concessions to/from the opponent, and trying to build a positive negotiation climate (De Dreu et al., 2000). This is related to taking a constructive position through problem solving (De Dreu et al., 2000), which is more likely to resolve in an agreement favourable to both conflict parties (Deutsch, 2006). Subsequently, prosocial behaviour induces positive outcomes to both parties within a conflict (De Dreu et al., 2000). Recent research also indicates that people are inclined to be less prosocial in online negotiations compared to face-to-face negotiations (Parlami and Geiger (2015). This increases the demand for researching the effect of types of online information on prosocial behaviour.

Thus, legal aid websites focus on legitimizing principles, while informal websites may be considered a form of social proof. In this empirical research on online consumer conflict, we examine the effects of these two different types of information (legitimizing and social proof) on prosocial conflict behaviour.

### **Impact of information**

Currently, legal websites offer primarily legal information on the content of the conflict, hereby focusing on rules and laws (Barendrecht et al., 2014). So, what laws are applicable to the situation, which rights does the consumer have, and how does this intervene in the situation at hand? This is referred to as legitimizing information (Giebels, 2000). It confirms the discrepancy between laws and rules on the one hand and the absence of complying on the other (Kelman, 2001). This is likely to increase feelings of unfairness (Pillutla, & Murnighan, 1996), and the degree to which consumers are egoistic and focused on personal gain (Forgas, 1998).

Generally, research in other domains has shown that legitimizing types of information might influence consumers' behaviour in conflict in several ways. Managers using this type of influence at work have appeared to be effective in changing behaviour of their subordinates, especially in individualistic cultures (Fu, & Yukl, 2000), such as the Netherlands. Subordinates likewise reported legitimizing to have the largest effect on behaving in accordance with their boss (Yukl, & Falbe, 1991). Yukl and Falbe (1991) had described this legitimizing form of influence 'downward power', which is especially based on the relation between manager and subordinate. Demanding, which fits in this kind of interaction (Yukl, & Falbe, 1991) could be labelled as being egoistic (De Dreu, Weingart, & Kwon, 2000). On the

contrary, using interpersonal relations to persuade subordinates' behaviour ('They also find this the best way to...') encourages just the opposite: lateral collaboration (Yukl, & Falbe, 1991).

On the other hand, on informal websites, such as forums on magazine or special interest sites, legal information has a strong social component, particularly aimed at comparing and exchanging information with (other) online users. That is, visitors may share information about previous experiences with sellers, and discuss actions to fight injustice and its effect. Similarly, others could provide an example of a successful claim towards a seller. This information arguably serves as social proof, which offers a point of reference to those reading it (Cialdini, 2001, Griskevicius et al., 2009, Tesser, Campbell, & Mickler, 1983; Wooten & Reed, 1998). As such, it might reflect a form of social support. Research seems to indicate that people in legal conflict experience a need for this social support (Van Dijk, Giebels, & Zebel, in preparation). Moreover, social proof appears to be persuasive to people who experience fear (Griskevicius et al., 2009), for example from the threat of the conflict.

Reading similar experiences serves a couple of important functions. First, it may signal that others have experienced something alike and as such validates one's views (Cialdini, 2001). Second, it may also offer insight in possible strategies (Festinger, 1954) and associated outcomes. That is, social proof might offer insight in feasible negotiation goals. This insight into options reduces uncertainty (Cialdini, 2001, p. 118), which is why this type of information is most influential, through experiencing uncertainty on how to act, and feeling similar to the person comparing with (Cialdini, 2001; Festinger, 1954; Tesser et al., 1983; Wooten & Reed, 1998). Subsequently, consumers may infer from these statements on how to behave, by following others' example (Festinger, 1954; Sundie, Cialdini, Griskevicius, & Kenrick, 2012).

### **Conflict behaviour**

In order to measure the effect of legitimizing and social proof, we focus on subsequent behaviour in the conflict. Meta-analysis has shown that the degree to which people are prosocial is likely to have positive effects on the ultimate conflict outcomes (De Dreu et al., 2000). These types of behaviour are visible in online contact between seller and consumer (Sundie et al., 2012), when the consumer gets in touch with the seller to communicate the experienced conflict. Generally, research has shown that people tend to be less prosocial in

online negotiating, compared to face-to-face negotiations (Parlami & Geiger, 2015). Therefore, attention to this type of behaviour is desirable.

**Prosocial versus egoistic behaviour.** While settling a conflict, parties try to rectify the experienced discord in various ways. One of the social balances to be found is on the scale from being prosocial to being egoistic (Sundie et al., 2012, p.4; De Dreu et al., 2000). Egoistic behaviour consists of posing threats, and demanding behaviour (De Dreu et al., 2000). The purpose of this behaviour is to maximize solely the outcomes for oneself. In contrast, behaving prosocial means exchanging information in a constructive manner and seeking to understand the perspective of the other (De Dreu et al., 2000). The goal of this latter behaviour is to maximise outcomes for oneself as well as outcomes for the opposing party (De Dreu et al., 2000). That motive arguably is paired with prosocial behaviour (Van Prooijen et al., 2008). Since added value of both parties probably is higher in the case of prosocial behaviour, this type of behaviour is desirable.

Although not many research has been conducted to the effect of social proof or legitimizing information on prosocial behaviour, more fundamentally research seems to indicate a relationship between social cues and prosocial behaviour (Kirschner, & Tomasello, 2010). These researchers found children who played music together to behave more cooperative and prosocial afterwards (Kirschner, & Tomasello, 2010). The feeling of not being alone, which social proof also incites (Cialdini, 2001), could possibly have the same effect in conflicts. Moreover, the opposite effect has been found: social exclusion, rather than being one of the group, leads to a decrease in prosocial behaviour (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007).

On the other hand, legitimizing information might discourage prosocial behaviour. The winning versus losing perspective provided presumably leads to a more competitive orientation. When trying to win a battle, people might be more focused on themselves, rather than on shared outcomes, and therefore behave more egoistically.

Hence, this leads to the following hypothesis:

H1: When consumers experience a conflict with a seller, social proof information leads to more prosocial behaviour towards the seller than legitimizing information.

### **Role of affect**

Within the field of consumer conflict feelings can hardly be denied. Research has shown in different ways how important they are in defining a conflict and its consequences (e.g.



Andersen & Guerrero, 1998; Baron, 1990; Van Kleef, 2004; Van Kleef, De Dreu, Pietroni, & Manstead, 2006). Fu and Yukl (2000) for example, emphasize that a negative affective reaction could undermine effectiveness of consequent behaviour. Furthermore, conflict is known to cause uncertainty, because of the inability to predict the future (Weary, Tobin, & Edwards, 2010).

