Emotional disclosure through negative online reviews

A study on the impact of feedback encouragement and public commitment on consumers’ perceived unfairness

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Abstract

Previous research has shown how venting one’s feelings can reduce the negative emotions of a consumption experience. This study proposes a general process of how consumers with feelings of unfairness due to a negative consumption experience can achieve emotional disclosure and reduced unfairness by posting online reviews. By using an experimental design with scenarios, this study tests how the perceived unfairness in this process is affected by the party encouraging the consumer to post an online review and the consumer’s public commitment. A student sample was divided into four groups and the perception of unfairness was compared between the groups depending on whether the party encouraging the feedback was a company perceived to be responsible for the sense of unfairness or an independent party and whether when the consumer was identifiable or anonymous to see if public commitment had an effect. Results showed that emotional disclosure was found to reduce the perceived unfairness in all groups. There was no significant difference between being encouraged by the company or independent party. Furthermore, no public commitment was in effect, even when participants’ answers were thought to become known to others. The results indicate that companies may prefer to encourage consumers to provide feedback themselves rather than using a third party and that posting online reviews will not make the consumer committed to their feeling of unfairness.

Keywords: Emotional disclosure, fairness, online reviews, public commitment
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1. Introduction

Online reviews have become an important source of information (Racherla and Friske, 2012) and a decision-making resource for consumers (cf. Litvin, Goldsmith, and Pan 2008). It is not uncommon for companies (e.g. Vanns.com) to encourage consumers to review their shopping experiences, particularly on online review websites. There are several reasons for the companies to facilitate consumers’ feedback and complaints, which may take form as online reviews. Complaining allows consumers to vent their feelings and can therefore increase customer satisfaction, product evaluation and likelihood of repurchase (Nyer, 2000). The complaints can also be used as strategic intelligence information by companies (Larivet and Brouard, 2010). Therefore, companies should establish appropriate complaints channels, communicate the firm’s responsiveness to complaints and inform where, to whom and how consumers should direct their complaint (Homburg and Fürst, 2007).

Previous psychology research suggests that consumers’ act of venting their emotions from an unfair consumption experience will have an influence on their mental and physical health (Pennebaker, Zech and Rimé, 2001). Pennebaker et al. (2001) also argue that individuals expressing their emotions from an upsetting experience, will enhance their long-term mood of this experience. Complaints are one way to vent emotions according to Kowalski (1996, p. 180), who defines complaining as “expressions of dissatisfaction, whether subjectively experienced or not, for the purpose of venting emotions or achieving intrapsychic goals, interpersonal goals, or both”. Research shows that consumers complaining can experience an increase of satisfaction due to emotional disclosure (Nyer, 2000; Nyer and Gopinath, 2005). In support for the effects of emotional disclosure, Lee-Wingate and Corfman (2011) also found that emotional disclosure in the form of written feedback reduced the consumer’s perception of unfairness of an upsetting experience. Similarly, there is reason to believe that online consumer reviews can act as a way of complaining and emotional disclosure of the perceived unfairness.

The perceived unfairness is an attitude which is highly relevant in regards to online retailing and online reviews. Generally, fairness can be defined as “a judgment of whether an outcome and/or the process to reach an outcome are reasonable, acceptable, or just” (Xia, Monroe and Cox, 2004 p. 1). In this paper unfairness will be regarded as the direct opposite of fairness. Consumers perceive price differences to be unfair (cf. Darke and Dahl, 2003) and when a company establishes prices perceived as unfair

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1 This can be compared to consumer satisfaction, which can be considered as the overall psychological state resulting from emotions of confirmed/disconfirmed expectations and previous feelings about the consumption experience (Oliver 1981, p. 27).
consumers are less likely to repurchase from that company (Campbell, 1999). A recent example of this is when major retailers offering online retailing, such as Walmart, Amazon.com and Target change prices hourly during holiday seasons to compete with each other. Clifford (2012) reports on how some buyers at these retailers paid as much as three times more than the buyer getting the lowest price. Such experiences are likely to be perceived as upsetting by consumers and might cause them to vent their feelings of unfairness through online reviews.

1.1 Problem discussion
Both Lee-Wingate and Corfman (2011) and Nyer and Gopinath (2005) argue that emotional disclosure is the reason for consumers who provide feedback to perceive the consumption experience more positively. In line with this we argue that negative online consumer reviews could act as a way of complaining and for emotional disclosure and that the consumers’ attitudes toward the consumption experience should be improved from the actual act of venting their feelings.

In Figure 1 we propose a general process of how consumers with feelings of unfairness due to a negative consumption experience can achieve emotional disclosure and reduced unfairness by posting online reviews. To sum up, the chain of events following a negative consumption experience to the effects of emotional disclosure can be described as follows. Firstly, when a consumer has a negative consumption experience a sense of unfairness grows. As the consumer writes about his/her feelings of the consumption experience he/she experiences an emotional disclosure, which changes the consumer’s emotions, such as the perceived unfairness.

![Figure 1](image)

Figure 1. The process of how consumers with feelings of unfairness can achieve emotional disclosure through posting negative online reviews, as proposed in this study.

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2 Although Lee-Wingate and Corfman (2011) studied the perception of fairness and not satisfaction explicitly as Nyer and Gopinath (2005), previous research has provided plenty of evidence that perception of fairness is an influential antecedent of customer satisfaction (cf. Smith, Bolton and Wagner, 1999; Davidow, 2003).
1.1.1 Influences on the process of emotional disclosure through online reviews

In this study there are two factors of particular interest affecting the perceived unfairness of the consumer in the process of emotional disclosure through posting online reviews. These are the party encouraging the consumer to post an online review and the public commitment the consumer may have to that online review.

Lee-Wingate and Corfman (2011) show that encouraging feedback can impede the consumers sense of unfairness when providing feedback. These findings were under the condition that the company was perceived as responsible for the negative consumption experience and that no remediation was expected. Based on their findings they suggest that consumer feedback should be encouraged by, and directed to, an independent party not responsible for the consumer’s negative experience in order to reduce the consumer’s perception of unfairness, rather than having feedback encouraged by, and directed to, the responsible company. However, Lee-Wingate and Corfman (2011) do not study how the level of unfairness is affected when the source of feedback encouragement is not the same as the receiver. A common example of such a situation is when an online retailer asks the customers to review them on an independent online review website such as Pricerunner.com. How this relatively common situation affects the perceived unfairness has therefore yet to be studied (see Figure 2). In this study we will treat an independent or third party as a non-responsible party unless otherwise stated.

<table>
<thead>
<tr>
<th>Company as receiver</th>
<th>Independent party as receiver</th>
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<tr>
<td><strong>Company encouraging feedback</strong></td>
<td>Lee-Wingate and Corfman (2011)</td>
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<tr>
<td><strong>Independent party encouraging feedback</strong></td>
<td>Lee-Wingate and Corfman (2011)</td>
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**Figure 2.** The boxes show the situations Lee-Wingate and Corfman (2011) studied. The orange box shows the situation where the retailer asks the customers to review them on third party online review website.

In the literature of public commitment it is often assumed that participants are not anonymous and the focus lies on the degree of publicness and its effect on commitment (cf. Gonzales and Hancock, 2008). Nyer and Gopinath (2005) found that the positive effect of emotional disclosure when providing feedback to a company was reduced by the amount of persons that became aware of a consumer’s negative attitudes about a company. Based on the findings from their study, Nyer and Gopinath (2005) concluded that consumers should provide their feedback in a relatively private manner rather than public, in order to avoid the consumers to become committed to their negative attitudes.
However, their study was conducted in an offline context. When posting online reviews it is not clear if public commitment will have the same effect on the emotional disclosure and subsequently the perceived unfairness. Posts, comments and reviews are almost always public and accessible on online review websites (Dellarocas, 2003), but when participating in online communities consumers make their commitments often in a relatively anonymous manner (Gopinath and Nyer, 2009). This raises concerns on how the anonymity of the consumers when posting online reviews would impact their public commitment since they might not perceive their opinions to become known to others.

The effect of public commitment on consumers’ perceived unfairness after posting online reviews is therefore in need of research. In Figure 3 we provide some examples of feedback in situations with various degrees of publicness and anonymity and under which conditions feedback on online review websites are most commonly apparent.

<table>
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<th>Low anonymity</th>
<th>High anonymity</th>
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<td><strong>Social media, word-of-mouth</strong></td>
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<td><strong>Anonymous feedback on online forums (e.g. online review) or in media</strong></td>
<td><strong>Anonymous feedback on online forums (e.g. online review) or in media</strong></td>
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<td><strong>Low publicness</strong></td>
<td><strong>Feedback in person to company, arbitrament</strong></td>
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<td><strong>Customer satisfaction survey</strong></td>
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**Figure 3.** The orange box shows the situation where feedback in the form of online reviews are most commonly apparent.

### 1.1.2 Purpose and research question

The purpose of this study is to test how perceived unfairness in the process of emotional disclosure through posting negative online reviews is affected by the party encouraging the consumer to post the online review and the consumer’s public commitment to the online review.

Thus our research question is as follows:

*How is the consumer’s level of perceived unfairness affected when posting online reviews on independent online review websites by:*

1) *The party encouraging the consumer to post the online review*

2) *The consumer’s public commitment to the posted online review*
2. Conceptual framework

2.1 Online review websites as a channel for consumer feedback

With the introduction of the online feedback mechanism customers can share their opinions, thoughts and recommendations on online reviews websites such as www.epinions.com (Dellarocas, 2003). Dellarocas (2003) also argues that online reviews can act as feedback to companies, and not only as sharing opinions to other consumers. Companies can reach the opinions of a wide array of past, current and potential customers and the consumers can share their personal opinions with unlimited audience (Dellarocas, 2003). The online review website is in this sense a third party which is independent, and the content is controlled by the online review website rather than the selling company or the consumer (Hennig-Thurau and Walsh, 2003).

The online review websites are characterized by being public and available to everyone, anywhere, at anytime (Dellarocas, 2003) and cover almost every area of consumption (Hennig-Thurau, Gwinner, Walsh and Gremler, 2004). Therefore, companies have the possibility to track what is being said about their products or services (Dellarocas, 2003). Usually the contributions on online review websites consist of an account of consumer experiences in written form and a formalized rating of the product or service which constitutes this experience (Hennig-Thurau and Walsh, 2003). Another feature that internet communication and the online reviews websites hold is that they provide the choice of anonymity for both the reviewers and the readers (Hennig-Thurau et al., 2004).

