

## Exposing Pinocchio customer

Harris, Lloyd

DOI:

[10.1108/JOSM-06-2015-0193](https://doi.org/10.1108/JOSM-06-2015-0193)

### *Document Version*

Early version, also known as pre-print

### *Citation for published version (Harvard):*

Harris, L 2016, 'Exposing Pinocchio customer: Investigating exaggerated service stories', *Journal of Service Management*, vol. 27, no. 2, pp. 63-90. <https://doi.org/10.1108/JOSM-06-2015-0193>

[Link to publication on Research at Birmingham portal](#)

### **Publisher Rights Statement:**

Eligibility for repository: Checked on 15/4/2016

### **General rights**

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

### **Take down policy**

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact [UBIRA@lists.bham.ac.uk](mailto:UBIRA@lists.bham.ac.uk) providing details and we will remove access to the work immediately and investigate.

## **EXPOSING PINOCCHIO CUSTOMERS: INVESTIGATING EXAGGERATED SERVICE STORIES**

### **INTRODUCTION**

Customers tell each other stories about their service consumption experiences. Such stories are common characteristics of conversations between friends and family. Indeed, these stories are so essential to the lives of our social species that they have always been a part of human life. Modern social media communication tools have amplified the effects of such word-of-mouth storytelling. Consumers often share their views of services with friends and acquaintances while seeking opinions from other friends and family. Organizations also acknowledge the importance of conversational interaction and they design sophisticated strategies to exploit positive word-of-mouth. These word-of-mouth communications are commonly assumed to be truthful communications between peers, but the assumption is frequently wrong (e.g. DePaulo and Bell 1996; Chung and Darke 2006; Audrain-Pontevia and Kimmel 2008; Duan, Gu, and Whinston 2008;). Pinocchio, in the classic Italian children's story (Collodi 1883), was a puppet whose nose grew longer when he lied. As such, Pinocchio serves as a good metaphor for customer's lying about their consumption experiences. This research investigates the phenomenon of Pinocchio Customers exaggerating their experiences as they retell them.

Arndt (1967) and Richins (1983) are frequently cited for triggering exponential growth in contemporary research on customer word-of-mouth (particularly, negative), although earlier commentators noted the efficacy of such interaction (Allport and Postman 1947). Whyte (1954, p. 140) argues "practically everyone agrees that the American consumer is immensely susceptible to word-of-mouth." Marketing researchers have devoted considerable attention to the drivers of customer word-of-mouth and explored its impact on a wide range of desirable organizational outcomes (Matos and Rossi 2008). However, most of this research assumes that customers truthfully retell their experience and the definitions and measures of word-of-mouth contain "no statement about the veracity" of such information (Audrain-Pontevia and Kimmel 2008, p. 125).

Studies suggest that humans lie in one-fifth of their social exchanges and deliberately deceive 30 percent of those with whom they have one-to-one conversations (DePaulo and Bell 1996). Indeed, Kornet (1997) argues that intentionally telling false stories is endemic in modern society. Serban (2001), argues that human evolution favored those who lie and that lying during social exchange is a logical and beneficial coping mechanism for contemporary industrial living. In this regard, judicious lying can be argued to be socially advantageous in a society in which, despite many physiological cues, most lies pass undetected—even by trained professionals (Mann, Vrij, and Bull 2002). Though far from a modern phenomenon, some commentators suggest that lying in human interaction has become more prevalent and more pervasive (Meltzer 2003).

Allport and Postman (1947) were the first to report that consumers are not always accurate when sharing word-of-mouth stories. Although much of the subsequent research has focused on the occurrence of customer word-of-mouth (East, Hammond, and Wright 2007), critical scholars have noted the need for more research into varying word-of-mouth forms and outcomes (Wojnicki and Godes 2008; Garnefeld, Helm, and Eggert, 2011; Van Vaerenbergh, Larivière, and Vermeir 2012; Eisingerich, Auh, and Merlo 2013). Indeed, Chung and Darke (2006) find that some customer word-of-mouth is grossly exaggerated, and Duan, Gu, and Whinston (2008) argue that some word-of-mouth is not true. These insights led Sengupta, Dahl, and Goin (2002) and Wojnicki and Godes (2008) to argue that customers routinely misrepresent their consumption experiences. Nevertheless, to date, empirical research that focuses on this phenomenon is lacking while our appreciation of the nature and scope of such customer behavior is limited. In this study, such activities are labeled “exaggerated word-of-mouth”, which we define as intentionally distorted communications by customers that misrepresent their consumption experiences.

This paper explores the nature and scope of exaggerated customer word-of-mouth and contributes insights in four ways. First, this research explores the scope of consumer exaggeration during word-of-mouth storytelling and the intended targets of such communications. Second, this research focuses on exaggerated *negative* word-of-mouth and develops a conceptual model of the drivers of such activity. Third, the theory is tested and contributes empirical insights into exaggerated negative word-of-mouth.

Fourth, through experiments, insights are gained into the cognitive mechanisms leading to exaggeration and the effects of attribution differences in personal versus service provider blame. The insights garnered in these studies have direct applications for service managers attempting to manage damaging negative word-of-mouth.

Exaggerated word-of-mouth by Pinocchio Customers is investigated through two exploratory studies and two experimental studies. The first two studies use self-reporting survey methods to explore the phenomena of exaggerated word-of-mouth. The first exploratory study explores the scope consumers engage in both exaggerated and unexaggerated word-of-mouth and the targets of such activities. Driven by the findings of the first study, the second exploratory study focuses on exaggerated negative word-of-mouth and explores the drivers of customer-exaggerated negative word-of-mouth. The next two studies are experimental investigations, which generate insights into the attribution of service failure and exaggerated negative word-of-mouth.