Weary et al. (2010) have found more specifically that legitimizing information, especially when it does not improve the consumers' understanding of the situation, can cause negative affect. The lack of understanding causes uncertainty, which is paired with negative feelings such as fear. On the contrary, the previously described functions of social proof might enhance positive affect. Social proof might be supportive because it could make consumers feel understood (Van Dijk et al., in preparation), which is indicative of positive affect. Moreover, social proof might clarify the situation, since comparable other persons provide insight into possible strategies and feasible goals by sharing their experience (Cialdini, 2001). The insecure, or unfamiliar situation leads people to look for solutions outside themselves, and behaviour of others is then considered a desirable guidance (Cialdini, 2001). In addition, the information, as well as the source (comparable others), is specifically aimed at consumers, which empowers the position of the consumer (Van Dijk et al., in preparation). This increase in control over the conflict process (Van Dijk et al., in preparation) supposedly is related to positive affect as well.

Therefore, we hypothesize:

H2a: When consumers experience a conflict with a seller, social proof information increases positive affect more than legitimizing information.

When positive affect has been aroused, it influences conflict processes as well. Research has shown that, even if the affect is caused by something else than the opposing party, it influences people's behaviour (Andrade & Ho, 2007). People who noticed their opponent was angry were less likely to propose unfair offers, beneficial to themselves, while people who knew their opponent was happy proposed offers with more equal gains for both parties (Andrade & Ho, 2007). Furthermore, Carnevale and Isen (1986) found positive affect experienced by parties to increase strategies that enabled outcomes with joint benefit, while negative affect encouraged competitive processes. Similarly, Forgas (1998), as well as George and Brief (1992) described how positive feelings might evoke a prosocial and cooperative orientation towards others, and behaving accordingly.

This research leads us to the following hypothesis:

H2b: When consumers experience a conflict with a seller, positive affect induces prosocial behaviour.

Forgas (1998) clarifies the relationship between affect and behaviour by engaging cognitive processes. He states that positive affect causes more favourable expectations. Processing and using that information results in more cooperative behaviour (Forgas, 1998). Moreover, research has shown that conflict parties who experience positive affect are more likely to behave prosocial (e.g. Pillutla, & Murnighan, 1996).

Another line of research regarding affect in conflict concerns interpersonal influence of affect (Van Kleef et al., 2006). Emotions shown within a conflict convey information about people's feelings, which can be used as cue for a reaction (Van Kleef et al., 2006). As an example, conflict parties appeared to concede more to the opponent if they had shown anger, rather than happiness (Van Kleef et al., 2006).

These findings stress the importance of taking affect into account while researching the process of a consumer conflict, and they lead to the following hypothesis:

H2c: When consumers experience a conflict with a seller, positive affect mediates the relationship between the type of information and prosocial behaviour.

### **Dependency**

An important component of consumer conflict is the relationship between the consumer and the seller. In consumer-seller interaction, the consumer and seller can both choose to either walk away (the seller by putting his price up) or engage to make an agreement. However, once an agreement has been made, the consumer depends on the seller to deliver the (right) product, whereas the seller depends on the consumer for payment. This mutual dependence allows *power* to occur (De Dreu & Van Kleef, 2004): the ability, relative to the opposing party, to detain or facilitate resources and/or punishments, and hereby modify others' states (Keltner, Gruenfeld, & Anderson, 2003). Moreover, in online purchases, the consumer often pays before receiving the product. Therefore, he or she can be considered more dependent on the retailer to send the product, than vice versa. This is then referred to as dependence asymmetry (Van Dijk et al., in preparation).

An important aspect of dependence asymmetry in online consumer conflicts might be the medium itself. The use of modern communication channels may have an influence on the dependency. People visiting sites where they can exchange information, have the (social)

power to impair the reputation of their negotiation partner, of whom done wrong to them (Keltner et al., 2003). Consumers using this instrument of power arguably experience more power, and therefore less dependence asymmetry. Providing this kind of power created a less asymmetrical dependency condition in the current study.

The research of De Dreu and Van Kleef (2004) pointed out that power is one of the most important influencers of a conflict negotiation. In their experimental study, they found that relative to the negotiation partner, less power causes a stronger desire to please than does more power. Furthermore, Van Kleef and colleagues (2006) describe dependency as a moderator in affect influencing negotiation attitude. People with relative more power than their opposing conflict party are less influenced by the emotions of the opposing party, than parties who have less power. However, in their research affect meant the valence of the communication from the opposing negotiator. Therefore, in line with these findings, we hypothesize the same for the intrapersonal affect:

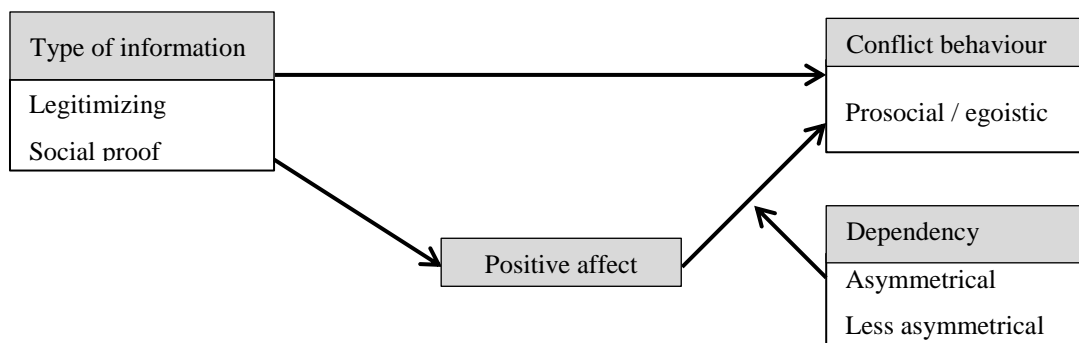
H3: When consumers experience a conflict with a seller, the relationship between positive affect and prosocial behaviour is stronger under high instead of low asymmetry.

**Current study**

By testing the hypotheses formulated, this research contributes to science as well as practice. A contribution to the theoretical field of conflict lies within examining the impact of social proof as an influencing mechanism in legal aid interventions. To legal practice, it will evaluate effects of their provision of information. Moreover, it might provide insight in possible improvements in the type of information, to favour legal aid’s efficiency.

Figure 1.