2.2 The consumers’ perceived unfairness

The concept of fairness (or unfairness) derives from social psychology and has been used to explain how individuals react to conflicts in various situations (Blodgett, Hill and Tax, 1997). Goodwin and Ross (1990) identified the consumers’ perception of fairness as the consumers’ feelings towards a transaction or exchange with the company or a consumption experience. Smith, Bolton and Wagner (1999) argue that a negative consumer experience can be seen as an exchange where the consumer perceives some kind of loss because of the negative experience. A negative consumption experience may therefore leave the consumer

\[3^{rd}\] Both online retailers and independent online review sites may offer online review platforms. However, online review sites in general, such as Pricerunner.com, do not themselves sell the products and are regarded as independent in this study.

\[4^{th}\] When rating a product the consumer’s feelings are not expressed and their perceived fairness should not be subject to the effects of emotional disclosure. Hence, ratings are excluded from the study.

\[5^{th}\] In the literature, the terms justice and fairness have been used almost interchangeably (Davidow, 2003). In this study the term fairness is used as it seems closer to a consumer context, rather than “justice” which has a more legal representation to it.
with the feeling of loss where the exchange is perceived to be unfair. According to Lee-Wingate and Corfman (2011 p. 898) consumers harbor feelings of unfairness when they perceive the experience as less favorable, even if they understand the reason why.

Distributive fairness stands for the impact of the tangible outcome of the transaction between the consumer and the company on the consumers’ perception of fairness (Blodgett et al., 1997; Smith et al., 1999). For instance, this could be the feeling of unfairness from paying a higher price than someone else for the same purchase. Xia et al. (2004, p. 3) defines price unfairness as “a consumer’s assessment and associated emotions of whether the difference (or lack of difference) between a seller’s price and the price of a comparative other party is reasonable, acceptable, or justifiable”. Darke and Dahl (2003) found that if another consumer got a better price the sense of unfairness was higher. Research also suggests that a price increase, which is a form of price difference, is regarded as more unfair than the price itself (Campbell, 1999).

2.3 Source of feedback encouragement and effects on perceived unfairness

Lee-Wingate and Corfman (2011) argue that consumers encouraged to give feedback to the company will provide them with the opportunity to vent their emotions and thus have an increased sense of fairness. They found that the party encouraging feedback and the party receiving the feedback also could have an effect on fairness. Their findings suggest that an independent party, rather than the company responsible for the negative experience, should be the one both encouraging and receiving the consumer feedback to increase the consumers’ perceived fairness. More specifically, Lee-Wingate and Corfman (2011, p. 903) found that “[...] disclosing emotions to the retailer produced fairness perceptions no different from not disclosing emotions at all”. Furthermore, similar results as providing feedback to an independent party were found when there is no specified party encouraging and receiving feedback (in their study, writing the feedback to the researcher conducting the experiment). Lee-Wingate and Corfman (2011) argue that mainly two factors explain these findings, expectation of remediation and the perceived responsibility of the party both encouraging and receiving the feedback.

2.3.1 Expectation of remediation

Research found that consumers who were encouraged to provide feedback had a higher perceived fairness if that feedback was followed by a positive outcome from the company (Goodwin and Ross, 1992). On the other hand, if a company encourages feedback but cannot remediate the cause of the problem as expected the company may be seen as fraudulent (Goodwin and Ross, 1990). If consumers feel the company did not
help them enough, and there were feasible options to do so, the consumers would likely experience more negative emotions (McColl-Kennedy and Sparks, 2003). However, when consumers have a negative consumption experience they will make attributions to whether the company could do something to remedy the situation (McColl-Kennedy and Sparks, 2003). Lee-Wingate and Corfman (2011) argue that when consumers are aware of the impossibility of any remedial action from the company, e.g. when providing feedback anonymously, the perceived unfairness does not decrease. In the case consumers provide feedback anonymously we believe, as Lee-Wingate and Corfman (2011) argue, that consumers will not perceive it to be feasible for the company to be able to remediate them. Therefore, we argue that even though the company is encouraging the consumer’s feedback, the consumer will not expect any remediation if the feedback is made anonymously. With that in consideration, we also expect in accordance with the findings by Lee-Wingate and Corfman (2011) that the consumer’s perception of unfairness when providing feedback to the company does not decrease when remediation is not expected.

2.3.2 Perceived responsibility

Research on how the source of encouragement affects the perceived unfairness in a consumer context is scarce. However, organizational fairness literature provides some insights on the responsibility of the source of the negative outcome and perceived fairness. Brockner, Fishman, Reb, Goldman, Spiegel, and Garden (2007) argue that when an outcome is unfavorable, people respond more negatively the more responsible the source of that outcome is perceived to be. Hence, there is likely to be a different impact on the consumer’s perception of unfairness, whether the party encouraging feedback is perceived by the consumer to be responsible or non-responsible for the negative outcome. Therefore, we argue when the company is perceived as more responsible for the unfavorable outcome (e.g. negative consumption experience) than a third party, it is likely that the consumer will have a higher perceived unfairness when the company encourages the consumer to provide feedback.

By applying the literature about the expectation of remediation and perceived responsibility on the perceived unfairness during the process of emotional disclosure through online reviews leads us to the first hypothesis that:

**H1:** When consumers expect no remediation their perception of unfairness is lesser if both the party encouraging feedback and the party receiving the feedback is independent, compared to a responsible party encouraging the feedback and an independent party is the receiver.
2.4 Behavioral and attitudinal commitment

Making a commitment has a powerful influence on behavior and attitude. Research found that making a commitment increased the confidence that individuals had in their evaluations (Knox and Inkster, 1968). The commitment may arise from the will to have a consistent behavior in either the individual’s own mind or in the eyes of others (Garnefeld, Helm and Eggert, 2011).

According to self-perception theory, people observe their own behavior and by this determine their attitudes and emotions (Bem, 1972). This suggests that once consumers have acted or made a statement they will face internal pressure to behave consistently with the attitude reflected in their actions or statements. However, according to Garnefeld et al. (2011) the self-perception is only in play when one’s attitude is weak or ambiguous, as there is no need to determine the attitude by the behavior when one’s attitude is strong. Further, they suggest that the consumer’s level of experience and expertise of a company or brand has an effect on his/her attitudes and self-perception behavior. The findings by Garnefeld et al. (2011) suggest that the less experience and less expertise the consumers have, the greater the likelihood that the consumers will stay committed to the attitudes they express through word-of-mouth (WOM) due to self-perception behavior.

2.4.1 Public commitment to perceived unfairness

Publicness is considered to be a key factor that indicates the extent to which one is committed to his/her position (Kielser, 1971 cited in Nyer and Gopinath, 2005 p. 939). Cialdini and Trost (1998) support that by arguing that publicness is one of the strongest factors affecting compliance and consistent behavior. Gopinath and Nyer (2009, p. 60) define public commitment as “when a person’s opinions or positions are made public or known to others”. This implies that the statement is to some extent public, meaning how accessible it is to an audience, for it to be known to others. However, it also requires the statement to be identifiable to the person who expresses it, for his/her statement to be known to others. The two dimensions, publicness and identifiability, are therefore separated. However, in the literature of public commitment the condition of identifiability is often assumed and the focus lies on the degree of publicness and its effect on commitment (cf. Gonzales and Hancock, 2008).

Nyer and Gopinath (2005) found that public commitment made consumers engaging in negative WOM to stay committed to their attitude of dissatisfaction compared to customers that complained in private to the
company. Furthermore, Gopinath and Nyer (2009) found that making a public commitment makes individuals more resistant to counter-attitudinal information. In their study, they argue that the reason is that the participants kept to their attitudes and beliefs because of the need to appear consistent in the eyes of others. Thus the attitudes of the consumer is more likely to stay the same after engaging in the public act of WOM, such as posting online reviews on public review websites, under the condition that the act of WOM is not made anonymously. Likewise, we expect the attitude and belief of the perceived unfairness of a consumption experience to be affected by public commitment.

2.4.2 Public commitment in the online context
Gopinath and Nyer (2009) argue that when participating in online communities consumers make their commitments public but in a relatively anonymous manner. Therefore anonymity in these situations needs to be taken into consideration. In a study of bloggers’ self-disclosure and perceived anonymity, Qian and Scott (2007) found that the intended audience is related to the perceived anonymity. Their research showed that when the blogger’s audience was an online audience which the person did not know in real life the blogger provided less identifiable information, and that the less identifiable information was provided, the stronger the sense of anonymity was. This is also in line with the definition of perceived anonymity by Waskul (1996, p. 134) who defines that experiencing anonymity is “to be selective in the disclosure of personal information, and to exert control over one’s participation in the location, situations, and timing of interaction”.

Due to the nature of the online review websites and the large amount of readers, it is reasonable to believe that the posted reviews are not aimed at an audience known to the poster. Therefore, we argue that most consumers posting on online review websites will provide little identifiable information and thus perceive to be anonymous. When online reviewers provide little identifiable information, they will likely be perceived to be anonymous as their statements will not be perceived to be traceable to them. This also reflects the conditions under which literature has controlled for public commitment, i.e. the conditions where the participants were anonymous. Subsequently, most consumers posting online reviews will feel anonymous and likely not feel the need to stay consistent in the eyes of others, which will cause a reduction in their perception of unfairness due the emotional disclosure act. On the other hand, when online reviewers provide more identifiable information about themselves, they will likely be perceived to be identifiable, creating a desire to stay consistent in the eyes of others, which would make them more committed to their beliefs and their perception of unfairness.
By applying the theory about commitment to attitudes due to publicness and identifiability on the perceived unfairness during the process of emotional disclosure through online reviews leads us to the second hypothesis that:

**H2:** Consumers posting a review in a public and identifiable manner are more likely to stay committed to their level of perceived unfairness than consumers expressing their feedback in public but in an anonymous manner.

### 2.5 Theoretical conclusions

Firstly, when a consumer has a negative consumption experience a sense of unfairness grows. When the consumer posts an online review it is public and accessible. As the consumer writes about his/her feelings of the consumption experience he/she experiences an emotional disclosure, which changes the consumer’s emotions, such as the perceived unfairness as illustrated in Figure 1. However, from the conceptual framework additional factors are believed to affect the consumer’s perceived unfairness in the process of emotional disclosure through posting online reviews. The change in perceived unfairness due to emotional disclosure is affected by both the responsibility of the party encouraging the feedback and the expectation of remediation (H1). Also, as the online review is public the perceived unfairness may be subject to the effect of public commitment (H2) depending on whether or not the consumer posting the review does it anonymously.

The purpose of the study is to test how perceived unfairness in the process of emotional disclosure through posting negative online reviews is affected by the party encouraging the consumer to post the online review (H1) and the consumer’s public commitment to their online review (H2).