### **EXPLORING THE VERACITY OF CONSUMER WORD-OF-MOUTH**

The assumption that consumer word-of-mouth is truthful, sincere and candid is implicit in most consumer word-of-mouth studies (Audrain-Pontevia and Kimmel 2008). However, a growing body of evidence demonstrates consumers routinely misbehave (Fullerton and Punj 2004; Reynolds and Harris 2009). Studies of customer misbehaviors find evidence of widespread customer lying during interactions with service providers (Harris 2008), fraudulent dishonesty (King and Dennis 2003), opportunistic cheating (Wirtz and McColl-Kennedy 2010), and even violence and aggression (McColl-Kennedy, Patterson, Smith, and Brady 2009).

Studies in sociology, psychology, criminology, and anthropology find that humans habitually lie and exaggerate during their interactions (Meltzer 2003). While service researchers find that consumers generally view word-of-mouth as trustworthy and accurate (e.g., Busch and Houston 1985) and that humans instinctively trust the comments of others (Ekman 1996), studies of deception find that most people have exceedingly poor lie detection skills (Edelstein, Luten, Ekman, and Goodman 2006). Indeed, many studies find that most people's accuracy at identifying lies is rarely greater than would be expected

by chance (Malone and DePaulo 2001). Theorists who argue that lying is essential to societal survival and social bonds (Smyth 2002) frequently cite these findings. Depaulo and Bell (1996) found that most people lie at least once every day and during 30 percent of extended social interactions.

Given these social science findings, the dearth of research into exaggerated customer word-of-mouth is perplexing (Wojnicki and Godes 2008). Nevertheless, occasional studies suggest that customers exaggerate their communications. Sengupta et al. (2002) found that consumers lie about products they have bought, and Chung and Darke (2006, p. 277) argued that customers pass on exaggerated information that is “less impartial than consumers assume.” Duan et al. (2008) studied online word-of-mouth and conclude that some is demonstrably untrue. These and other insights have led commentators to argue that additional research is needed into the less salubrious customer behaviors during service experiences (Fisk et al. 2010). Thus:

**P1.** Consumers regularly exaggerate both positive and negative word-of-mouth communications with a variety of target audiences.

### **Study 1: Exploring the Prevalence of Exaggerated Word-of-Mouth**

To gauge the scope of consumer exaggerated word-of-mouth communications, a survey of hospitality consumers was deemed appropriate on the grounds that prior studies have reported a high level of customer word-of-mouth in this context (East et al. 2008). A representative sample of 1,000 consumers was obtained from a data broker. In total, 252 questionnaires were completed, for a response rate of approximately 25 percent. Of the respondents, 54 percent were women, the median age was 42, and the largest group comprised respondents who earned between \$40,000 and \$60,000 annually.

To measure non-exaggerated word-of-mouth, respondents were asked whether they had communicated their experiences of a visit to a restaurant, bar, or hotel to anyone within the last two months (see Appendix A for a list of the multi-item scales). Exaggerated word-of-mouth was similarly measured with a question that asked whether they had exaggerated any of their communications regarding these experiences. To gauge the frequency of exaggeration and non-exaggeration, respondents noted the number of times they had engaged in such activities during the last two months. A self-

completed word-of-mouth diary also gauged word-of-mouth frequency over two weeks (respondents recorded the nature and frequency of each word-of-mouth form) which is in line with East's (2007) recommendations to reduce retrieval bias in word-of-mouth research,

These single-item measures of word-of-mouth activity enable calculating an objective indicator of both exaggerated and non-exaggerated word-of-mouth incidence. However, to facilitate subsequent research and evaluate validity, additional subjective multi-item scales of these activities were added. Scales were developed that measured the scope of exaggerated and non-exaggerated (1) word-of-mouth activity, (2) positive word-of-mouth, and (3) negative word-of-mouth (see Appendix A). The word-of-mouth scales measured the degree respondents engaged in such communications.

### **Results of Study 1**

Table 1 documents the results of Study 1. Approximately 87 percent of the sample reported undertaking non-exaggerated word-of-mouth within the last two months. Exaggerated word-of-mouth was somewhat lower, with just over two-thirds of respondents recording episodes of exaggerated communication within the same period. The frequencies of both forms of word-of-mouth were measured in two ways. The self-reported and diary-recorded frequencies of both were compared and found to not be significantly different ( $p>0.05$ ). The mean frequency of non-exaggerated word-of-mouth (4 times) was significantly ( $p<0.05$ ) lower than the equivalent frequency of exaggerated communications (4.35 times). Thus, non-exaggerated word-of-mouth (348) is more frequent than exaggerated word-of-mouth (291), but those engaging in exaggerated word-of-mouth do so more often than those communicating non-exaggerated word-of-mouth. These findings show that exaggerated word-of-mouth is relatively common.

### **INSERT TABLE 1 HERE**

Analysis of the multi-item scales of non-exaggerated word-of-mouth found mean levels notably above the mid-point of 4 for non-exaggerated word-of-mouth activity (5.6) and positive word-of-mouth (4.8) and a mean of 3.9 for negative word-of-mouth. These levels broadly equate to previous studies and generally support the view that positive communication is more common than negative communication (East et al. 2007). However, the findings for exaggerated word-of-mouth are markedly different (see

Table 1). While the mean levels of negative and positive exaggerated word-of-mouth activity are closer to the mid-point (as would be expected with a lower level of sample penetration), the reported mean of exaggerated negative word-of-mouth is significantly higher ( $p < 0.05$ ) than exaggerated positive word-of-mouth. That is, consistent with Hennig-Thurau et al. (2004), respondents reported a higher level of exaggerated negative word-of-mouth than exaggerated positive word-of-mouth, possibly reflecting perpetrators' efforts to elicit listener attention or even sympathy.

Study 1 also suggests a different pattern in the intended target audiences of non-exaggerated and exaggerated word-of-mouth. For non-exaggerated word-of-mouth, communication appears equally prevalent across all six types of target audiences. However, for exaggerated word-of-mouth, prevalence appears linked to social links and intimacy as the incidence of exaggerated word-of-mouth rises with the level of social intimacy. These findings indicate consumers indiscriminately communicate non-exaggerated word-of-mouth while they communicate exaggerated word-of-mouth more often to socially close audiences. This suggests consumers have higher levels of exaggerated word-of-mouth with those whom they are socially close.