*Research model: Type of information influences the degree of prosocial conflict behaviour, a relation that is mediated by positive affect. The influence of positive affect on conflict behaviour is however moderated by dependency.*



## 2. Method

To test the hypotheses, an online experiment was developed and conducted with Dutch speaking participants<sup>1</sup>. Within the experimental setting, participants received currency to purchase an online gift card. The seller sent the gift card code, which participants had to check. Consequently, a conflict situation was created between the participant and the seller (preprogrammed) of the gift card, because the website declared the gift card code as being non-valid. Subsequently, participants received one of the conditions of help: legitimizing information, social proof information, or a no help in the control condition. Next, participants were in contact with the seller. Finally, questions were answered regarding the manipulation, positive affect, and demographic factors. All participants signed a digital informed consent prior to the experiment. The study was approved by the faculty's ethics committee.

### Procedure

Students of Twente University participated as part of their freshman and sophomore study obligation to take part in several studies. Furthermore, people were invited to join the experiment on several websites, such as social media (Facebook pages of the researchers, and several special interest groups), forums (FOK!forum, FCTwente.nl). Moreover, a diverse group of 163 acquaintances of the researchers, of various educational levels, and spread across the Netherlands, received an invitation per email. Through these channels, participants received an online link to the experiment, which was programmed in the web-based survey-software of Qualtrics. Participation took 25 minutes on average ( $M = 25.3$ ,  $SD = 22.48$ ).

Participants were told they were going to be part of a study on behaviour in online web shops. Consequently they were introduced to a webpage, in which the design was based on popular Dutch web shops (Wehkamp.nl, Marktplaats.com, and Bol.com). Participants were told that they would be either selling to or buying from another participant. In reality, all participants were purchasing from a pre-programmed seller. Participants received 50 *florijnen* (an experimental currency) to spend on one out of three presented gift cards. If they completed the study, they could win the chosen gift card in real life.

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<sup>1</sup> The current hypotheses were tested within the overarching PhD research of Marian van Dijk. Van Dijk's research model contained two more interventions of help; esteem support, and emotional help. These conditions were not included in the current study. Moreover, Van Dijk manipulated conflict asymmetry, which we will exclude.

Firstly, participants choose a seller and accompanying product. They received a message from the seller with a gift card-code, which they had to check. The website did not approve the code: Participants received an error message that the code was already used. They then either received a message from the seller, stating that he or she found it bothersome too, or stating that he or she did not experience a problem<sup>2</sup>. The message included a new code. This second code also appeared to be wrong. This staged the conflict. Participants could now send a message to the seller, which was saved and used in analysing the degree of prosocial behaviour. Participants received a response from the seller, stating that he/she could not send another code, since after all the participant had ‘only paid once’.

Secondly, participants could send a partly pre-programmed letter, in which they could choose sentences varying in degree of prosocial behaviour. While the seller had ‘time to respond’ participants filled out the manipulation check and items on affect.

Thirdly, sets of questions about previous experience with consumer conflicts, and demographic variables were to be answered.

Finally, participants were debriefed about the real purpose of the study. Moreover, they could leave their email address in order to receive the research rapport.

## Design

The design in this study was a 3 (type of information: legitimizing, social proof, and control) \* 2 (dependency: highly asymmetrical and less asymmetrical) between subjects design. The information conditions, as well as dependence asymmetry were independent variables, while affective state and prosocial behaviour were dependent variables. The hypothesis regarded differences between legitimizing and social proof. However, a control condition was added to analyse the effects of providing information in general.

Figure 2.

*3 \* 2 model: dependence asymmetry and type of information*

Dependency: High asymmetry Intervention: Legitimizing	Dependency: Low asymmetry Intervention: Legitimizing
Dependency: High asymmetry Intervention: Social proof	Dependency: Low asymmetry Intervention: Social proof
Dependency: High asymmetry Intervention: None	Dependency: Low asymmetry Intervention: None

<sup>2</sup> This first message manipulated conflict symmetry, whereas the second manipulated conflict asymmetry. This was a variable in the design of Marian van Dijk.

### **Manipulation of information**

Two types of information were presented to the participants in this research. The first intervention was legitimizing, in which the message after complaining was: “Based on Dutch consumer law, you will now receive information on rules applicable to your conflict.”, followed by:

When the seller does not deliver a product to the consumer within the agreed timeframe for delivery, you have explicit rights. According to the Dutch Civil Code, book 7, article 9, title 4, and article 19a, you are able to declare the supplier to be in default and determine a new timeframe for delivery.

The second intervention regarded social proof information. Participants read:

You are not the only one having issues with this seller. Experiences of other buyers are e.g.: Buyer26 – I am not satisfied with the experience I had with the seller. I ordered a giftcard-code, but the seller probably sent me a wrong code. He or she did not solve the problem either. That is why I firstly provided the seller with a new deadline for supplying the valid code. Since that did not work either, I claimed a refund of my ‘money’, which I eventually received.

To be able to compare people who read information to people who did not, a control condition was added. Participants in this condition did not get additional information. Instead of reading an intervening text, these participants pursued contact with the seller by writing a letter, accordingly as consumers who were not seeking for extra information would do. Participants in the other conditions wrote this letter after their interventions.

**Manipulation check.** The manipulation of social proof was tested using the item ‘After reading the help, I felt like other people have had the same problem’. A 7-point Likert-scale, ranging from 1 (strongly disagree) to 7 (strongly agree), was used for measuring this feeling of joint experience. People in the legitimizing condition were expected to score low on this variable; however, an explicit manipulation check on legitimizing was not included.

To test the manipulation, a one-way between subjects ANOVA (analysis of variance) was conducted with condition of help as independent variable, and score of the manipulation check (joint experience) as dependent variable. Participants in the condition social proof information ( $N = 63$ ) reported a higher feeling of joint experience ( $M = 5.7$ ,  $SD = 1.80$ ) than participants in the condition of legitimizing information ( $N = 67$ ,  $M = 4.5$ ,  $SD = 2.0$ ;  $F(1, 128) = 13.24$ ,  $p < .001$ ). The manipulation was successful in the overall sample, which was confirmed in the student sample (social proof condition:  $M = 5.6$ ,  $SD = 1.7$ , legitimizing condition:  $M = 4.4$ ,  $SD = 2.0$ ,  $F(1, 85) = 10.17$ ,  $p = .002$ ). The convenience sample reveals a

marginal significant difference between the conditions (social proof condition:  $M = 5.7$ ,  $SD = 2.1$ , legitimizing condition:  $M = 4.7$ ,  $SD = 2.1$ ,  $F(1, 41) = 2.94$ ,  $p = .09$ ).