Based on that, we construct our study on two theoretical dimensions to test. Firstly, whether the responsible company or independent party encouraging the consumer to provide the feedback affects the perceived unfairness. Secondly, whether the consumer posting the online review is anonymous or not will have an impact on the consumer’s public commitment and thus the level of unfairness. This is illustrated in Figure 4.
Figure 4. The theoretical dimensions tested in this study.

3. Method

3.1 Research design

This study uses a deductive approach to conduct a quantitative study by using an experimental design (Saunders, Lewis and Thornhill, 2009 p. 152, 489). The study tests how the perceived unfairness is affected by the party encouraging consumers to post online reviews and their public commitment to the online review. Experiments are suitable to answer the purpose of the study as the link between the variables affecting the perceived unfairness can be tested, showing if participants have a sustained, increased or decreased perception of unfairness depending on whether the party encouraging the feedback is the company/independent party and whether public commitment will have an effect when the consumer is identifiable/anonymous (Saunders et al., 2009 p. 142). Experiments also have the benefit of isolating and testing the planned manipulation by removing alternative explanations and thus reduce threats to internal validity (Saunders et al., 2009 p. 142). As the manipulations have to be planned beforehand the experiment is conducted, a deductive approach with clear hypotheses is appropriate. A questionnaire was used in order to collect data that can be standardized and more easily compared between the groups (Saunders et al., 2009 p. 144).

The participants of the experiment were surveyed twice to measure the effect of emotional disclosure and public commitment on their perceived unfairness. Pennebaker et al. (2001) found that during the expressing phase when venting emotions, there will be a negative influence on the mood related to this specific experience. This suggests that the perceived unfairness will increase at the moment of the emotional
disclosure, and subsequently decrease over a period of time, reducing the long-term perceived unfairness of an experience. The implication of this is that unfairness should increase as the participants write about their feelings in the experiment, and decrease afterwards. Nyer (2000) argues the increased level of negative emotions lasts a few hours or up to two days in a few cases. Therefore perceived unfairness was measured within three days to a one week time span.

The participants of the experiment were divided into four groups and each group was faced with a scenario. Although scenarios cannot fully reflect a real life experience, using scenarios has the benefit of making the answers more comparable to each other and to isolate the focus of this study from other external factors involved when recalling previous experiences (Fredrickson, 1986). Furthermore, by using scenarios participants would not be subject to any biases of memory lapses and the risk of recalling only the most critical and extreme situations they have experienced, all of which are more common for retrospective self-reports (Smith et al., 1999).

The two conditions that are changed in the four different scenarios are the party encouraging the feedback and the anonymity of the consumer in the scenario and the participant. The perception of unfairness was then compared between the groups depending on whether the party encouraging the feedback is the company/independent party and whether public commitment will have an effect when the consumer is identifiable/anonymous (see Figure 5). The party receiving feedback and the publicness is constant in all four groups. Further details about the scenarios are explained later on in this paper.

In the study a single-blind procedure was used as the participants were not informed that the sample was divided in four different groups with different instructions. This increases the internal validity as it reduces the effects of demand characteristics, meaning that participants will to a lesser extent have a change in behavior due to their assumptions of the study’s purpose (Kirk, 2009).
Figure 5. This figure explains the conditions of the party encouraging the consumer to post online reviews and the anonymity of the consumer for each group.

3.2 Sample
The preferred object of study is referred as the ideal population (Dahmström, 2000, p. 50). In this study the ideal population would be any consumer posting negative online reviews. The population aged between 16-24 were reported as the most frequent users on the internet and population aged 25-34 were reported second most frequent users on the internet among the population in Sweden (The Swedes and the Internet report, 2012). According to Cox, Purdy and Sampath (2008) the group in this age range uses the internet very often and are the most comfortable with online purchases and are rated as the group with most tendency to complaint online through different online channels. Persons in this age group should therefore represent the largest part of the ideal population and they are likely more familiar with posting negative online reviews.
To reach persons in the age group 16-34 the study was conducted at Uppsala University using a convenience sample of students. Understandably, student samples are subject to criticism because the limitations of generalizability (Lee and Cude, 2012) and so is using convenience sampling (Weber, 1992). When conducting experiments it is common to use captive population such as university students to reduce problem of non-representative persons not participating in the experiment (Saunders et al., 2009 p. 144). Students are also likely to have similar purchase power and therefore more similar experiences of the kind of products purchased and reviewed online. As such, sampling university students can also improve the internal validity of the results. As students also are among the most relevant age group of the ideal population, we believe that students represent a valid sample for our study.

3.3 Operationalization and measures

3.3.1 Unfairness perception
To measure the perceived unfairness participants in the experiment were asked to rate their perceived unfairness on a 7-point Likert scale consisting of 5 items. The scale was based on the unfairness scale that Darke and Dahl (2003) used and their items were found to belong to the same construct in their study. There are several dimensions of fairness (Smith et al., 1999). However, to make our results comparable to Lee-Wingate and Corfman (2011) the influence of price, which is connected to distributive fairness, was used to measure the perceived unfairness. More specifically, the feeling of unfairness from paying a higher price than someone else for the same purchase was studied. The items of measurement can be found in Appendix 1.

3.3.2 Public commitment
In order to be able to study whether public commitment will make participants have a sustained, increased or decreased perception of unfairness the initial perceived unfairness was measured and compared to their unfairness level within three days to a one week time span. The condition for public commitment among participants was based on Gopinath and Nyer (2009) who studied public commitment among students. In our study participants in the identifiable condition groups (ComId and IndId) were asked for permission to having their name being seen together with their answers among other students at Uppsala University. These participants were in this way under the impression that their answers were known to others, however in reality the answers were not published or made public. Participants in the anonymous condition groups
(ComAn and IndAn) were informed that their answers would not be made known to others. Further details on this can be seen in the example questionnaire in Appendix 2.

### 3.4 Manipulation checks

The survey was conducted in English, taking into account the possibility of surveying international students. Possibly, results could differ for participants disclosing their emotions if English is their native language. Therefore, nationality was asked for in the questionnaire to observe if any major differences needed to be considered in this matter. However, the English skills among the participants is believed to be rather equal as the survey was conducted on students that all had education in English, and as the majority of the survey was conducted on master students where the entire education is in English.

A measure on a 7-point Likert scale of perceived anonymity was adapted from Qian and Scott (2007) to check for the perceived anonymity when posting online reviews using different amounts of personal information. To control for the perceived responsibility of the company in the scenario a 7-point Likert scale measuring the perceived responsibility was adapted from Botti and McGill (2006). The expectation of remediation was measured by asking participants on a 7-point Likert scale whether they expected any sort of compensation from the company in the scenario by providing feedback. All these measures used two items and to reduce response bias for these measures half of the items were reverse phrased (Field, 2005 p. 669). The items of measurement can be found in Appendix 1.

There is a chance self-perception behavior might affect the commitment to the perceived unfairness regardless of how public or identifiable the consumer is. This might result in all the experiment groups showing similar levels of commitment in the second measurement of unfairness. To better isolate the effect of public commitment control measures of the experience and expertise is measured as Garnefeld et al. (2011) showed that these factors could mitigate the self-perception behavior. Therefore the questionnaire included measures of experience and expertise. The respondents of group ComAn and IndAn could during the analysis then be divided into groups of high versus low experience and expertise to check for any significant variance in their answers and the effect of public commitment.

The factor for experience is included in the scenarios where the consumer is said to have made several purchases from the online retailer. While this might affect the levels of perceived unfairness, the purpose of this study is not to measure the absolute values but to compare the level of unfairness among the groups depending on the party encouraging the feedback and the degree of public commitment. In the study the
participants’ level of expertise of online retailers, which is the responsible party and source of the perceived unfairness in the scenarios, is measured instead of having the level of expertise manipulated in the scenario. This is because the difficulties that arise because the level of knowledge varies and the difficulty of imagining having other levels of expertise (Garnefeld et al., 2011). The experience was measured with one item and expertise with four items, and both measurements were adapted from (Garnefeld et al., 2011). Using more than one item for the measurement of experience would have been more reliable. However, it was considered to be sufficient as the question was only used as a control variable to see if the respondents understood that the consumer in the scenario had made several purchases from the online retailer before, which was clearly stated in the scenario. The items of measurement can be found in Appendix 1.

### 3.5 Framing of the scenario

When framing the scenario recommendations by Weber (1992) were taken into account. Weber (1992) argues that more than two scenarios are recommended and that scenarios should be grounded in theory with clear hypotheses, be realistic, focus on the critical issues of the study and be based on previously tested scenarios. Furthermore, scenarios should allow for both open-ended and close-ended questions. In addition, Fredrickson (1986, p. 481) argues that the context, problem, described actions and terminology in the scenario can be defined in a way so that the scenario creates a realism that “generates interest, and therefore 'involvement' by the respondent”. Weber (1992) argues involvement in the scenario generates more realistic responses as well.

The scenario of this study meets these recommendations well as there are four versions of the scenario which are grounded in theory with clear hypotheses. The scenario is based on Darke and Dahl (2003) and Lee-Wingate and Corfman (2011) in order to be based on previously tested scenarios and includes both open-ended and close-ended questions in accordance with Weber’s (1992) recommendations. Pictures of authentic products and websites were used to increase the realism of the scenario. Furthermore, a pretest of the scenario was made among fourteen students of the same population (but a different sample) to evaluate the feasibility and understandability of the scenario and the following questions. A few changes were made concerning layout and wordings of the questions for the questionnaire that was later used in the experiment. The framing of the scenario is described in detail below and can be seen in Appendix 2.

In the scenario the participants were asked to imagine themselves in the following situation of a consumer. The consumer has recently made a purchase of a camera which the consumer is greatly satisfied with from an online retailer the consumer has purchased from several times before, but finds out the same product has
been bought by a fellow student at a considerably lower price. A few days after the discovery the consumer receives an email from the retailer requesting the consumer to provide feedback, or was encouraged by a friend to provide feedback, depending on the conditions the participants were divided into. A friend was used as an independent party since it was deemed more feasible and realistic in the context of the scenario than having e.g. an independent online review website knowing about the purchase and encouraging the consumer. To increase the involvement and make the participants reflect on the emotions surrounding of the different parts of the scenario the participants were asked to choose a facial expression most representative of these emotions (Lee-Wingate and Corfman, 2011). The facial expressions show faces that can be interpreted expressing happiness, sadness, indifference anger/frustration, surprise and mischievousness. Even though these expressions may be interpreted differently the purpose is solely to increase involvement in the scenario. These expressions are argued to reflect a relatively wide spectrum of basic emotions that are relevant to the scenario and emotions that are common for consumers engaging in negative WOM (Wetzer, Zeelenberg and Pieters, 2007). Therefore, the facial expressions are not believed to bias the respondents’ answers to any greater extent.