Overall, the results of Study 1 show exaggerated word-of-mouth is relatively common, predominantly negative in nature, and communicated to a wide range of target audiences. These findings broadly support P1.

## **Study 2: Exploring the Drivers of Exaggerated Negative Word-of-Mouth**

Since Study 1 found that exaggerated word-of-mouth is significantly ( $p < 0.05$ ) more often negative than positive, the remainder of this paper focuses on negative exaggerated word-of-mouth. Study 2 conceptualizes, operationalizes, and tests a model of the drivers of exaggerated negative word-of-mouth.

### **INSERT FIGURE 1 HERE**

Figure 1 identifies the key constructs included in Study 2. The rationale for the forwarded conceptual model is partially generalized from research on the drivers of customer word-of-mouth (Godes et al. 1995; Libai et al. 2010), theories of intentional customer misbehavior (Fullerton and Punj 2004), research into social lying behaviors (Mann et al. 2002), and insights from Study 1. The rationale

for the linkages between individual concepts and further details of theory is described subsequently.

First, Figure 1 depicts a positive association between customer dissatisfaction and exaggerated negative word-of-mouth. Customer dissatisfaction is the degree consumers consider their consumption expectations unfulfilled (Oliver 1981, 1996). Many studies conclude that customer dissatisfaction is a key driver of subsequent negative word-of-mouth (e.g., Godes et al. 2005; Wangenheim, 2005; Garnefeld, Helm, and Eggert 2011). Focusing on the deliberately deviant activities of consumers, Reynolds and Harris (2009) and Yi and Gong (2008) argue that dissatisfaction drives acts of intentional customer misbehavior. Thus, contemporary theory suggests that dissatisfaction is also likely to trigger deliberate acts of customer deviance during word-of-mouth exchanges (Reynolds and Harris 2009). These arguments lead to:

**H1.** The greater consumers' dissatisfaction, the greater is their exaggerated negative word-of-mouth.

Second, Figure 1 presents consumers' sufficiency of venting negative feelings as linked to exaggerated negative word-of-mouth. The sufficiency of venting negative feelings pertains to the extent post-service complaining consumers believe they adequately expressed their consumption-related frustrations (Sundaram, Mitra, and Webster 1998). Previous research has shown cathartic desires (such as, venting) drive consumers' negative communications (Bennett 1997) and when consumers *fail* to vent their negative feelings they are likely to engage in negative word-of-mouth (Voorhees, Brady, and Horowitz 2006). Studies of human interaction find that levels of fear, anger, and frustration are linked to dishonest communication (Yoo 2009) and can be used to self-justify exaggerated and falsified communication (Meltzer 2003). Thus:

**H2.** The lower consumers' sufficiency of venting of negative consumption-related feelings, the greater is their exaggerated negative word-of-mouth.

Third, Figure 1 shows that perceptions of interactional justice are linked to exaggerated negative word-of-mouth. This study uses Blodgett, Hill, and Tax's (1997) definition of interactional justice, which is the perceived fairness of how consumers are treated by employees during conflict/complaint processes.



In examining multiple forms of justice, Blodgett et al. (1997) and Wirtz and Mattila (2004) conclude that interactional justice is significantly more important in driving negative word-of-mouth than perceptions of distributive and procedural justice. Thus, when consumers perceive unfair treatment, they are more likely to engage in intentionally deviant behaviors, such as exaggerated negative word-of-mouth (Harris and Reynolds 2004). This is concordant with studies that argue that some consumers are motivated to spread negative word-of-mouth from a desire to retaliate (Cheung, Anitsal, and Anitsal 2007) or even to enact malicious revenge (Wetzer, Zeelenburg, and Pieters 2007). Indeed, Ross and Robertson (2000) argue that reflexive evaluations of situational social dynamics are a key determinant of people's willingness to lie. In such circumstances, consumers who perceive discourtesy (i.e., poor interactional justice) seem more likely to exaggerate their negative word-of-mouth. Thus:

**H3.** The lower consumers' perception of interactional justice, the greater is their exaggerated negative word-of-mouth.

Fourth, Figure 1 depicts an association between tie strength and exaggerated negative word-of-mouth. Interpersonal tie strength is a "combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services that characterize the tie" (Granovetter 1973, p. 1361). Wetzer et al. (2007) suggest that one motive for engaging in negative word-of-mouth is tie-strengthening social bonding, a process facilitated by higher levels of social interaction between strong (rather than weak) ties. This is concordant with the findings of Study 1 as well as earlier studies (e.g., Bansal and Voyer 2000), which indicated that exaggerated word-of-mouth was linked to social intimacy. Although higher levels of social interaction provide greater opportunities for word-of-mouth exaggeration, studies have also found that such dishonesty is related to social intimacy (Sullivan 2002). Indeed, sociologists and anthropologists have observed that intimate familial and social relationships are often built on lies; from the childhood deceptions of the Tooth Fairy and Santa Claus to the "white" lies between adult peers (Barnes 1994). Thus:

**H4.** The greater the tie strength between consumers and the target recipient, the greater is their exaggerated negative word-of-mouth.

The fifth factor linked to exaggerated negative word-of-mouth is public self-consciousness.