### Manipulation of dependence asymmetry

The degree of dependence asymmetry was varied at the start of the experiments: half of the participants were primed with a review-option. They were told that they would be able to write a review of the seller, which following participants could see. This implied disadvantaging the reputation of the seller. Providing this power to the consumer led to a decrease of dependence asymmetry. However, dependency was asymmetrical in both conditions, since participants had already paid their full credit for the gift-card before the conflict emerged.

**Manipulation check.** To check the manipulation of dependence asymmetry, a variable was assembled for the difference in experienced own dependency and control (reversed to lack of control) on the outcome (Eigenvalue 1.3, 63.5 % of variance,  $r = 0.8$ ). In the same way, a variable measuring estimated dependency of the seller and the lack of control on the outcome of the seller was constructed (Eigenvalue 1.1, 55.3% of variance,  $r = 0.7$ ). When splitting these results in the different samples, comparable results were found. Because of the results, as shown in table 1, the variables were combined for further analyses.

Table 1

#### *Principal Component Analysis on dependence asymmetry variables*

Sample	Subject	Eigenvalue	% of variance	Correlation with component
Overall	Participant	1.2	58.4	.8
	Seller	1.2	61.2	.8
Student	Participant	1.3	65.6	.8
	Seller	1.2	59.2	.8
Convenience	Participant	1.0	50.8	.7
	Seller	1.3	65.2	.8

Next, the manipulation of dependence asymmetry was checked by a one-way between subjects ANOVA. The difference in experienced dependence asymmetry in the asymmetrical

dependency condition ( $M = 3.05$ ,  $SD = 1.67$ ) and the less asymmetrical dependency condition ( $M = 2.33$ ,  $SD = 2.32$ ) was significant ( $F(1, 194) = 4.50$ ,  $p = .04$ ): People in the asymmetrical dependency condition experienced more asymmetry than people in the less asymmetrical dependency condition. As shown in table 2, the succeeding of the dependence asymmetry manipulation was not found in the student sample (asymmetrical dependency:  $M = 2.76$ ,  $SD = 1.34$ , less asymmetrical  $M = 2.47$ ,  $SD = 2.39$ ;  $F(1, 131) = .47$ ,  $p = \text{ns.}$ ). The manipulation did succeed in the convenience sample (resp.  $M = 3.60$ ,  $SD = 2.07$ , and  $M = 2.04$ ,  $SD = 2.15$ ;  $F(1, 61) = 7.40$ ,  $p = .01$ ). Therefore, we focused on the convenience sample in further analysis.

Table 2

*Dependence asymmetry manipulation check*

Sample	F	p
Overall	(1,194) = 4.5	.035
Student	(1,131) = 0.5	ns.
Convenience	(1,61) = 7.4	.008

*Note.* Overall N = 197. Student N = 134. Convenience N = 63

Lastly, the manipulation of *conflict asymmetry*, part of Van Dijk's research, was analysed to check whether or not this intervened with dependence asymmetry or the conditions of information<sup>3</sup>. This indicated that asymmetry in experiencing conflict did not intervene with experienced dependence asymmetry. Therefore, participants originally assigned to a conflict asymmetry condition were also used in our further analyses.

## Participants

Preparatory to measuring the experiment with participants, we asked a total of 12 testers to undergo the experiment. To test the flow and set-up, think-aloud protocols were executed with a total of 7 testers. Consequently, minor adjustments were made, and the experiment was tested with 5 different people while thinking aloud. The interventions and manipulations were refined and a subsequent sample, consisting of a convenience sample of 63 people, was used

<sup>3</sup> A one-way between subjects ANOVA was conducted to compare the experienced conflict asymmetry in the asymmetrical conflict condition ( $M = .59$ ,  $SD = 1.67$ ) to the symmetrical conflict condition ( $M = .77$ ,  $SD = 1.47$ ). People who were assigned to the asymmetrical conflict condition did not experience more conflict asymmetry than people in the symmetrical conflict condition ( $F(1, 194) = .51$ ,  $p = \text{ns.}$ ). Neither in the student sample (resp.  $M = .71$ ,  $SD = 1.23$ , and  $M = .90$ ,  $SD = 1.44$ ,  $F(1, 131) = .52$ ,  $p = \text{ns.}$ ) nor in the convenience sample (resp.  $M = .25$ ,  $SD = 2.60$ , and  $M = .51$ ,  $SD = 1.53$ ,  $F(1, 61) = .21$ ,  $p = \text{ns.}$ ) did this manipulation succeed.



for the final analysis. In the final version, all participants were randomly assigned to a condition (type of information, and dependence asymmetry).

Participants were 33.7 years old on average ( $SD = 14.2$ ), and mostly female (69.8%). A small majority of the participants (60.3 %) had previous experience with a consumer conflict. Legal insurance was less common, with 25.9 % being legally insured, 47.7 % did not have such insurance, while 25.9 % did not know if they were insured. On average, 42% of Dutch households population is legally insured (Peters, Van Gammeren-Zoetewij, & Combrink-Kuiters, 2014, p. 120). The majority had pursued higher education (Hoger Beroepsonderwijs 31.7 % and university 52.4 %). In our sample, 93.7 % was Dutch, and 7.9 % German. The language of the experiment was Dutch to all participants.

### Measures

A variety of mechanisms underlying the types of information were furthermore measured with 18 items measured on a 7-point Likert-scale from 1 (strongly disagree) to 7 (strongly agree). Examples of the items measuring the mechanisms are: ‘The help gave me a clear image of what I wanted to accomplish within the conflict’, which measured help provided by the information on goal setting. Confidence in own capabilities was measured with: ‘I had more confidence in my own capabilities after reading the help’, and ‘I felt stronger after reading the help’. A principle component factor analysis was conducted and showed all 18 variables to form one scale (Eigenvalue 14.00, explaining 73.7% of variance,  $r = 0.9$ ). For a full overview of the items, see appendix.

We used the I-PANAS-SF questionnaire (Thompson, 2007) to measure affect. This 7-point scale includes 10 items (1 = barely, or not at all, 7 = completely;  $\alpha = .78$ ). A principle component factor analysis with varimax rotation was conducted (see table 3) to analyse the structure of the scale. In accordance with previous findings (Thompson, 2007; Watson, Clark, & Tellegen, 1988), the scale consisted of two subscales: positive affect and negative affect. Positive affect was measured with 5 items ( $\alpha = .83$ ), such as “To what extent do you feel attentive at this moment?”. Negative affect was measured with items such as “To what extent do you feel nervous at this moment?” ( $\alpha = .85$ ). In the current research however, ‘To what extent do you feel inspired’ did not fit in either of the components. Therefore, it was not taken into further analysis.