The participants were then asked to write the online review in the place of the consumer in the scenario and were in another open ended question asked to specifically describe the emotions surrounding the consumption experience. This was to ensure the participants had emotional disclosure (Lee-Wingate and Corfman, 2011). In group 1 (ComAn) and group 2 (ComId) it was the company asking for feedback to be provided on a well known online review website. In group 3 (IndAn) and group 4 (IndId) it was a friend (an independent party) encouraging feedback to be provided on a well known online review website. In group 1 (ComAn) and group 3 (IndAn) the consumer and participant then provided the feedback anonymously, whereas in group 2 (ComId) and group 4 (IndId) they were identifiable as they provided feedback. The experiment was followed by a set of questions/statements regarding perceived unfairness, responsibility of the company, expectation of remediation, experience and expertise of online retailers and some demographical questions.

This was followed by an online questionnaire sent within three to seven days after the first questionnaire was filled out. The follow up questionnaire briefly reminded the participants of the scenario and measured the perceived unfairness and included some filler questions in order to diminish the risk of participants to change their behavior due to their assumptions of the study’s purpose (Kirk, 2009). The design of the follow-up questionnaire can be seen in Appendix 3.
3.6 Distribution

The scenario and questionnaire was printed and distributed among students at Uppsala University. All participants were informed that the experiment concerned feedback on online review websites and that the questionnaires were to be filled out individually. Participants were also informed that the experiment included an online follow-up questionnaire which would be sent within a week and that the participants’ email addresses were required for this purpose. The participants were also informed that the ones completing both surveys would have the chance to win two cinema tickets and that the winner would be randomly drawn regardless of the respondents’ answers. This incentive was used as a way to improve the response rate, especially for the follow-up survey. Since it is common practice at Uppsala University to offer cinema tickets for students participating in experiments, and the fact that we informed that the winner was drawn at random, this incentive is not believed to have had any significant effects on the respondents’ answers in the questionnaire.

All questionnaires also had a cover page asking the participants to write down their email address for us to be able to contact them again for the follow up questionnaire. Participants in the anonymous condition groups (ComAn and IndAn) were informed that their answers would not be made known to others and that the email address would be used solely to be able to contact them again for the follow-up questionnaire. To study the public commitment, the participants were informed of the possibilities that their answers may be known to others. Participants in the identifiable condition groups (ComId and IndId) were asked for permission to having their name be seen together with their answers for the other students at Uppsala University.

The email addresses were used to send out the second questionnaire online within three to seven days after the first questionnaire was filled out. The answers were traced to the participants’ specific emails by using the online survey service Survey Monkey. Thereby the participants’ answers from the first and the second questionnaire could be matched and compared. Two reminders were sent to the participants to secure as many answers as possible. The online survey was open for responses two weeks at the most. Some participants may therefore had a longer time span between answering the first questionnaire and the second one, and possibly be subject to memory bias (Smith et al., 1999). However, the follow-up questionnaire briefly reminded the participants of the scenario which is thought to reduce this source of error. Further details about the follow-up questionnaire can be seen in appendix 3. After the data collection period a participant completing both surveys was randomly drawn as the winner of the cinema tickets and then contacted.
3.7 Method for data analysis

Subsequent analysis of the collected data was conducted to statistically establish if the hypotheses were confirmed. Firstly, the data was explored to find any extreme values or wrong entries for the entire sample. The following analyses were made for each hypothesis separately as the sample used in the analyses differed depending on the requirements for testing the hypotheses.

The analysis of the first hypothesis (H1) is explained first. The normality of the data was analyzed to assess which further analyses could be performed (Pallant, 2011 p. 204). A factor analysis was performed to validate that the items for the unfairness scale belong to the same structure by analyzing the underlying pattern of correlation (Pallant, 2011, p. 104). Thereby the factor analysis also allowed the items to be summarized into a smaller and more manageable set of related variables for further analysis (Pallant, 2011 p.181). The reliability of the items used for the different measures (scales) were analyzed by testing Cronbach’s alpha (Field, 2005 p. 668), which shows the internal consistency of the scale (Pallant, 2011 p. 299). The mean for the perceived responsibility and expectation of remediation was calculated and examined to see if they met the conditions in H1.

To compare if there was any significant difference in perceived unfairness between the groups encouraged by the company to the groups encouraged by the independent party a Mann-Whitney U test was performed. The Mann-Whitney U test is a non-parametric test for comparing the median of two independent groups by converting the scores of the variables to ranks across the two groups and evaluating whether the ranks for the two groups differ significantly (Pallant, 2011 p. 227). Non-parametric tests are more suitable for smaller sample sizes or when using ordinal scales such as the Likert scale (Pallant, 2011 p. 204). However, the non-parametric tests have a greater risk of not showing significant differences where they actually exist as they are less sensitive to the normality of the data (Pallant, 2011 p. 213). For this reason also the parametric equivalent, the independent t-test, was performed on the variables for perceived unfairness as well. This test instead shows if there is a significant difference in the mean for the two groups (Pallant, 2011 p. 240).

Next, the analysis of hypothesis 2 (H2) was performed. The procedure of analyzing H2 resembles the procedure for analyzing H1 to a great extent. The normality of the data was explored first. Then a factor analysis was conducted on the measures for perceived unfairness at both the first time of measure and the second time. A factor analysis was also done on the measure for expertise to validate that the items for the expertise scale belong to the same structure by analyzing the underlying pattern of correlation (Pallant, 2011, p. 104). The reliability of the items used for the different measures were then analyzed by testing Cronbach’s alpha (Field, 2005 p. 668). The mean for anonymity was calculated to see if the consumer in
the scenario was perceived to be anonymous/identifiable according to the framing of the scenarios. The mean for expertise and experience was also calculated in order to explore the possible self-perception behavior among the participants as it may have an effect on the commitment to their perceived unfairness. To test if there was any public commitment affecting the perceived unfairness of the respondents the unfairness scores from the first questionnaire and the follow-up questionnaire were compared with a Wilcoxon Signed Rank Test. The Wilcoxon Signed Rank Test is a non-parametric test designed to measure the median of the same participants on two occasions by converting the variable scores into ranks and comparing them from time one and at time two (Pallant, 2011 p. 230).

4. Results and discussion of results

4.1 Sample size

The first questionnaires were handed out to 327 students at Uppsala University. A total of 229 questionnaires were returned. Out of these 50 were disqualified for not filling out the questionnaire correctly or falling outside the age span. The remaining responses were explored to find potential outliers which might affect the subsequent analysis and to see that no wrong entries were apparent, e.g. values outside of the scales in the questionnaire (Pallant, 2011 p. 43). To identify and remove potential outliers a thorough inspection of histograms and boxplots was made. A comparison of the mean and 5 % trimmed mean was also used to determine in which cases to remove outliers. With this method an alternative mean without the top and bottom five percent of the scores is calculated in order to see if the most extreme scores in the data have a high impact on the mean (Pallant, 2011 p. 63). Ultimately 5 outliers were removed from the sample, leaving a total of 174 responses for analysis. Table 1 shows the distribution of respondents in each group. There were nine participants coming from English native speaking countries. The purpose for controlling for the nationality was to check if there were any language differences for the native English speaking participants and the other participants to write the online reviews. Thus, their written reviews were examined and as they were similar to the other respondents’ there were no reason found for them to be treated separately from the other responses.

<table>
<thead>
<tr>
<th>Group</th>
<th>ComAn</th>
<th>ComId</th>
<th>IndAn</th>
<th>IndId</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>41</td>
<td>47</td>
<td>32</td>
<td>54</td>
<td>174</td>
</tr>
</tbody>
</table>

Table 1. The number of responses in total and by group.
4.2 Results of H1

For the analyses of H1 the whole sample size (n=174) was used. First we present the analysis of the normality of the data and then a factor analysis using principal component analysis. Lastly the comparison of means between groups will be presented.

The items for unfairness were analyzed for normality by checking skewness and kurtosis. None of the items for unfairness had scores of skewness or kurtosis exceeding an absolute value of 1 which suggest they are normally distributed (Hair, Anderson, Tatham, and Black, 1992 p. 24). Normally distributed scores suggest parametric analyses such as a factor analysis and independent t-test are appropriate (Pallant, 2011 p. 204).

4.2.1 Factor analysis

A factor analysis using the principal component analysis (PCA) was performed on the unfairness scale as it establishes how the items can contribute to one structure (Field, 2005 p. 631). The PCA was used to validate that the items for the unfairness scale belong to the same structure by analyzing their underlying pattern of correlation (Pallant, 2011, p. 104). It also allows us to reduce the number of variables (Field, 2005 p. 619). A Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was performed resulting in a score of 0.70. A value close to 1 indicates the pattern of correlation for the items is high and that the analysis shows distinct and reliable factors. The minimum recommended value is 0.5 and therefore our results are deemed to be sufficient (Field, 2005 p. 640). Furthermore, to check if the items show an identity matrix, meaning that all variables are independent of each other, a Bartlett’s test of sphericity was conducted. Bartlett’s test should be significant, less than 0.05, for the scores not to represent an identity matrix (Field, 2005 p. 642). The result was highly significant (p < 0.005) indicating that a PCA is appropriate to use.

To determine the number of factors, components with an eigenvalue of 1 or above were used (Pallant, 2011 p. 192). Initially two factors were extracted, Price Unfairness and Price Difference Unfairness, explaining 76.3 % of the cumulative variance. Although only one factor might have been possible to explain the construct of unfairness, this would result in a lesser cumulative variance explained by the factor (Pallant 2011, p.184). Furthermore, we believe that the two factors measuring the unfairness could be conceptually different as they seem to be stemming from two reasons; whether the actual price paid in the scenario was unfair and the unfairness derived from the difference between the consumer’s price paid compared to the price paid by the other person in the scenario. Research also suggests that price unfairness and price difference unfairness may be different. This is because price increases, which are a form of price difference, are regarded as more unfair than the price itself (Campbell, 1999).
To improve the interpretability of the factors the components were rotated. This means that the loading of the items are maximized on one of the extracted factor, while reducing the loading on the other factors (Field, 2005 p. 644). We expect the factors should correlate to each other, as only one factor was extracted in the study by Darke and Dahl (2003). A direct oblimin rotation was used as it is more appropriate when factors are expected to correlate and the degree to which the factors were allowed to correlate was set to a recommended delta value of 0 (Field, 2005 p. 637).

The pattern matrix of the rotated components show on which factors the items are loading on (see Table 2). Loadings below 0.4 are not shown and all remaining items have a communality above the recommended 0.7 (Field, 2005 p. 655). The results from the pattern matrix lead us to retain two factors, Price Unfairness and Price Difference Unfairness.