Customer public self-consciousness refers to the extent consumers' disposition is focused on how others perceive their actions (Buss 1980). Fernandes and dos Santos (2007) claim that negative word-of-mouth is more common among customers with high levels of public self-consciousness, and Marquis and Filiatrault (2002) show that low levels of public self-consciousness are associated with direct forms of complaining. These insights are supported by research showing links between the levels of customer public self-consciousness and customer misbehavior (Harris 2008; King and Dennis 2003). In terms of deliberate negative word-of-mouth exaggeration, Kamins, Folkes, and Perner (1997) find that consumers have a higher propensity to spread rumors that reflect on them favorably, and Sengupta et al. (2002) find increased levels of misrepresentation (lying) when recipients are viewed as inspirational figures. Hennig-Thurau et al. (2004) observe that negative word-of-mouth can be motivated by a need to enhance self-image. Thus:

**H5.** The greater consumers' public self-consciousness, the greater is their exaggerated negative word-of-mouth.

The sixth factor linked to exaggerated negative word-of-mouth is the consumers' maven status. A market maven is someone who has "information about many kinds of products, places to shop, and other facets of markets and [who initiates] discussions with consumers and [responds] to requests from consumers for market information" (Feick and Price 1987, p. 85). By definition, the scope of market mavenism is linked to word-of-mouth propensity (Price, Feick, and Guskey 1995; Wiedmann, Walsh, and Mitchell 2002; Wangenheim, 2005). Recently, Wojnicki and Godes (2008) find that mavens self-enhance through positive word-of-mouth that demonstrates their aptitude. However, Moore (2012) suggests that where word-of-mouth includes *describing* content (as seems likely during exaggeration); negative word-of-mouth is increased. Indeed, studies of market maven motivations provide some suggestions that they may exaggerate their word-of-mouth. Slama, Natarajan, and Williams (1992) argue that market mavens have a driving, imperative need to gain pleasure through advice offering, suggesting that the pleasure gained is more important to the maven than the actual advice. Furthermore,

Wetzer et al. (2007) note that word-of-mouth is often motivated by people's desire for self-presentation and revenge, indicating that advice offering is far from exclusively altruistic in nature. Thus:

**H6.** The greater the market mavenism of consumers, the greater is their exaggerated negative word-of-mouth.

Seventh, Figure 1 shows that the extent of consumer anomia is linked to exaggerated negative word-of-mouth. The term "anomia" means the perceived absence of social norms or laws (Rosenbaum and Kuntze 2003) and is similar to the concept of alienation. Intuitively, consumers with high levels of anomia are more likely to engage in acts that break social norms (e.g., truthfulness) because, psychologically, such consumers fail to recognize broader social norms. Thus, sociologists argue that anomia frequently manifests in untruthfulness (Zhao and Cao 2010) and affects both the processing and the nature of verbal communications between peers (Echebarria-Echabe 2010). Recent studies of deviance during service suggest that levels of customer (Reynolds and Harris 2009) and employee (Harris and Ogbonna 2006) alienation are positively associated with the severity and extent of deviance. Similarly, Rosenbaum and Kuntze (2003) conclude that anomia is associated with various forms of unethical and untruthful consumer behavior. Thus:

**H7.** The greater consumers' anomia, the greater is their exaggerated negative word-of-mouth.

## **Methods**

To test these seven hypotheses, a self-administered survey again focused on the bar, restaurant, and hotel sectors. A new sample was obtained from a data brokerage agency and crosschecked to ensure exclusivity. To ensure suitability and improve response rates, each potential respondent was contacted through a personalized letter. The letter requested participation by people who had told others of a recent bar, restaurant, or hotel experience about which they had complained at the time. In total, 275 fully completed questionnaires were received. This was a response rate of more than 38%, according to the Council of American Survey Research Organizations (1982) response rate calculation approach. The majority (52%) of respondents were woman, with a median age of 34 and a median income of \$39,000. The majority lived with a partner (married or unmarried) and had at least a high school level of education.

To test the seven hypotheses, nine reflexive measures were required. Appendix A provides the scales for each of these factors. Dissatisfaction was assessed with a four-item scale based on the studies of Bloemer and Odekerken-Schröder (2002) and Pizam and Ellis (1999). The five items measuring the perceived sufficiency of consumer venting of negative feelings were based on an adapted version of Hennig-Thurau et al.'s (2004) scale. Interactional justice was gauged with an adapted version of Maxham and Netemeyer's (2002, 2003) five-item measure. The four-item measure of tie strength was adapted from the scale De Bruyn and Lilien (2008) used, which was originally derived from Frenzen and Davis (1990). The five-item scale gauging market mavenism was drawn from Price et al.'s (1995) six-item scale. The six-item measure of public self-consciousness is from the broader revised self-consciousness scale (Schlenker and Weigold 1990), which Marquis and Filiatrault (2002) successfully adapted to the consumer context. The six items measuring anomia were drawn from Srole's (1956) nine-item scale. Finally, the measure of exaggerated negative word-of-mouth was taken from the scale developed in Study 1.

To gauge potential non-response bias, a time-trend extrapolation test was employed (Armstrong and Overton 1977). The marker variable technique was employed (Malhotra, Kim, and Patil 2006; Podsakoff, Mackenzie, Lee, and Podsakoff 2003). Social desirability was assessed using four items derived from Reynolds (1982). The results suggest that non-response bias, common methods bias, and social desirability did not bias the data. To control for consumers' consumption-related ethical norms, a shortened version of Fukukawa's (2002) consumer ethics scale was adopted. Four demographic control variables—gender, age, income, and race—were also measured because they potentially influence dysfunctional customer behavior (Harris and Reynolds 2003).

CFA was used to assess the measurement model. To obtain a ratio of sample size to estimated parameter greater than five, which improves the reliability of parameter estimates (Bentler and Chou 1987), the psychometric properties of the measures were examined by estimating two measurement models. The fit of the data were gauged using the chi-square/degrees of freedom ratio ( $\chi^2/df$ ), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Given the large

sample size (275), some distortion of the chi-squared statistic was expected (Marsh, Bella, and McDonald 1988). Nevertheless, the first measurement model yielded satisfactory fit with the data, producing a  $\chi^2/df$  of 2.31, CFI of 0.92, and RMSEA of 0.06. Similarly, the second measurement model generated acceptable fit with the data, producing a  $\chi^2/df$  of 2.36, CFI of 0.93, and RMSEA of 0.07.