Table 3

*Factor analysis I-PANAS-SF within the convenience sample*

Component	Name	Eigen- value	Rotated loadings	% of variance	Cronbach's alpha
1 (5 items)	Negative affect	4.38	2.98	29.75	.85
2 (4 items)	Positive affect	1.77	2.96	29.61	.83

The degree of **prosocial behaviour** was measured in several ways. First, when participants wrote a message to the seller, their communication was analysed. The degree of being prosocial was measured by calculating the amount of first person singular and plural forms relative to the amount of words typed in total (Zijstra, Van Meerveld, van Middendorp, Pennebaker, & Geenen, 2004). Using 'ik', 'me', and 'mijn' (resp. 'I', 'me', and 'my'/'mine'), and 'je', 'jou(w)', 'u', and 'uw(e)' ('you' and 'your(s)') more in communicating to the seller was interpreted as being more egoistic. Therefore, this measure was labelled 'egoistic language'. Secondly, using the words 'we'/'wij', and 'ons'/'onze' ('we', 'us' and 'our') more indicated prosocial behaviour (Fitzsimons, & Kay, 2004), and was therefore called 'prosocial language'. Research has shown that analysing this language style aspect can give insight in the degree of self-focusing behaviour (Pennebaker, Mehl, & Niederhoffer, 2003; Slatcher & Pennebaker, 2008). The proportions were measured using the Linguistic Inquiry and Word Count (LIWC) of Pennebaker, Booth, and Francis (2007), which was developed in order to analyse verbal expression quantitatively. Since the experiment was in Dutch, the Dutch version was used (Zijlstra et al., 2004).

The third measure for prosocial behaviour was counting social word-use relative to the total amount of words typed. This 'social focus' consisted of words referring to other people, such as 'someone else', 'mate' or 'they'. These words were likewise reported using the Dutch version of the LIWC (Zijlstra et al., 2004).

The fourth and last aspect of language-use measured with the LIWC was the total amount of words typed by the participants. This measure was labelled 'communication activity'. It was used for calculating the relative egoistic language, prosocial language and social focus, as well as taken into account as an extra dimension of behaviour within the conflict.

A second moment of measuring prosocial behaviour was included in a letter participants wrote to the seller. After having sent the first message, where prosocial behaviour was

measured using LIWC, participants still did not receive a valid code. Therefore, they could send a letter. The format was pre-programmed, and participants choose which sentences they would like to use. Hence, they decided how they behaved towards the seller. The sentence measuring prosocial versus egoistic behaviour regarded solving the problem. 'I demand that you solve this problem as soon as possible', was the most egoistic choice. A more social option read: 'I would like you to solve this problem as soon as possible'. The prosocial option was: 'I would like to discuss with you how we can solve this problem as soon as possible'. This scale was labelled 'prosocial choice'.

### 3. Results

Previous to analysing the results of the experiment the random assignment of participants to the conditions was checked. Participants were not over- or underrepresented in the conditions of help based on the dichotomous variables gender ( $\chi^2(2) = .74$ ;  $p = \text{ns.}$ ), nationality ( $\chi^2(2) = .29$ ;  $p = \text{ns.}$ ), experience with consumer conflict ( $\chi^2(2) = .17$ ;  $p = \text{ns.}$ ), and legal insurance ( $\chi^2(2) = .04$ ;  $p = \text{ns.}$ ). This also applies to the conditions of dependence asymmetry (resp.  $\chi^2(1) = .37$ ;  $p = \text{ns.}$ ,  $\chi^2(1) = 2.59$ ;  $p = \text{ns.}$ ,  $\chi^2(1) = .62$ ;  $p = \text{ns.}$ , and  $\chi^2(1) = 1.00$ ;  $p = \text{ns.}$ ).

#### Correlations

Pearson product-moment correlation coefficients were computed (see table 4) to assess the relationship between the variables. Negative affect and positive affect correlated ( $r = .44$ ,  $n = 63$ ,  $p < .01$ ); people experiencing more negative affect did also experience more positive affect. This means some of the participants stated affect more strongly in general. However, only positive affect correlated with communication activity in the message to the seller: The more positive affect participants reported, the more words they typed ( $r = .27$ ,  $n = 63$ ,  $p = .03$ ). Furthermore, experienced dependence asymmetry correlated with prosocial choice ( $r = .33$ ,  $n = 63$ ,  $p = .01$ ). The more dependence asymmetry participants experienced, the more they chose the prosocial sentence in the letter to the seller.

Table 4 A

*Correlations between continuous variables*

Measure	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Negative affect	2.15	0.91	-										
2. Positive affect	3.33	0.86	.44**	-									
3. Egoistic language	6.80	5.41	.01	.13	-								
4. Social focus	7.71	7.77	-.03	.07	-.17	-							
5. Prosocial choice	1.87	0.66	.13	.00	.02	-.06	-						
6. Communication activity	22.59	15.81	.08	.27*	.14	-.07	-.01	-					
7. Experienced dependence asymmetry	2.53	2.23	.07	-.02	.04	-.07	.33**	-.01	-				

Note. N = 63. \*p < .05. \*\* p < .01 (2-tailed).

Table 4 B

8. The help made me feel less on my own.	3.93	2.04	.36*	.06	.26	-.22	-.18	.13	-.02	-			
9. I had more confidence in my own capabilities after reading the help.	3.98	2.09	.32*	.09	.26	.30*	-.22	.18	-.18	.82**	-		
10. The help made me feel supported.	3.89	1.97	.27	.09	.24	-.21	-.11	.09	-.14	.74**	.87**	-	
11. I felt stronger after reading the help.	4.07	2.08	.11	-.06	.36*	-.31*	-.16	.15	-.05	.79**	.86**	.85**	-

Note. N = 44. \*p < .05. \*\* p < .01 (2-tailed).

**Prosocial behaviour**

The next step is testing the first hypothesis: When consumers experience a conflict with a seller, social proof information leads to more prosocial behaviour towards the seller than legitimizing information. Using the Dutch version (Zijstra et al., 2004) of the Linguistic Inquiry and Word Count (LIWC) of Pennebaker, Booth, and Francis (2007) word-use of participants was analysed in the interaction with the seller. The relative amount of egoistic

language (first personal singular pronouns: I, me, mine) did not differ in the legitimizing condition ( $M = 6.59$ ,  $SD = 5.24$ ) compared to the social proof condition ( $M = 8.19$ ,  $SD = 5.66$ ;  $t(42) = -.97$ ,  $p = ns.$ ). Comparing receiving information with the control group did not result in differences either ( $t(61) = -1.41$ ,  $p = ns.$ ). Therefore, it seems that the information did not have an effect on the usage of egoistic language.