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price difference is unfair</td>
<td></td>
<td>0.877</td>
</tr>
<tr>
<td>Price difference is questionable</td>
<td></td>
<td>0.882</td>
</tr>
<tr>
<td>Price is fair (reverse coded)</td>
<td>0.827</td>
<td></td>
</tr>
<tr>
<td>Price is reasonable (reverse coded)</td>
<td>0.905</td>
<td></td>
</tr>
<tr>
<td>Price is justified (reverse coded)</td>
<td>0.817</td>
<td></td>
</tr>
</tbody>
</table>


Further, to check for the reliability of the items used to measure the two extracted factors a test of Cronbach’s alpha was conducted (Field, 2005 p. 668). For the items belonging to the factor Price Unfairness the Cronbach’s alpha was 0.83 and for the factor Price Difference Unfairness it was 0.72 which are above the commonly recommended 0.7 (Pallant, 2011 p. 97). This led us to use composite scores for Price Unfairness scores and Price Difference Unfairness in the analyses henceforth.

Using the composite scores Price Unfairness and Price Difference Unfairness for comparing the groups may distort the results in case there would be any major differences of the consistency of scores on the unfairness scale in each group. Therefore a Cronbach’s alpha test was done for each group separately as well. As seen in Table 3 all the alpha values but one are above 0.7. When dealing with psychological
constructs values beneath 0.7 can be expected and the low number of items used also lowers the importance of a high alpha value (Field, 2005 p. 668). Overall, we find these results supporting the use of the composite scores when comparing the groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>Cronbach’s Alpha Price unfair</th>
<th>Price difference unfair</th>
</tr>
</thead>
<tbody>
<tr>
<td>All groups combined</td>
<td>0.83</td>
<td>0.72</td>
</tr>
<tr>
<td>ComAn</td>
<td>0.84</td>
<td>0.83</td>
</tr>
<tr>
<td>ComId</td>
<td>0.84</td>
<td>0.72</td>
</tr>
<tr>
<td>IndAn</td>
<td>0.81</td>
<td>0.78</td>
</tr>
<tr>
<td>IndIn</td>
<td>0.82</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Table 3. Cronbach’s alpha value of the composite scores Price Unfairness and Price Difference Unfairness for each group.

### 4.2.2 Analysis of perceived responsibility and expectation of remediation

To test if the party encouraging the consumer to post the online review has an impact on the perceived unfairness the means between the groups where the company was encouraging the online review (ComAn and ComId) were compared to the means in the groups where and independent party encouraged the online review (IndAn and IndId). First the analysis of ComAn and IndAn were done, and then the same analyses were made for ComId and IndId.

#### 4.2.2.1 Perceived responsibility and expectation of remediation for ComAn and IndAn

Since the two items for perceived responsibility and the two items for no expectation of remediation essentially represent the same question with reversed wordings, analyzing the internal consistency through the Chronbach’s alpha is deemed to be sufficient for determining whether the two items can be combined for the reason of reducing the number of variables. A Cronbach’s alpha test was used to determine the internal consistency between the two items of perceived responsibility and the two items for no expectation of remediation.

Perceived responsibility had a Cronbach’s alpha value of 0.35 and no expectation of remediation had a score of 0.65. Even though Cronbach’s alpha coefficient value was less than 0.7, according to Pallant (2011 p. 97) within short scales (less than ten items) it is more common to have lower Cronbach’s value. In that
case it is suitable to check the value of the mean inter-item correlation for the items with a recommended range between 0.2 to 0.4 (Pallant, 2011 p. 97). These criteria were not met either. A closer examination of the data shows that most likely these results are due to some participants misreading the items with reverse wordings. We chose to exclude the item with the highest standard deviation for each of the scales for perceived responsibility and no expectation of remediation from further analysis. This meant that only one item was used to measure the perceived responsibility and no expectation of remediation. The mean of the item for perceived responsibility (M=4.86) and the item for no expectation of remediation (M=6.08) suggest conditions in H1 are met. Although using only one item might affect the reliability of the measures negatively, the excluded items still pointed toward the same results with means above a score of 4.

### 4.2.2.2 Perceived responsibility and expectation of remediation for ComId and IndId

The same procedure of analysis for ComAn and IndAn was performed for ComId and IndId. First, the Cronbach’s alpha was calculated for the perceived responsibility and no expectation of remediation. Perceived responsibility had a Cronbach’s alpha value of 0.74 and no expectation of remediation had a score of 0.66. The two items for perceived responsibility were combined into the variable Total Responsibility for the reason of reducing the number of variables. The mean inter-item correlation for the items for no expectation of remediation was not within the recommended range between 0.2 to 0.4. We chose to exclude the item with the highest standard deviation for the scales for no expectation of remediation from further analysis, leaving one item for the measurement of no expectation of remediation. The mean of the Total Responsibility (M=4.50) and the item for no expectation of remediation (M=6.00) suggest conditions in H1 are met. Again, using only one item for no expectation of remediation might affect the reliability of the measure negatively, but here the excluded item still pointed toward the same results with a mean above 5.

### 4.2.2.3 Comparison of means and median

Since Likert scales are ordinal this suggests using a non-parametric analysis (Pallant, 2011 p. 125). For comparing two groups with non-parametric methods the Mann-Whitney U Test is appropriate as it calculates the difference of the median instead of the mean as the independent t-test does (Pallant, 2011 p. 227). Analyses were made using the composite scores Price Unfairness scores and Price Difference Unfairness calculated from the factors extracted in the factor analysis. In addition, each single item belonging to the scale for unfairness was analyzed. As the end results were identical, only Price Unfairness and Price Difference Unfairness are reported henceforth. The Mann-Whitney U Test revealed no significant result on p = 0.05 level for neither comparison of ComAn/IndAn or ComId/IndId (see Table 4).
However, parametric analyses using data from Likert scales are commonly used in social science research. The responses for ComAn/IndAn and ComId/IndId were found to be normally distributed and the sample size adequate for parametric tests (Pallant, 2011 p. 204). Therefore we also conducted the equivalent parametric method for comparing groups, the independent t-test, to compare the perceived unfairness. There was no significant result on p = 0.05 level for neither comparison of ComAn/IndAn or ComId/IndId when performing the independent t-test (see Table 5).

### Table 4. Results of the Mann-Whitney U Test comparing the groups for the price unfairness and price difference unfairness.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Total Price Unfairness</th>
<th>Total Price Difference Unfairness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance (2-tail)</td>
<td>Z-value</td>
</tr>
<tr>
<td>ComAn &amp; IndAn</td>
<td>0.57</td>
<td>−0.57</td>
</tr>
<tr>
<td>ComAn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IndAn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ComId &amp; IndId</td>
<td>0.93</td>
<td>−0.09</td>
</tr>
<tr>
<td>ComId</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IndId</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Results of the independent t-test comparing the groups for the price unfairness and price difference unfairness.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Total Price Unfairness</th>
<th>Total Price Difference Unfairness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance (2-tail)</td>
<td>t-value</td>
</tr>
<tr>
<td>ComAn &amp; IndAn</td>
<td>0.45</td>
<td>0.77</td>
</tr>
<tr>
<td>ComAn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IndAn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ComId &amp; IndId</td>
<td>0.93</td>
<td>0.82</td>
</tr>
<tr>
<td>ComId</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IndId</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Another analysis was made where the samples were sorted to include only respondents who firmly believed the company was responsible and no compensation was expected, to better reflect the conditions required in H1. Only respondents with scores of 5 or higher on the 7-point Likert scale on both perceived responsibility and no expectation of remediation were used this time. This resulted in 39 respondents left for analysis of ComAn/IndAn (ComAn, n=21 and IndAn, n=18) and 38 respondents of ComId/IndId (ComId, n=20 and IndId, n=18). For smaller sample sizes as these ones the non-parametric analyses are most appropriate (Pallant, 2011 p. 204). A Mann-Whitney U Test was performed to compare the perceived unfairness for ComAn/IndAn and ComId/IndId. The Mann-Whitney U Test revealed no significant result on p = 0.05 level for neither comparison of ComAn/IndAn or ComId/IndId (see Table 6).

<table>
<thead>
<tr>
<th>Sample sorted for high perceived responsibility and no expectation of remediation</th>
<th>Mann-Whitney U Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total Price Unfairness</strong></td>
</tr>
<tr>
<td></td>
<td>Significance (2-tail)</td>
</tr>
<tr>
<td><strong>Comparison ComAn &amp; IndAn</strong></td>
<td>0.53</td>
</tr>
<tr>
<td>ComAn</td>
<td></td>
</tr>
<tr>
<td>IndAn</td>
<td></td>
</tr>
<tr>
<td><strong>Comparison ComId &amp; IndId</strong></td>
<td>0.97</td>
</tr>
<tr>
<td>ComId</td>
<td></td>
</tr>
<tr>
<td>IndId</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Results of the Mann-Whitney U Test comparing the groups for the price unfairness and price difference unfairness where the samples were sorted for high perceived responsibility and no expectation of remediation.

Altogether these results clearly show that H1 is not confirmed with the sample used in this study.

4.3 Discussion of H1 results

The discussion of the results are made regarding the first hypothesis. The hypothesis stated that when consumers expect no remediation their perception of unfairness is lesser if both the party encouraging
feedback and the party receiving the feedback is independent, compared to a responsible party encouraging the feedback and an independent party is the receiver.

The means and medians of the responses show that the price and the price difference in the scenario were perceived as unfair, which supports the findings by Darke and Dahl (2003). The company was also in general perceived as responsible for the unfair price difference and no remediation was expected. It should also be noted here that the scores for unfairness tend to be higher for respondents who firmly believed the company was responsible and that no compensation would be given. This supports that expectation of remediation and responsibility can affect the perceived unfairness. Furthermore, the results indicate that the price difference was perceived to be more unfair than the price in general.

However, results indicate that a company encouraging a consumer to post an online review does not increase the level of perceived unfairness compared to when an independent part is encouraging the consumer to post an online review, even in the case that the consumer does not expect any remediation and the company is perceived responsible for the negative consumption experience. This is contrary to hypothesis 1 and some possible explanations for this will be presented here.

Firstly, it is difficult to detect significant differences between groups when using small sample sizes (e.g. 20) according to Pallant (2011 p. 208), and it could be necessary to have a higher alpha level for significance than the traditional 0.05 level. However, the results were far from significant in each test, suggesting that the sample size was not the major reason for the insignificant results.

McColl-Kennedy and Sparks (2003) argue that consumers will have more negative emotions toward a company when they are expected to help the consumers and they did not do so as expected. However, the consumers are also argued to take into account if it is feasible for the company to do anything to remedy that situation. The results show that the respondents in general did not expect any remediation. This indicates that the perceived anonymity is not the only reason for consumers not to expect any remediation, as the identifiable groups had practically the same mean for the expectation of remediation as the anonymous groups.