Cronbach's alpha coefficients, composite reliabilities, and average variance extracted (AVE) were the reliability measures employed (see Appendix A). During the estimation of the measurement models, all loadings (and corresponding t-values) were significant, indicating convergent validity. Inspection of Cronbach's alpha coefficients found acceptable coefficients ranging from 0.82 (consumer dissatisfaction) to 0.93 (consumption-related ethical norms). The discriminant validity assessment procedure that Fornell and Larcker (1981) recommend was adopted. In each case, this procedure found that the square of the parameter estimates between two constructs was less than the AVE, in support of claims of discriminant validity.

## **Results of Study 2**

A structural equation was estimated to test each hypothesis and the fit of the model to the data. Here, consistent with the procedure employed during CFA, the structural model was gauged with absolute (RMSEA), incremental (CFI), and parsimonious ( $\chi^2/df$ ) fit measures (see Table 2). Accordingly, a structural model of the 7 hypothesized relationships (see Figure 1) was estimated. This proved a poor overall fit with the data, with RMSEA of 0.1, CFI of 0.77, and  $\chi^2/df$  of 3.71, suggesting that a better-fitting model could be specified. Consequently, to improve model fit, respecification was deemed worthy of consideration and existing theory reexamined to explore overlooked paths. A reevaluation of extant theory suggested that the initial proposed model (see Figure 1) neglected to include well-established links between dissatisfaction and consumer venting sufficiency, tie strength and public self-consciousness and between market mavenism and public self-consciousness. Prior research has suggested that customers' dissatisfaction is linked to venting negative feelings (Nyer 2000). Further, earlier studies argue that when the sender and receiver of information have close social ties, public self-consciousness (a disposition that focuses on how others perceive actions) is likely to be higher (e.g., Jaimovich 1999). In addition, market

maven behavior is positively associated with self-consciousness (Walsh et al. 2004). Accordingly, additional paths were specified. However, in line with Reynolds and Harris (2009), the demographic control variables were found not to be significant and were excluded from the analysis.

### **INSERT TABLE 2 AND FIGURE 2 HERE**

The two models were compared, which revealed that the respecified model (see Figure 2) was a better fit across all indices examined. Consequently, the respecified model was examined to gauge overall validity. The fit statistics indicate that the research model provides a very good fit with the data ( $\chi^2/\text{d.f.} = 1.84$ , CFI = 0.93, and RMSEA = 0.056), leading to the conclusion that the research model constitutes a valid representation of relationships.

Hypotheses 1 to 3 focus on the links between exaggerated negative word-of-mouth and consumer dissatisfaction, venting sufficiency, and interactional justice. H1 and H2, respectively, state that the higher the levels of consumer dissatisfaction and the lower the perceived sufficiency of venting of negative feelings, the higher is the level of exaggerated negative word-of-mouth. Evidence in support of H1 is found in the form of a significant, positive link between the level of consumer dissatisfaction and exaggerated negative word-of-mouth ( $\beta = 0.131$ ,  $t = 2.2$ ,  $p < 0.05$ ), indicating that dissatisfying experiences affect subsequent exaggeration of negative word-of-mouth communications. H2 is also supported through a significant, negative association between perceived sufficient venting and exaggerated negative word-of-mouth ( $\beta = -0.144$ ,  $t = -2.5$ ,  $p < 0.01$ ), suggesting that when consumers believe that they have insufficiently vented negative feelings, they are more likely to engage in exaggerated negative word-of-mouth. H3 argued that perceived interactional justice is associated with exaggerated negative word-of-mouth. Table 2 documents substantiation for this hypothesis ( $\beta = -0.14$ ,  $t = -2.6$ ,  $p < 0.01$ ), in support of the view that the perceived fairness during service experiences is linked to the exaggerated of negative word-of-mouth. Given such results, H1–H3 are fully accepted.

Hypotheses 4 to 7 focus, respectively, on the direct relationships between exaggerated negative word-of-mouth and tie strength, public self-consciousness, market mavenism, and anomia. Data analysis reveals no support for the hypothesized association between tie strength and exaggerated negative word-

of-mouth ( $\beta = 0.04$ ,  $t = 1.0$ ,  $p = 0.33$ ) suggesting that the findings of Study 1 could be misleading. The lack of a significant link leads to the rejection of H4. In contrast, strong support emerges for H5–H7. Public self-consciousness ( $\beta = 0.127$ ,  $t = 2.3$ ,  $p < 0.05$ ), market mavenism ( $\beta = 0.169$ ,  $t = 3.6$ ,  $p < 0.001$ ), and anomia ( $\beta = 0.271$ ,  $t = 5.4$ ,  $p < 0.001$ ) are all significantly associated with exaggerated negative word-of-mouth, indicating that a range of consumer characteristics affects such activities. Consequently, H5–H7 are accepted in full.

Collectively, the variables in the model generate a squared multiple correlation (SMC) of 0.22. That is, the variables in the model explain over 22% of the variance in exaggerated negative word-of-mouth. This suggests that while over a fifth of the variance of exaggerated negative word-of-mouth is explained, additional factors must explain the remaining variance (see later). Given the lack of previous attention and studies of exaggeration in consumer word-of-mouth, the SMC of 0.22 can be argued to be far from trivial. Indeed this level of explanatory power is similar to other studies of word-of-mouth (e.g. East et al. 2008) and deviant customer behavior (e.g. Reynolds and Harris 2009).

## **EXPERIMENTING WITH EXAGGERATED WORD-OF-MOUTH**

Although Studies 1 and 2 provide evidence for exaggerated word-of-mouth and its possible antecedents, it is natural to ask whether it is possible to provide direct evidence concerning the operation of self-reported measures of word-of-mouth exaggeration. Hence, the rationale for our last two studies is to explore the causal impact of various factors governing word-of-mouth in a simple setting, using an approach where the key variables could be manipulated experimentally.