Although not many of the participants used prosocial language (first personal plural pronouns: we, us, our), independent-samples T-tests were conducted to analyse differences. Participants in the legitimizing condition ( $M = 1.11$ ,  $SD = 3.85$ ) did not use a different proportion of prosocial language than participants in the social proof condition ( $M = 0.50$ ,  $SD = 2.41$ ;  $t(42) = .49$ ,  $p = ns.$ ). Participants who read information did not differ from those in the control group either ( $t(61) = -1.41$ ,  $p = ns.$ ).

Subsequently, the effects of the independent conditions of help on the dependent degree of social focus (using words such as mate, talk, they) were tested using an independent-samples T-test. Relative to the total amount of words typed, participants in the legitimizing condition ( $M = 9.55$ ,  $SD = 7.56$ ) did not show more or less social focus than participants in the social proof condition ( $M = 8.78$ ,  $SD = 9.19$ ;  $t(42) = .30$ ,  $p = ns.$ ). However, receiving information ( $M = 9.15$ ,  $SD = 8.36$ ) did cause participants to write more social focussed words than participants who did not read information ( $M = 4.39$ ,  $SD = 4.91$ ;  $t(61) = -2.31$ ,  $p = .03$ ).

The next variable we used testing prosocial behaviour regarded the prosocial choice-scale ranging from 1: 'I demand that you solve this problem as soon as possible', and 2: 'I would like you to solve this problem as soon as possible', to 3: 'I would like to discuss with you how we can solve this problem as soon as possible'. Independent-samples T-tests were conducted to analyse the different conditions. Participants in the legitimizing condition ( $M = 2.00$ ,  $SD = .84$ ) did not choose more or less prosocial than participants in the social proof condition ( $M = 1.78$ ,  $SD = .60$ ). Information ( $M = 1.89$ ,  $SD = .72$ ) versus no information ( $M = 1.84$ ,  $SD = .50$ ) did not affect the degree of prosocial choice in general either ( $t(61) = -.243$ ,  $p = ns.$ ). This means that neither of the measures of prosocial behaviour could confirm the first hypothesis.

### **Legitimizing, social proof, and affect**

Next, the influence of the conditions of information on affect was analysed. An independent-samples T-test was conducted to compare participants in the legitimizing condition ( $M = 2.99$ ,  $SD = 1.32$ ) to participants in the social proof condition ( $M = 3.54$ ,  $SD = .74$ ). Participants reading social proof information reported a higher level of positive affect than participants

who had read legitimizing information ( $t(42) = -1.74, p = .04$ ). This means that hypothesis 2a is confirmed: When consumers experience a conflict with a seller, social proof information increases positive affect more than legitimizing information. However, a one-way between subjects ANOVA showed neither social proof information, nor legitimizing information differed from the control group ( $M = 3.43, SD = 1.07; F(2,60) = 1.65, p = ns.$ ).

Hypothesis 2b was: “When consumers experience a conflict with a seller, positive affect induces prosocial behaviour”. Positive affect and egoistic language, as opposite of prosocial behaviour, was low ( $r = .13$ ). Nevertheless, a single linear regression analysis was conducted with positive affect as an independent variable, and egoistic language as a dependent variable. It was not confirmed that positive affect influences egoistic language ( $F(1,61) = 1.02, R^2 = .02, p = ns.$ ).

The second measure of prosocial behaviour, prosocial language, was also tested as dependent variable of positive affect. A single linear regression analysis was conducted and did not show influence of positive affect on prosocial language ( $F(1,61) < .01, R^2 < .01, p = ns.$ ).

The correlation between positive affect and social focus was also very low ( $r = .07$ ) and positive affect only explained 0.5 % of the variance in social focus. The influence of positive affect (independent variable) on the social focus (dependent variable) measure of prosocial behaviour was tested using a single linear regression analysis. Positive affect did not influence this outcome variable ( $F(1,61) = .32, R^2 < .01, p = ns.$ ).

Lastly, a single linear regression analysis was conducted with positive affect as independent variable, and prosocial choice as dependent variable. This dependent variable was not influenced by the degree of positive affect ( $F(1,61) < .01, R^2 < .01, p = ns.$ ) Therefore, the hypotheses 2b (Positive affect induces prosocial behaviour) cannot be confirmed. Since the conditions of information did not have an effect on prosocial behaviour, hypothesis 2c (Positive affect mediates the relationship between the type of information and prosocial behaviour) cannot be confirmed either.

### **Testing the model**

The results of our data do not meet the requirements to test our model completely. According to Baron and Kenny (1986) the first step of analysing mediation is confirming the independent variable (condition of help) is a predictor of the dependent variable (prosocial behaviour). This first criterion could not be met, so continuing the analysis is not responsible.

However, the interaction of positive affect and dependence asymmetry can be analysed. To test the relationship between positive affect and dependence asymmetry (independent variables) and their effect on prosocial behaviour (dependent variable), a multiple regression analysis was conducted. In the condition of low asymmetry, people who experienced more positive affect showed marginally significantly more egoistic behaviour, they used more words such as 'I'. Participants who reported one point of positive affect higher used an average of 1.5 egoistic words more ( $b^* = 1.49, t = 2.00, p = 0.05$ ). This interaction explained 10.4 % of variance in usage of egoistic language. As is shown in figure 1, this effect was not found under high asymmetry ( $b^* = -1.39, t = -1.23, p = ns$ ).

The second measure of prosocial behaviour, prosocial language, was also tested as dependent variable of positive affect and dependence asymmetry. A multiple regression analysis was conducted and showed no significant interaction within the condition of low asymmetry ( $b^* = -0.39, t = -1.07, p = ns$ ) or high asymmetry ( $b^* = 0.86, t = 1.56, p = ns$ ).

The third measure of prosocial behaviour was the amount of socially focused words people used in their message to the vendor. This variable was also tested in a multiple regression analysis, as dependent variable of the independent positive affect and dependence asymmetry. In the condition of low asymmetry ( $b^* = -1.53, t = -1.39, p = ns$ ), nor in the condition of high asymmetry, an interaction effect was found ( $b^* = 1.84, t = 1.11, p = ns$ ).