In this study the receiver of feedback was an independent online review website in all groups. In the study by Lee-Wingate and Corfman (2011) respondents providing feedback to an unspecified audience (i.e. presumably the experimenter) showed the same effects on unfairness from emotional disclosure as respondents providing feedback to an independent party. One possible reason for the similar unfairness
levels in the study by Lee-Wingate and Corfman (2011) is that the unspecified audience was not perceived as responsible. The decisive factor for the consumer’s perceived unfairness might be the perceived responsibility of the party receiving feedback, rather than the encouraging party.

4.4 Results of H2

For the calculation of H2 only remaining responses from participants who completed the follow-up questionnaire and agreed to the public commitment condition were used. Of the study’s entire sample of 174 respondents there were 105 respondents who completed the follow-up questionnaire, all of which were completed correctly. There were 13 of these respondents who did not agree to the public commitment condition and were therefore excluded. This left the sample used for the following analyses of H2 with 92 respondents. The number of respondents in each group is shown in Table 7.

<table>
<thead>
<tr>
<th>Group</th>
<th>ComAn</th>
<th>ComId</th>
<th>IndAn</th>
<th>IndId</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>26</td>
<td>20</td>
<td>23</td>
<td>23</td>
<td>92</td>
</tr>
</tbody>
</table>

Table 7. The number of responses for H2 analysis by group.

Since the sample used to analyze H2 is greatly reduced compared to the sample used for analysis in H1, separate analyses were done on the 92 respondents of the H2 sample to avoid any systematic response bias of respondents that did not complete the follow-up questionnaire or agree to the public commitment condition.

The H2 sample size (n=92) was firstly checked for normality on a general level in order to conduct a factor analysis using principal component analysis. Then a Wilcoxon Signed Rank Test was performed on each group separately to measure the difference of the respondents’ unfairness perception over time. The Wilcoxon Signed Rank Test is a non-parametric test designed to measure the median of the same participants on two occasions by converting the variable scores into ranks and comparing them from time one and at time two (Pallant, 2011 p. 230). Since the perceived unfairness was measured twice with a time difference (within 1 week) henceforth, first time measures will be referred to as T1 and second time measures as T2.

Also the data was analyzed for normality by checking Skewness and kurtosis. All of the items for unfairness T1, expertise and unfairness T2 had scores either below the value 1 or fairly exact value of 1 (e.g. 1.03). The normality of the data was considered as adequate for performing the following factor analysis.
4.4.1 Factor analysis
Though the sample size is small, according to Hair et al. (1992, p. 227) “there should be four or five times as many observations as there are variables to be analyzed in the factor analysis”. As there are 5 items for the unfairness scale a minimum of 4 x 5 = 20 observations are needed, which makes the sample size of these groups sufficient for conducting the factor analysis.

A factor analysis using the principal component analysis (PCA) was made on the unfairness T1, expertise and unfairness T2 scales to validate the underlying correlation of the factors and reduce the number of variables (Field, 2005 p. 619). A Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was performed. The KMO for expertise, unfairness T1 and unfairness T2 were all above 0.65 and were deemed to be sufficient considering the minimum recommended value of 0.5 (Field, 2005 p. 640). The results are shown in Appendix 4 Table 1A. Bartlett’s test of sphericity was conducted showing highly significant results (p < 0.005) indicating that a PCA is appropriate to use. These results are also shown in Appendix 4 Table 1A.

To determine the number of factors, components with an eigenvalue of 1 or above were used (Pallant, 2011 p. 192). Initially two factors, Price Unfairness and Price Difference Unfairness, were extracted explaining 72.6% of the cumulative variance for the unfairness T1 scale and 74.7% of the cumulative variance for the unfairness T2 scale. Regarding the expertise scale only one component with an eigenvalue above 1 was shown, thus one factor was extracted for the expertise scale explaining 63.4% of the cumulative variance. The pattern matrix of the rotated components shows on which factors the items are loading on (see Appendix 4 Table 2A, 3A and 4A). Loadings below 0.4 are not shown and all remaining items have a communality above the recommended 0.7 (Field, 2005 p. 655). The results from the pattern matrix lead us to retain two factors, Price Unfairness and Price Difference Unfairness for the unfairness scale in both times (T1 and T2) and one factor for the expertise scale, Total Expertise.

4.4.2 Cronbach's alpha
To check for the reliability of the items used to measure the extracted factors in the unfairness scales (T1, T2) as well as in the expertise scale a test of Cronbach’s alpha was conducted (Field, 2005 p. 668). The results of this test are shown below and further details can be found in Appendix 4 Tables 5A and 6A. Using the composite scores Price Unfairness, Price Difference Unfairness and Total Expertise for comparing the groups may distort the results in case there would be any major differences of the consistency of scores on
the unfairness or expertise scale in each group. Therefore the Cronbach’s alpha test was done for each group separately on these constructs.

Of the 16 Cronbach’s alpha tests made on the unfairness factors (4 groups x 2 variables x 2 times of measure) 6 had and alpha value beneath 0.7 (see Appendix 4 Table 5A). When dealing with psychological constructs values beneath 0.7 can be expected and the low number of items used also lowers the importance of a high alpha value (Field, 2005 p. 668), therefore the factors reaching a value of 0.67 were very close and considered as sufficient. For the extracted unfairness factors among the groups all the alpha values but two were above 0.67. Although the Cronbach’s alpha value for these two items are less than 0.67, the Inter-Item Correlations Means lies between 0.2 and 0.4 as suggested by Pallant (2011 p. 97) (see Appendix 4 Table 5A). For the expertise scale the alpha values in all groups were above 0.7 (see Appendix 4 Table 6A).

All in all, we find these results supporting the use of the composite scores when comparing the groups. This led us to use composite scores for Price Unfairness scores and Price Difference Unfairness (T1 and T2) and Total Expertise in the analyses henceforth.

Since the two items for perceived anonymity essentially represent the same question with reversed wordings, analyzing the internal consistency through the Cronbach’s alpha is deemed to be sufficient to determine whether the two items can combined for the reason of reducing the number of variables. All groups but one showed a value above 0.7 and the item with an alpha value below 0.7 showed an inter-item correlation within the recommended range of 0.2 - 0.4 (see Appendix 4 Table 7A). The composite variable of the two items for perceived anonymity were therefore used in the analyses henceforth.

4.4.2.1 Experience, expertise and perceived anonymity
The mean of the items of anonymity and identifiability in the anonymous groups and in the identifiable groups suggest the consumer in the scenario to be anonymous/identifiable according to the scenarios (see Table 8). A 7-point Likert scale was used for these measures. Scales were coded so that a high mean in groups ComAn and IndAn reflects the conditions in the scenarios where the respondents are anonymous and high mean in groups ComId and IndId reflects the conditions in the scenarios where the respondents are identifiable. Also when measuring the mean of the experience and total expertise the results show that the respondents have a fairly high level of experience and expertise as shown in Table 8.
### Table 8. The mean for experience, total expertise and anonymity/identifiability by group.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Experience</th>
<th>Total Expertise</th>
<th>Anonymity/Identifiability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ComAn</td>
<td>5.4</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td>ComId</td>
<td>5.8</td>
<td>5.0</td>
<td>5.2</td>
</tr>
<tr>
<td>IndAn</td>
<td>5.7</td>
<td>4.7</td>
<td>5.1</td>
</tr>
<tr>
<td>IndId</td>
<td>5.2</td>
<td>4.8</td>
<td>4.8</td>
</tr>
</tbody>
</table>

#### 4.4.3 Wilcoxon Signed Rank Test for the public commitment

For us to test the impact of public commitment on the consumers’ perceived unfairness we measured the ranks of the perceived unfairness T1 compared to T2 using the Wilcoxon Signed Rank Test, which allows us to compare between T1 to T2 (Pallant, 2011 p. 230) (see Table 9). For these analyses, an alpha level of 10% will be adopted when interpreting the significance of the results. Increasing the alpha level increases the risk of a Type I error, which is when results indicate there is a difference between the groups when there actually is not (Pallant 2011, p. 207). However, it is difficult to detect significant differences between groups when using small sample sizes (e.g. 20) and it therefore could be necessary to have a higher alpha level for significance than the traditional 0.05 level (Pallant, 2011 p. 208).

<table>
<thead>
<tr>
<th>Group</th>
<th>Total Price Unfairness</th>
<th>Total Price Difference Unfairness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance (2-tail)</td>
<td>Z-value</td>
</tr>
<tr>
<td>ComAn</td>
<td>0.121</td>
<td>-1.551</td>
</tr>
<tr>
<td>ComId</td>
<td>0.089</td>
<td>-1.701</td>
</tr>
<tr>
<td>IndAn</td>
<td>0.505</td>
<td>-0.667</td>
</tr>
<tr>
<td>IndId</td>
<td>0.022</td>
<td>-2.292</td>
</tr>
</tbody>
</table>
Table 9. Wilcoxon Signed Rank Test on Public Commitment. The figures in bold show the significant findings.

4.4.3.1 Public commitment analysis on group ComAn

The results of the Wilcoxon test showed a significant difference (p = 0.099) in the total price difference unfairness variable between T1 and T2 with a decrease in the mean T1 (Md = 5.5) and T2 (Md = 5.25) (see Table 9). Meaning that group ComAn experienced a lower perception of unfairness after venting their feelings from the negative purchasing experience.

4.4.3.2 Public commitment analysis on group ComId

The results of the Wilcoxon test showed a significant difference (p = 0.089) in the total price unfairness variable between T1 and T2 with a decrease in the mean T1 (Md = 4.67) and T2 (Md = 4.17) (see Table 9). Even though H2 suggests that there should not be a difference in the median due to the public commitment effect. Meaning that group ComId experienced a lower perception of unfairness after venting their feelings from the negative purchasing experience.

4.4.3.3 Public commitment analysis on group IndAn

The results of the Wilcoxon test did not show any significant differences between T1 and T2 although a difference was expected (see Table 9). Another analysis was made where the samples were sorted to include only respondents who had high experience and expertise of online retailing, in case the commitment was due to self-perception. Only respondents with scores of 4 or higher on the 7-point Likert scale on both Total Expertise and the item measuring experience were used for this purpose (from here on referred to as IndAn Exp). This resulted in 16 respondents left for analysis of IndAn Exp. A Wilcoxon test showed a significant difference (p = 0.081) between the Price Unfairness T1 (Md = 4.67) and T2 (Md = 4.33), showing that the perceived price unfairness decreased (see Table 10). Meaning that group IndAn Exp experienced a lower perception of unfairness after venting their feelings from the negative purchasing experience.