In addition to providing a complementary methodology to offer stronger evidence for some of the key conclusions drawn from the surveys in Studies 1 and 2, the experimental studies were also aimed at helping to answer a key question: *what are the underlying cognitive mechanisms leading to exaggeration?* In particular, do the exaggerations arise from the customer forming a distorted perception, which they then honestly report; or is their perception veridical, but their communication deliberately distorted when communicated to the provider of the service for rhetorical storytelling reasons?

### **Study 3: Venting Frustration and Exaggerated Negative Word-of-Mouth**

In Study 3, we created a simple experimental scenario that can induce real consumer experience of a service: a survey. The crucial manipulation is that, for half the participants, this experience would involve a frustrating aspect: long waiting times between parts of the study. The main aim was to investigate whether the frustrating intrusion would lead to exaggerated negative word-of-mouth.

People were presented with the survey containing a scenario about a hypothetical chain of restaurants wishing to find consumer preferences for various dishes. While specifying their choices, half of the participants experienced error messages between each of the three tasks. We expected that frustration induced by the error messages would lead to marginal overestimation of the actual time the tasks took. Additionally, we wanted to investigate the effect of frustration on recommendation, a future visit to the restaurant, dissatisfaction, and anomia. Further, we were interested in what role the position of venting sufficiency had relative to the time estimates, recommendation, and a future visit. Therefore, the participants were asked to vent either before or after those questions. Our hypothesis was that the effects frustration had on recommendation, future visit, and the time estimates would be attenuated if people had an opportunity to vent first. Lastly, we were interested in what role personal versus neutral framing of the recommendation variable had on time exaggeration. Specifically, we wanted to determine whether, after experiencing frustration, the participants who were asked to recommend the survey to their best friend as opposed to for recording purposes only, would exaggerate to a greater extent.

The sample consisted of 543 respondents (245 females, 162 males, and 136 unknown) between the ages of 18 and 82. The respondents were recruited via an online sample survey company. All consented to take part in the study. A short, online survey was programmed in Qualtrics, consisting of the instructions, dishes selection task, feedback section, and demographic section.

The dishes selection task involved three tasks regarding appetizers, entrées and desserts. Each task included the instructions and a list of 12 dishes relevant to the particular category. Three empty boxes were placed next to the list, one for favorable, the other for unfavorable and the last box for indifferent dishes (see Appendix C). Each task had a drag and drop feature, so the dishes could be moved from the



list to any of the boxes using a mouse. The tasks were timed and all dishes had to be moved in order to proceed to the further questions.

The feedback section consisted of a set of questions related to the survey experience: venting sufficiency, recommendation, future visit to the restaurant, time estimates, and dissatisfaction. Two additional variables, the control question and anomia, were also included. Recommendation was assessed by one item and presented in one of the two different forms depending on the manipulation: personal (recommend to one's best friend) or impersonal (make a recommendation for recording purposes only). A 100 point scale was applied ranging from 0 "I would definitely never take this survey again" to 100 "I would definitely take this survey again. Venting sufficiency was presented as an open-ended question. There was no limit to how many words one could enter in the text box. Future visit to the restaurant was evaluated by one item, listing two answer options: "Yes" and "No". Time estimates were assessed with three items, each focusing on one of the tasks. The answers were required in minutes and seconds. Dissatisfaction was evaluated with four items (such as "I was dissatisfied with this survey experience") and anomia by six items (including "The situation of the average citizen is getting worse and not better."). Both variables were assessed by a 7-point Likert-type scale, ranging from 1 "strongly disagree" to 7 "strongly agree". The reliability of the assessment of dissatisfaction was  $\alpha = .84$  and the reliability of anomia was  $\alpha = .70$ . The control question was examined by one item, asking whether there were any problems with the survey provider. There were two possible answers to this item: "Yes" and "No".

The demographic section included typical demographic questions like age and gender, and "catch" questions such as a word-matching task and birth year. The "catch" questions are commonly included in online surveys to detect inattentive participants. The word matching task included one question: "Please select the word shark from the list below". The list consisted of nine words one of which was "shark".

A between-participant 2x2x2 (frustration present/absent, venting sufficiency first/last, personal/impersonal scenario) design was implemented. Four error screens intersected the tasks of selecting dishes, so the first screen appeared before the Appetizers task, the second in between the

Appetizers and Entrée tasks, and so on. The screens were identical, containing the error and waiting message. Each screen lasted 20 seconds. In the condition without frustration, no error screens appeared. The control question focusing on the presence or absence of such problems was placed after the last error screen. The item assessing venting sufficiency was presented either straight after the control question or after the recommendation, future visit and time estimates variables. In the feedback section, the order of the time estimates and future visit was randomized. The recommendation item appeared after the venting sufficiency item if venting sufficiency was presented first; otherwise it was presented after the control question. All tasks and items in the survey were presented one at a time. Apart from the demographic questions, every response was required before proceeding to the next question.

The participants read the instructions describing a hypothetical chain of restaurants. Then the participants were informed they would be asked to provide preferences for restaurant dishes and feedback. After that, the consent was requested, followed by the first task, or alternatively the first error screen. Once the tasks were completed, the participants proceeded to the feedback section, followed by the demographic section.

### **Results of Study 3**

After filtering responses, 347 responses were analyzed. Recommendation scores ranged from 0 to 100 where the higher score indicated the higher degree of recommendation. Future visit to the restaurant had two possible values: 1 for “yes” and 2 for “no”. The scores for the last item of dissatisfaction were reversed and added to the sum of the first three items, so the final score for dissatisfaction could vary from 4 to 28 where the higher scores represented the higher dissatisfaction. Similarly, all six scores for anomia were added, ranging from 6 to 42 with the higher scores indicating the higher anomia. Time exaggeration for each task was calculated by subtracting the estimated time in seconds from the actual time in seconds.