Finally, the prosocial choice was tested as dependent variable of positive affect and dependence asymmetry. A multiple regression analysis was conducted. In the condition of low asymmetry ( $b^* = -.03, t = .26, p = ns$ ) and in the condition of high asymmetry ( $b^* = -.06, t = -.38, p = ns$ ), positive affect and dependence asymmetry did not have effect on the prosocial choice.

This means that the third hypothesis (The relationship between positive affect and prosocial behaviour is stronger under high instead of low asymmetry) is not confirmed. In fact, the opposite seems to be indicated by egoistic language. Participants in the condition of low asymmetry let affect influence their behaviour more than participants in the highly asymmetrical condition.

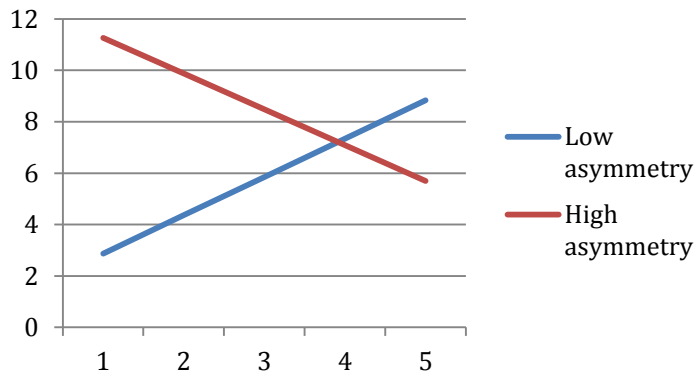


Figure 3. Interaction between positive affect and dependence asymmetry on egoistic behaviour.

### Impact of information

Finally, the conditions of information and the mechanisms they activated were tested. Independent-samples t-tests were conducted with type of help as the independent variable and the mechanism-checks as dependent variables. Mechanisms showing (marginal) significant differences between the conditions of information are shown in table 5 (for an overview of all mechanisms, see appendix).

The strongest distinguishing effect of social proof is making people feel less on their own ( $t(43) = -2.47, p = .02$ ). Self-confidence was also increased more by social proof, compared to legitimizing ( $t(43) = -2.35, p = .02$ ). Moreover, social proof made people feel more supported than legitimizing did ( $t(43) = -2.17, p = .04$ ). Likewise, people in the social proof condition felt marginal significant stronger than people in the legitimizing condition ( $t(43) = -2.05, p = .05$ ).

Table 4b shows how the mechanisms correlate, and how they are correlated with other variables within the experiment. Feeling less alone and feeling capable were positively related to negative affect (resp.  $r = .36, n = 44, p = .02$ ;  $r = .32, n = 44, p = .04$ ). Moreover, using first personal singular pronouns was correlated with feeling strong: people who felt stronger also used 'I', 'me', and/or 'mine' more ( $r = .36, n = 44, p = .02$ ). Furthermore, both feeling capable ( $r = .30, n = 44, p = .04$ ) and feeling strong ( $r = .31, n = 44, p = .04$ ) correlated with social focus.



Table 5

*Differences in mechanisms*

Item	Legitimizing M (SD)	Social proof M (SD)	t	p
The help made me feel less on my own.	3.15 (1.98)	4.61 (1.88)	-2.47	.02
I had more confidence in my own capabilities after reading the help.	3.24 (2.14)	4.65 (1.82)	-2.35	.02
The help made me feel supported.	3.24 (1.95)	4.48 (1.83)	-2.17	.04
I felt stronger after reading the help.	3.40 (2.26)	4.65 (1.75)	-2.05	.05

*Note.* Legitimizing: N = 21, social proof: N = 23.

#### 4. Discussion

The purpose of this study was to compare the effects of social proof information of informal websites, to the more formally used legitimizing information. An online experiment was conducted to measure the effect on prosocial behaviour towards the opposing conflict party. Moreover, positive affect was taken into account as mediator, and dependence asymmetry as moderator of the relationship between positive affect and prosocial behaviour.

The results seem to indicate that social proof causes more positive affect than legitimizing information. This positive affect can cause prosocial behaviour, though only in case of low asymmetrical dependency. However participants who reported higher positive affect also reported more negative affect, only positive affect was related to more active communication behaviour. Furthermore, reading information, whether social proof or legitimizing, versus not reading information encouraged participants to write more about social others.

Moreover, the mechanisms of social proof and legitimizing differentiated on several aspects. Whereas social proof made participants feel less on their own in the conflict, legitimizing did not. This finding supports Cialdini's conclusion on social proof validating the view of the receiver of this information (2001). Confidence was also strengthened by social proof. Furthermore, social proof seemed to make people feel supported and stronger, which is in line with Festinger (1954).

Although both types of information did not seem to encourage prosocial behaviour, it is plausible that they do have an effect on the conflict situation. Both types of information made participants refer more to social others. Moreover, the influence of social proof on positive affect suggests positive consequences, even though the effects of these feelings in the context

of online consumer conflicts are unclear. Further research is required to examine whether or not, or how, these types of information (distinctively?) influence behaviour.

An important note here, is many of the mechanisms did not differentiate, and the average appreciation of the items was high. For instance, the feeling of being within rights was averagely judged high, as well as satisfaction of the information. This could indicate that providing information is one of the most important aspects of information, rather than other mechanisms. However, social proof and legitimizing information did not have different effects on prosocial behaviour, therefore it would be desirable to research what does stimulate prosocial behaviour.

Weary et al. (2010) described the influence of information as decreasing uncertainty. Despite the fact that the social proof information caused self-confidence within our experiment, we do not know how uncertain participants were before reading the information. Measuring this variable during the experiment could have been obtrusive, and therefore provoking socially desirable behaviour. However, social proof, as opposed to legitimizing information, did cause participants to feel more self-confident, more positive affect, and supported. This confirms Weary's research (2010) partly, since legitimizing information did not have these effects. Therefore, it seems that not every type of information decreases uncertainty.

Nevertheless, social proof did not seem to have a discriminating effect on prosocial behaviour, compared to legitimizing information. Tiedens and Linton (2001) found uncertainty causing information to be processed superficially. This would explain effectiveness of social proof, as compared to the less accessible legitimizing information (Tiedens, & Linton, 2001). However, Griskevicius and colleagues (2009) described social proof to be effective, because it is persuasive to people experiencing fear. This raises the question whether social proof is effective because it is processed even in case of experiencing fear, because it is persuasive to people experiencing fear, or both. Participants in our experiment did not experience much negative affect, including fear, and in the current study social proof did not have an effect on prosocial behaviour. This could mean Tiedens' and Linton's research (2001) to be more applicable to online consumer conflicts. However, future research should provide more knowledge on the conditions of online consumer conflicts under which social proof is effective and whether or not it influences prosocial behaviour.