<table>
<thead>
<tr>
<th></th>
<th>Wilcoxon Signed Rank Test</th>
<th>Total Price Unfairness</th>
<th>Total Price Difference Unfairness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Significance (2-tail)</td>
<td>Z-value</td>
</tr>
<tr>
<td>IndAn Exp</td>
<td>0.655</td>
<td>-0.447</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table 10. Wilcoxon Signed Rank Test on Public Commitment for group IndAn Exp.
4.4.3.4 Public commitment analysis on group IndId

The results of Wilcoxon test showed a significant difference (p = 0.022) in the total price unfairness variable between T1 and T2 with a decrease in the mean T1 (Md = 5) and T2 (Md = 4.67) (see Table 9), even though H2 suggests that there should not be a difference in the median due to the public commitment effect. The results show that group ComId experienced a lower perception of unfairness after venting their feelings from the negative purchasing experience.

4.4.4 Effect size

In order to measure the magnitude of the significant difference between the unfairness perception in T1 and T2 the Effect size statistics were performed on each of the groups separately (Pallant, 2011 p. 242). The effect size was interpreted based on the commonly used criteria that a value less that 0.1 = small effect, 0.3 = medium effect and more than 0.5 = large effect (Pallant, 2011 p. 232). The results for the groups ComAn (r = 0.23) and ComId (r = 0.26) were between small and medium effect, the results for the groups IndId (r = 0.34) and IndAn Exp (r = 0.31) were medium effect (see Table 11). Meaning that Wilcoxon sign rank test showed a statistically significant decrease in the unfairness perception with a small-medium effect in the groups ComAn and ComId and a medium effect in the groups IndId and IndAn Exp.

<table>
<thead>
<tr>
<th>Effect size (r-value)</th>
<th>ComAn</th>
<th>ComId</th>
<th>IndId</th>
<th>IndAn Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.23</td>
<td>0.26</td>
<td>0.34</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Table 11. Effect size of the significant results.

4.5 Discussion of H2 results

The discussion of the results are made regarding the second hypothesis. The hypothesis stated that consumers posting a review in a public and identifiable manner are more likely to stay committed to their level of perceived unfairness than consumers expressing their feedback in public but in an anonymous manner.

The results show that the respondents’ perceived unfairness were affected by the act of emotional disclosure. In all the groups (ComAn, ComId, IndAn Exp and IndId) the median for unfairness in each group decreased when measured before and after the emotional disclosing act. In the groups ComId and
IndId the results show that the respondents were not committed to their level of unfairness when compared between T1 and T2. However, there was a difference in the median between T1 and T2 which is a result of the emotional disclosure. The results support the findings by Lee-Wingate and Corfman (2011) that participants can achieve emotional disclosure in written form. It also indicates that online reviews can act as a mean for emotional disclosure. Also the results support the psychological findings by Pennebaker et al. (2001) that individuals will experience an emotional improvement from a negative experience when expressing these negative emotions.

From the results of the analysis of H2 we can see that consumers posting online reviews either in an identifiable manner or anonymous manner will experience a decrease in their unfairness perception after the emotional disclosure act. This suggests that public commitment will have no impact in this matter. We conclude that consumers posting online reviews publicly and identifiably will still experience a reduction in their unfairness perception from a negative purchasing experience as long as they vent their negative emotions. The results do not support hypothesis 2.

The results might be explained with the research within computer-mediated communication (CMC), which gives reason to believe that behavior on online environments are significantly different from the real life behavior (Joinson, 1999). Public self-awareness (i.e. concern for others’ opinions) is lower for persons engaging in CMC (Matheson and Zanna, 1988). This suggests that the public commitment on online environments might be weaker. Joinson (1999) argues that participating in online questionnaires also shows lower public self-awareness compared to paper-and-pen questionnaires and that the lower public self-awareness seems to give a similar effect as being anonymous. As the follow-up questionnaire was done online this is also a possible reason for the lack of public commitment.

However, the lack of public commitment might also be due to the information given during the survey. Participants may have felt more anonymous when conducting the online review as there was no information regarding the publicness or anonymity in the follow-up questionnaire for neither of the groups (Joinson, 1999). Although these explanations show possible limitations of the method of this study, they better reflect the conditions in which consumers post their online reviews. As such, consumers might very well remain unaffected by the public commitment when posting online reviews.

We found self-perception behavior in only one of the groups (IndAn). According to Garnefeld et al (2011) self-perception behavior occurs when the attitudes are weak and ambiguous, which indicates that the other
groups had beliefs regarding the unfairness of the scenario that were firm enough not to act on self-perception from the first time of measurement to the second one.

The results showed a relatively high mean in expertise and experience among the participants which can explain why participants in most groups were not subject to self-perception. However, participants in group IndAn showed commitment to their level of unfairness. As this commitment disappeared when sorting the group for respondents with a high expertise and experience the results also provide support for the findings by Garnefeld et al. (2011).

5. Concluding discussion

The objective of this study was to test how the consumer’s perceived unfairness in the process of emotional disclosure through posting negative online reviews is affected by the party encouraging the feedback and the consumer’s public commitment to the online review. On a general level the results showed that consumer’s perceived unfairness from a negative experience decreased overtime after the emotional disclosure act. The results support the findings by Lee-Wingate and Corfman (2011) that participants can achieve emotional disclosure in written form. It also indicates that online reviews can act as a mean for emotional disclosure.

However, results of H1 showed that the level of perceived unfairness was not higher when a company encourages a consumer to post an online review compared to when an independent party is encouraging the consumer to post an online review, even in the case that the consumer does not expect any remediation and the company is perceived responsible for the negative consumption experience.

In regards to H2, results suggest that public commitment will have no effect on the consumer’s perceived fairness when posting an online review. The results might be explained with the research within computer-mediated communication (CMC), which gives reason to believe that behavior on online environments are significantly different from the real life behavior (Joinson, 1999) where the concern for other’s opinions are lesser (Matheson and Zanna, 1988).

This study contributes by further emphasizing the role of online reviews and the effects on the attitudes of consumers posting them. While there is considerable literature on the consumer behavior effects on the receivers of WOM, there is little research on how the behaviors and attitudes of the senders of WOM such
as online reviews are affected (Garnefeld et al., 2011). The study gives a deeper understanding on possible implication for companies facilitating consumer feedback through online reviews and how this affects the consumer’s perceived unfairness. It also extends the current knowledge of public commitment on online environments.

However, the results of this study should be used with caution. The findings do not imply that encouraging consumers to post online reviews is always the best option. Both Lee-Wingate and Corfman (2011) and Nyer and Gopinath (2005) argue that encouraging consumers to post feedback publicly is not recommended due to the risk of how negative WOM could affect the readers. Providing feedback or complaining more privately can also be used as a way for the consumer to have emotional disclosure which results in a more positive long-term mood of the negative experience. On the other hand, the benefit for companies to encourage consumers to post online reviews should not be entirely disregarded either. According to Duan, Gu, and Whinston (2008) negative WOM can actually increase the purchase intentions of potential customers, a notion known as the awareness effect of (negative) WOM.

The age group 16-34 are the most active internet users and most comfortable with online shopping, suggesting that their levels of expertise in online retailing should be relatively high. Frequent buyers are also more likely to have a high experience of the retailer. Consequently, for retailers encouraging frequent buyers to post online reviews the consumers are less likely to be committed to their perceived unfairness from a negative consumption experience.

### 5.1 Managerial implications

The results indicate that companies themselves may prefer to encourage consumers to provide feedback since the results suggest the sense of unfairness when posting online reviews is not increased compared to having an independent party encouraging the consumer. Furthermore, encouraging consumers to publicly review the company online does not seem to make the consumer publicly committed to their level of unfairness. On the contrary, our results suggest that the consumer will reduce his or her sense of unfairness because of the emotional disclosure. As persons posting online reviews on online review websites are argued to in most cases be anonymous, companies would not have to worry too much about the consumer posting the online reviews being publicly commitment to their perceived unfairness. However, when consumers make their voices heard on social media the situation might be highly relevant as individuals often provide more identifiable information.
5.2 Limitations and further research

This study has some limitations that are required for the reader to take into consideration. The findings should not be generalized without caution as the sample is relatively small and consisted of students in the ages between 19-34 collected through convenience sampling. Further, the study used an experimental design and not actual online reviewers. Although this helps isolating the factors affecting the perceived unfairness, it cannot not fully represent real life as a field study might have done. The use of scenarios also share this weakness and there is a risk the respondents were not as involved in the scenario as they would had they experienced a similar situation in real life. However, using scenarios also has the benefit of making the answers more comparable to each other and to control for the influences of other factors affecting the perceived unfairness (Fredrickson, 1986). The personality of the individuals participating in the study can also have an effect on the results. Surveying persons who have stronger concern for their public image might be more affected by the public self-awareness (Joinson, 1999).

Consumers might be influenced by counter-attitudinal information when writing their online review as it is common that the previously posted reviews are visible at the same time. This was not controlled for in the study as the answers had to be individual and any other reviews might have biased the respondents answers. Furthermore, the counter-attitudinal resistance is higher when this information comes from persons that are not from a close peer group with more influence on the respondent (Gopinath and Nyer, 2009). Online reviews posted on online review websites are most likely posted by strangers not belonging to the consumer’s peer group and thus having little influence on the attitude of the consumer making a public commitment. Therefore, controlling for the influence of other persons reviews was not considered in our study, although further research in this topic would be needed to validate this.

Public commitment on online communities or social media where the individuals postings are more likely to become known by their peer group also need to be further investigated as it is more common to provide personal information making the effect of public commitment more likely to be evident.

Whether the feedback encouragement or the changes in the unfairness level occurred before or after complaining directly to the company (if that would be the case) was not considered in this study in order to have a more comparable study to Lee-Wingate and Corfman (2011). As complaining directly to the
responsible company somewhere along the process of emotional disclosure proposed in this paper could have an impact on the consumers’ perceived unfairness the customers’ complaints as a factor could be considered in the process of consumers emotional disclosure and perceived unfairness in future research.

Another line of further research would be how the perceived unfairness would be affected in the situations simulated in this study when a consumer is expecting some kind of remedial action from the company. In this study the perceived unfairness was studied with the condition that the consumers both perceived the company as responsible and that no remediation was expected. Further research on the impact of perceived responsibility and expectation of remediation by their own would shed light on their importance on perceived unfairness of consumers providing feedback.

References


Internet resources

Appendix 1

Scales and items used for measurement:
A 7-point Likert scale was used for these measures. Scales were coded so that a high mean reflects the conditions in the scenarios and expected results.