### **INSERT TABLE THREE HERE**

The means and standard deviations of the main variables for the frustration and venting sufficiency manipulations are presented in Table 3. For the time exaggeration, the directions of the mean

differences between the levels of frustration varied across the tasks, although these differences were not large. Indeed ANOVA test revealed no significant relationship (Appetizers:  $F(1, 329) = 0.14, p = .709, \eta_p^2 < .001$ ; Entrées:  $F(1, 329) = 0.10, p = .748, \eta_p^2 < .001$ ; Desserts:  $F(1, 329) = 1.04, p = .308, \eta_p^2 = .003$ ). Moreover, experiencing frustration led to decreased recommendation ( $F(1, 329) = 64.85, p < .001, \eta_p^2 = .165$ ) and dissatisfaction ( $F(1, 329) = 1139.27, p < .001, \eta_p^2 = .776$ ). The participants also expressed a lower inclination to visit the restaurant if one opened in their area ( $F(1, 329) = 12.31, p = .001, \eta_p^2 = .036$ ). The analysis showed that the minute difference between anomia scores was not significant ( $F(1, 329) = 1.32, p = .252, \eta_p^2 = .004$ ). Venting sufficiency played a significant role in participants' recommendation when the other two manipulations were considered. Specifically, a significant, three-way interaction was found for recommendation ( $F(1, 329) = 4.10, p = .044, \eta_p^2 = .012$ ). In both personal and impersonal scenarios, the participants were less likely to recommend if they were exposed to frustration. However, if those participants had a chance to vent first, their recommendations improved but only for those who were to recommend for recording purposes only. Lastly, the two-way interaction between the frustration and scenario variables was not found for the time exaggerations (Appetizers:  $F(1, 329) = .90, p = .344, \eta_p^2 = .003$ ; Entrées:  $F(1, 329) = .49, p = .486, \eta_p^2 = .001$ ; Desserts:  $F(1, 329) = .11, p = .742, \eta_p^2 < .001$ ).

To conclude, we found the frustrating situation might have a detrimental effect on consumers' dissatisfaction and recommendation. Further, this situation could even influence the third party, which is not directly associated with the fault of the service but only with the provider itself. Being able to vent at the right time could also alleviate impersonally targeted recommendation when frustration is present. Despite those interesting results, time exaggerations did not seem to be affected by any of the manipulations. In some cases, the means were even in the opposite direction than expected. One possible explanation for such an effect could be offered by attribution theory (Jones and Davis 1965). According to this theory, people interpret situations in a way to attain their positive self-image. Reflecting on our experiment, it seems probable that on being asked "How long did the task take you", the participants assumed that if they exaggerated, it would shed unfavorable light on their own abilities, rather than

providing further evidence of the weaknesses of the survey. In this regard, consumers were unwilling to act as Pinocchio Customers where doing so reflected poorly on them. This view is concordant with the excellent study of Wojnicki and Godes (2008) which finds strong evidence that consumer's word-of-mouth is affected by their motivation to self-enhance. Therefore we decided to run the second experiment where the attribution would be made towards the service provider.

#### **Study 4: Attribution and Exaggerated Negative Word-of-Mouth**

Attribution theory (Jones and Davis 1965) suggests a further experiment reframing the key question about the length of time that the survey took. Crucially, the aim is to modify the natural attribution of any slowness to be the poor design of the survey, rather than the failings of the participant. If exaggeration has a perceptual origin, rather than a rhetorical origin, then this variation should make no difference: that is, if a frustrating experience has a direct impact on other aspects of experience (in this case, perception of time), then the way it is reported by participants should be immaterial. In contrast, if exaggeration has a rhetorical storytelling basis (that is, people exaggerate to make their case stronger), then switching attribution to the survey should generate exaggeration, when the factor of interest is attributed as indicating the quality of the survey (or more generally the service being evaluated). The aim is to investigate whether consumers act as Pinocchio Customers when they attribute blame to others.

Therefore in Study 4, the design was simplified and several changes were added. Specifically, attribution was altered for the time estimate questions in the direction of the survey provider in two ways. First, at the beginning, all participants were notified that the system might get stuck. Second, in the time estimate questions, we stated that the task was designed to take only 15 seconds and the survey team wished to know if they designed the task well. The question was how long the respondents thought each task had taken. The 15-second limit was specified, so all participants made their estimates from the same reference point. Further, we investigated whether people experiencing frustration not only exaggerate but also create a falsehood. Hence, participants were asked whether they saw any unreadable characters while working on the tasks. In this experiment, we also attempted to replicate the results regarding the

recommendation, dissatisfaction, and future visit variables. Anomia was removed from the design as no relationship was found in the previous experiment. The main focus was on the frustration manipulation.

We recruited 259 respondents via an online sample survey company. All consented to take part in the study. The online survey for Study 4 was mostly identical to the survey from Study 3. The following alternations were made in the feedback section: The recommendation variable was presented in the personal form only. Time estimates included the anchor for the completion of each task, which was set to 15 seconds. The question wording was changed, so the attribution was not placed on the respondents. Another variable assessing exaggeration was added consisting of two items. The first item was focused on the evaluation of the presence versus absence of unreadable characters in any of the selecting dishes tasks, with two possible answer options: “Yes” and “No”. The second item, which appeared only if the former answer option was selected, assessed the number of such characters. The reliability of the dissatisfaction assessment was  $\alpha = .85$ .

A one-way between participant design was used with frustration (present/absent) as the main factor. The order of the exaggeration items was randomized. The control items were presented before those questions. Recommendation, future visit and dissatisfaction were placed after the exaggeration questions. The experimental procedure in Study 4 was identical to the procedure in Study 3.

#### **Results of Study 4**

The criteria for the exclusion were the same as in Study 3. The recommendation, dissatisfaction and future visit scores were scaled in the same way as in the previous experiment. Calculating the scores for time exaggeration changed. The estimates converted in seconds were subtracted from the reference point. The first character variable had two possible scores: 1 for “yes” and 2 for “no”. The second character variable could have any numbers greater than 0.