### **Samples and procedure**

Two samples were collected for the experiment: a convenience sample of 63 people, and a sample of 134 students at Twente University. The manipulation of dependence asymmetry did not succeed in the student sample, therefore further analysis was conducted solely on the convenience sample. Consequently, the convenience sample used for analysing the results was small ( $N = 63$ ). Therefore, it would be recommended to test the paradigm with a bigger sample ( $N > 25$  per cell), preferably a non-student sample. Another important conclusion to be cautiously drawn from the current research is students' reaction to online conflict seem to differ from the convenience sample. Peterson and Merunka (2014) have previously concluded to not generalise results of consumer research with student samples, which our research confirms. However, in both samples the standard deviations of the measures of prosocial behaviour were large. This may be one of the reasons why we found little effects. Since randomization was successful, this could mean an unidentified variable could have intervened. A possible example is the degree of experience in online purchasing, or how important participants find it to settle the conflict versus receive the gift card code they desire. Future research should take this into account.

Furthermore, in our experiment we did not offer participants an exit option. A conflict was staged, and people could choose how to react to the seller, however, they could not walk away. Giebels, De Dreu, and Van de Vliert (2003) found prosocial people are more sensitive to an exit option, besides conceding and negotiating. However, in this experiment, participants had already payed, which is often the case in online shopping. Adding an exit option would therefore have been less realistic. Moreover, although we did not offer an exit option explicitly, some participants initiated an exit themselves, by writing: 'Due to this constant error message, I want to retract from purchasing and I want a refund.'

### **Dependence asymmetry**

Little research has been focussing on dependence asymmetry, however it is acknowledged to be an important influencer of consumer conflict (Van Dijk et al., in preparation). The current research extended the knowledge on dependence asymmetry, firstly because the option to review had an effect on the experienced dependence asymmetry. This seems to indicate people could be empowered by explicitly providing this option, for example on legal aid websites. These sites could profit from this knowledge, using the reviews as social proof for new clients, or as input to detect problems in online sales.

Moreover, the current research showed an interacting effect of dependence asymmetry and positive affect on prosocial behaviour: Only when dependence asymmetry is low, positive affect decreases prosocial behaviour. Two measures supported this findings: Low asymmetry, combined with positive affect, causes people to behave less prosocial. Moreover, high asymmetry was related to people making prosocial choices. In the condition of high asymmetry, affect did not seem to influence behaviour, which corresponds with Van Kleef et al. (2006), who found dependence asymmetry to influence expression of emotions within a conflict: People experiencing relatively low power showed less emotions than people experiencing more power than their opponent.

### **Conclusion**

In conclusion, the current research adds to existing knowledge in intrapersonal processes within online consumer conflicts. Information does seem to have an effect on prosocial behaviour, however, it is yet unclear whether or not these processes differ among types of information. Furthermore, social proof increases positive affect more than legitimizing information does. Nevertheless, the influence of positive affect on intrapersonal processes and behaviour

Moreover, dependence asymmetry influencing processes within conflicts (e.g. De Dreu & Van Kleef, 2004; Van Dijk et al., in preparation; Van Kleef, 2006) is confirmed. The role of dependence asymmetry and affect in interpersonal processes previously described by Van Kleef et al. (2006) seems to be translatable to intrapersonal processes: low asymmetry causes more influence of affect than high asymmetry. People who experience relatively low power show their emotions less than people who experience (almost) equal power, which supplements previous research (e.g. Van Kleef et al., 2006).

Further research on information processes within consumer conflicts is recommended, to provide more insight in experiences and behaviour in these situations. The current study provided some insight in the mechanisms underlying social proof within an online consumer conflict. Previous experience or level of education does not seem to cause differences among people experiencing an online consumer conflict. An important remaining question is how people could be influenced by different types of information and how prosocial behaviour can be stimulated. Answering these questions would provide important knowledge to Dutch legal aid to help both their clients and sellers to reach a satisfying solution.

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## Appendix

Table A1

*Mechanisms of type of information*

Item	Legitimizing M (SD)	Social proof M (SD)	t	p
After reading the help I felt I would be able to solve the conflict.	3.29 (1.74)	4.09 (1.82)	-1.48	. ns.
I felt stronger after reading the help.	3.40 (2.26)	4.65 (1.75)	-2.05	.05*
I had more confidence in my own capabilities after reading the help.	3.24 (2.14)	4.65 (1.82)	-2.35	.02**
The help gave me a clear image of what I <u>wanted to</u> accomplish within the conflict.	3.35 (1.98)	4.39 (1.75)	-1.81	.08*
The help gave me a clear image of what I <u>could</u> accomplish within the conflict.	3.40 (2.14)	4.00 (1.78)	-.99	ns.
Because of the information I knew how to handle the conflict.	3.00 (1.73)	3.96 (1.85)	-1.77	.08*
The help gave me a clear strategy to adopt within the conflict.	3.43 (1.89)	4.04 (1.97)	-1.06	ns.
The help made me feel understood.	3.35 (1.98)	4.41 (1.92)	-1.76	.09*
I felt my vision was acknowledged.	3.19 (2.14)	4.22 (1.81)	-1.71	ns.
The help made me feel less on my own.	3.15 (1.98)	4.61 (1.88)	-2.47	.02**
The help made me feel supported.	3.24 (1.95)	4.48 (1.83)	-2.17	.04**
After reading the help, I felt better about the conflict.	3.20 (1.96)	4.09 (1.98)	-1.47	ns.
After reading the help, I was less stressed.	3.43 (2.14)	3.70 (1.77)	-.45	ns.
Reading the help made me feel helped.	3.38 (1.99)	4.17 (1.78)	-1.39	ns.
The advice made me feel fully within my rights.	4.33 (2.22)	5.05 (2.08)	-1.08	ns.
After reading the help, I knew my rights.	4.05 (2.22)	4.30 (2.03)	-.40	ns.
The information in the help was clear.	4.14 (1.74)	4.78 (1.98)	-1.14	ns.
The information in the help was relevant to me.	3.90 (2.05)	4.39 (2.21)	-.76	ns.

*Note.* Legitimizing: N = 21, social proof: N = 23, \* p < .10 \*\* P < .05 (2-tailed).