Unfairness scale
The price I paid for was fair. (Reverse coded)
I perceive the price I paid was reasonable. (Reverse coded)
The price difference was unfair.
I perceive the price difference to be questionable.
The price I paid was justified. (Reverse coded)

Anonymity scale
I perceived myself anonymous when I posted my online review. (Reverse coded for ComId and InId)
I thought I was identifiable when I posted my online review. (Reverse coded for ComAn and IndAn)

No expectation of remediation scale
Camdio will probably compensate me after I’ve provided feedback. (Reverse coded)
I do not expect any compensation from Camdio.

Perceived responsibility scale
Camdio is not responsible for the price difference. (Reverse coded)
Camdio is to blame for the price difference.

High Experience
Before this purchase I was certain that Camdio was a good online retailer.

High Expertise scale
I am very interested in e-commerce.
I know a lot about online retailers.
It is very interesting to get an overview of the many online retailers in the market.
Sometimes, I talk about online retailers with other people.
Appendix 2
First questionnaire

Consumer feedback on online review websites

E-mail address: ____________________________________________

[ComId and IndId] Note: As part of this study a follow-up questionnaire will be sent to you. [ComAn and IndAn] Note: As part of this study a follow-up questionnaire will be sent to you. The email address will be used for this purpose only and will not be shown together with your answers.
Imagine yourself in the following situation:
You have tried out the new Canon EOS 1100D camera that a friend of yours owns. You like the camera and decide to buy it from an online retailer called Camdio where it cost 2600 SEK. You have purchased from Camdio several times before and you were satisfied with them. When you receive the camera you are greatly satisfied with it.

Which of the expressions from figure 1 best corresponds to your feelings/emotions when you receive your camera?  

![Expressions from figure 1](image)

Figure

[ComAn and ComId] During the same week while you are at the university you overhear two other students talking about how one of them also bought a Canon EOS 1100D camera from Camdio as well this week. However, the other student bought it for 2080 SEK, which is 20% less from the amount you paid (2600 SEK).

[IndAn and IndId] During the same week while you are at the university you and your friend overhear two other students talking about how one of them also bought a Canon EOS 1100D camera from Camdio as well this week. However, the other student bought it for 2080 SEK, which is 20% less from the amount you paid (2600 SEK).

Which of the expressions from figure 1 best corresponds to your feelings/emotions when you hear about the price difference?  

[ComAn and ComId] One week after you made the purchase you receive an email from Camdio encouraging you to provide feedback about your purchase on a well known independent online review website:

“Dear customer,
Your feedback is important to us and we would like to invite you to write a review about your recent purchase. Please post your review at the online review website Pricespy.co.uk by clicking [here]. Your comments will help other customers to make informed buying decisions and we can improve the products we offer.”

[IndAn and IndId] Your friend then encourages you to provide feedback about your purchase on a well known independent online review website called Pricespy.co.uk, arguing that the comments will help other customers to make informed buying decisions
Which of the expressions from figure 1 best corresponds to your feelings/emotions when you are encouraged to provide feedback on PriceSpy?  ____

[ComId and IndId] You decide to provide the feedback on PriceSpy. The username you login with shows your real name and on your profile your hometown, age and other information about you is visible. Please write your online review where you describe the emotions surrounding your consumption experience.

[ComAn and IndAn] You decide to provide the feedback on PriceSpy (figure 2). The username you login with has no connection to your real name and no other personal information about you is shown as you post your feedback.

Please write your online review below

____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________
Please describe the emotions surrounding your consumption experience.

Please answer the following questions where you imagine yourself as the consumer in the scenario:

Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>The price I paid for was fair.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>I perceive the price I paid was reasonable.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>The price difference was unfair.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>I perceive the price difference to be questionable.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>The price I paid was justified.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
</tbody>
</table>

Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I perceived myself anonymous when I posted my online review.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>I thought I was identifiable when I posted my online review.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>Camdio will probably compensate me after I’ve provided feedback.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>I do not expect any compensation from Camdio.</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○</td>
</tr>
</tbody>
</table>

Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please answer the following questions where you imagine yourself as the consumer in the scenario:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Camdio is not responsible for the price difference. ○ ○ ○ ○ ○ ○ ○
Camdio is to blame for the price difference. ○ ○ ○ ○ ○ ○ ○
Before this purchase I was certain that Camdio was a good online retailer. ○ ○ ○ ○ ○ ○ ○

Please provide answers about yourself in the following questions:

Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

I am very interested in e-commerce. ○ ○ ○ ○ ○ ○ ○
I know a lot about online retailers. ○ ○ ○ ○ ○ ○ ○
It is very interesting to get an overview of the many online retailers in the market. ○ ○ ○ ○ ○ ○ ○
Sometimes, I talk about online retailers with other people. ○ ○ ○ ○ ○ ○ ○

[ComId and IndId] Demographic questions:

First name: ________________
Last name: ________________
Nationality: ________________
Age: ___________
□ Male □ Female

What program are you studying? _______________________
☐ I agree to let my answers be made public together with my name to other students doing their master thesis for the department of business and administration at Uppsala University.

[ComAn and IndAn] Demographic questions:

Age: _______

☐ Male   ☐ Female

Nationality:_____________________

Thank You!
Appendix 3
Follow-up questionnaire (online)

Consumer feedback on online review websites - part two
You answered a questionnaire few days ago about a scenario where you imagined yourself purchasing a new Canon EOS 1100D camera and found out another student bought the same product for a lower price.

[ComAn and ComId] The online retailer (Camdio) encouraged you to provide feedback about the purchase on an independent online review website (PriceSpy).

[IndAn and IndId] Your friend encouraged you to provide feedback about the purchase on an independent online review website (PriceSpy).

Please answer the following questions where you imagine yourself as the consumer in the scenario:
Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>The price I paid for was fair.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I perceive the price I paid was reasonable.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The price difference was unfair.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
I perceive the price difference to be questionable. ○ ○ ○ ○ ○ ○ ○ ○
The price I paid was justified. ○ ○ ○ ○ ○ ○ ○ ○

Please answer to what degree you agree with the following statements on a scale from 1-7 where 1 represents “completely disagree” and 7 “completely agree”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am less likely to make online purchases in the future</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I will probably do more price research before buying a similar product in the future</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am more likely to provide feedback on online review websites from now on</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Appendix 4

<table>
<thead>
<tr>
<th>Scales</th>
<th>Unfairness T1</th>
<th>Expertise</th>
<th>Unfairness T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO</td>
<td>0.659</td>
<td>0.748</td>
<td>0.743</td>
</tr>
<tr>
<td>Bartlett’s test</td>
<td>Sig (p &lt; 0.005)</td>
<td>Sig (p &lt; 0.005)</td>
<td>Sig (p &lt; 0.005)</td>
</tr>
</tbody>
</table>

Table 1A. KMO and Bartlett’s test of sphericity for unfairness T1, expertise and unfairness T2 scales.

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price difference is unfair</td>
<td></td>
<td>0.900</td>
</tr>
<tr>
<td>Price difference is questionable</td>
<td></td>
<td>0.799</td>
</tr>
<tr>
<td>Price is fair (reverse coded)</td>
<td>0.740</td>
<td></td>
</tr>
<tr>
<td>Price is reasonable (reverse coded)</td>
<td>0.872</td>
<td></td>
</tr>
<tr>
<td>Price is justified (reverse coded)</td>
<td>0.795</td>
<td></td>
</tr>
</tbody>
</table>

Table 2A. Unfairness T1 extracted factors.

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price difference is unfair</td>
<td></td>
<td>0.895</td>
</tr>
<tr>
<td>Price difference is questionable</td>
<td></td>
<td>0.884</td>
</tr>
<tr>
<td>Price is fair (reverse coded)</td>
<td>0.806</td>
<td></td>
</tr>
<tr>
<td>Price is reasonable (reverse coded)</td>
<td>0.871</td>
<td></td>
</tr>
<tr>
<td>Price is justified (reverse coded)</td>
<td>0.840</td>
<td></td>
</tr>
</tbody>
</table>

Table 3A. Unfairness T2 extracted factors
### Table 4A. Expertise extracted factors.

<table>
<thead>
<tr>
<th>Component</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterestedEcommerce</td>
<td>0.83</td>
</tr>
<tr>
<td>KnowOnlineRetailers</td>
<td>0.85</td>
</tr>
<tr>
<td>InterestingOnlineRetailers</td>
<td>0.79</td>
</tr>
<tr>
<td>TalkAbOnlineRetailers</td>
<td>0.71</td>
</tr>
</tbody>
</table>

### Table 5A. Cronbach’s alpha values for the unfairness scales in both times (T1, T2) for the four groups.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Time</th>
<th>Price difference unfair</th>
<th>Price unfair</th>
<th>Price difference unfair</th>
<th>Price unfair</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td></td>
<td></td>
<td>T2</td>
<td></td>
</tr>
<tr>
<td>ComAn</td>
<td>0.672</td>
<td>0.823</td>
<td>0.699</td>
<td>0.868</td>
<td></td>
</tr>
<tr>
<td>ComId</td>
<td>0.686</td>
<td>0.769</td>
<td>0.932</td>
<td>0.803</td>
<td></td>
</tr>
<tr>
<td>IndAn</td>
<td>0.775</td>
<td>0.747</td>
<td>0.759</td>
<td>0.713</td>
<td></td>
</tr>
<tr>
<td>IndId</td>
<td>0.339*</td>
<td>0.760</td>
<td>0.496*</td>
<td>0.793</td>
<td></td>
</tr>
</tbody>
</table>

*Though the Cronbach’s alpha value for these items are less than 0.7, however, the Inter-Item Correlations Means lies between 0.2 and 0.4 as suggested by Pallant (2011 P. 97)*

### Table 6A. Cronbach’s alpha values for the expertise scale for the four groups.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Expertise Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ComAn</td>
<td>0.744</td>
</tr>
<tr>
<td>ComId</td>
<td>0.862</td>
</tr>
<tr>
<td>IndAn</td>
<td>0.775</td>
</tr>
<tr>
<td>IndId</td>
<td>0.853</td>
</tr>
</tbody>
</table>

Table 6A. Cronbach’s alpha values for the expertise scale for the four groups.
<table>
<thead>
<tr>
<th>Groups</th>
<th>Anonymity Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ComAn</td>
<td>0.757</td>
</tr>
<tr>
<td>ComId</td>
<td>0.702</td>
</tr>
<tr>
<td>IndAn</td>
<td>0.851</td>
</tr>
<tr>
<td>IndId</td>
<td>0.489*</td>
</tr>
</tbody>
</table>

Table 7A. Cronbach’s alpha values for the anonymity scale for the four groups

* Inter-Item Correlations Mean 0.324, recommended to be between (0.2-0.4)