The Mann-Whitney U test was applied to all further analyses. The condition without frustration had 93 participants and with frustration 73 participants. The mean differences between the levels of the frustration manipulation are presented in Table 2. The participants who experienced the error screens made the time estimates higher for all tasks. These differences were significant (Appetizers: Mann

Whitney U:  $z = 2.03$ ,  $p = .042$ ; Entrées: Mann Whitney U:  $z = 2.18$ ,  $p = .029$ ; Desserts: Mann Whitney U:  $z = 2.50$ ,  $p = .013$ ). There were no significant differences in the actual completion times for the Appetizers and Entrée tasks between the participants who experienced the frustration and those who did not (Appetizers: Mann Whitney U:  $z = 1.13$ ,  $p = .258$ ; Entrées: Mann Whitney U:  $z = 1.44$ ,  $p = .150$ ), although a significant difference was reported for the dessert task (Mann Whitney U:  $z = 2.18$ ,  $p = .029$ ). This suggests that there may be a small impact of how long the tasks actually took. However, this impact cannot explain the very large effects observed in exaggerating the times. Further the results for recommendation (Mann Whitney U:  $z = 5.72$ ,  $p < .001$ ) and dissatisfaction (Mann Whitney U:  $z = 2.49$ ,  $p = .013$ ) were successfully replicated. However, the differences for the future visit variable were found non-significant (Mann Whitney U:  $z = 0.11$ ,  $p = .912$ ). Only one participant per condition documented the presence of unreadable characters (Mann Whitney U:  $z = 0.17$ ,  $p = .863$ ). They both noted seeing two such characters.

#### **INSERT TABLE FOUR HERE**

To summarize, when the attribution was towards the service provider rather than the individual, people who were faced with the error screens made significantly higher time exaggerations than people who were not. This strongly suggests people undertake exaggerated word-of-mouth and act as Pinocchio Customers. However, the participants who experienced frustration did not tell a lie about the presence of unreadable characters. Therefore, it seems that people exaggerate about their negative experiences, but their Pinocchio tendency to exaggeration has its limits. It is possible that people tend to exaggerate about the most plausible aspects of their experience. Study 4 replicated the findings of Study 3 with regards to recommendation and dissatisfaction.

### **CONTRIBUTIONS AND IMPLICATIONS**

While the links between customer word-of-mouth and desirable organizational outcomes have been widely studied (Matos and Rossi 2008), the possibility that customers might routinely exaggerate their consumption experience stories has been neglected (Sengupta et al. 2002; Wojnicki and Godes 2008). This research explicitly addressed customer exaggeration regarding service consumption and the

reasons customers engaged in such behaviors. Study 1 focused on the scope and targets of exaggerated word-of-mouth, and Study 2 concentrated on identifying the drivers of exaggerated negative word-of-mouth. Studies 3 and 4 experimentally elucidated the cognitive mechanisms leading to exaggeration.

The first contribution of this research centers on the explication of exaggerated word-of-mouth by service customers. While exaggerated word-of-mouth by consumers had previously been indirectly observed, our studies explored the scope and nature of exaggeration, culminating in experiments that find causal links between frustrated consumers and experience exaggeration. Our experiments find that that service consumers do *not* inexorably or implausibly exaggerate their service stories but in contrast consumers perspicaciously exaggerate. Moreover, Study 3 strongly supports the attribution-based insights of Wojnicki and Godes (2008) in that, where admissions of failure are personally attributed, self-enhancement appears to preclude exaggeration. However, Study 4 clearly demonstrates that, where failure is clearly attributed to service providers (rather than to the customer), exaggerated negative word-of-mouth occurs, unrestrained by self-enhancement/protection needs. These insights lead to the conclusion that exaggeration arises *not* from cognitive distortion of negative experiences; but from an individual's rhetorical storytelling objective. In this regard, Study 4 suggests that rather than all aspects of a negative experience tainting subsequent recollections; individuals exploit their storytelling skills to strengthen their claims regarding service provision.

A second contribution of this research derives from developing and testing a model of the factors associated with consumers' exaggerated negative word-of-mouth. To uncover some of the drivers of consumers' service experience exaggerations, Figure 1 formed a novel conceptual model of the drivers of consumers' exaggerated negative word-of-mouth. This model draws from literature on customer word-of-mouth, dysfunctional customer behavior, and consumer complaining, as well as the concordant research into deceitful human behavior and interaction in the fields of sociology, psychology, criminology, and anthropology. As such, the model synthesizes existing research and forms the basis of subsequent empirical evaluations. Testing this model found that consumers' exaggeration of experiences is driven by *both* psychological characteristics and perceptions of consumption experiences. Importantly, this study

found that customer-exaggerated negative word-of-mouth could be heavily affected by firm-related factors and influenced by firm activities.

The first study explored the phenomenon of exaggerated word-of-mouth and generated insights into the nature of such behaviors. In this regard, Study 1 generated a number of valuable insights. Somewhat unexpectedly, Study 1 found that exaggerated negative word-of-mouth is more prevalent than positive communications and further that exaggerated word-of-mouth is more common among socially close communicators. This is consistent with anthropological and psychological studies that show humans habitually lie during social exchanges and they are often rewarded for doing so (DePaulo and Bell 1996; Smyth 2002). Thus, Study 1 confirmed that social exchange regarding consumption experiences is similar to other forms of social exchange where deliberately telling falsehoods is endemic (Kornet 1997) and constitutes a beneficial coping mechanism for contemporary societal stresses and pressures (Serban 2001). In focusing on the wide-ranging organizational implications of customer-to-customer word-of-mouth communication, prior studies have assumed that customers act honestly and in good faith when recounting their consumption experiences.

The results of this study also have implications for future practice. Many frameworks and models in a range of industries stress the organizationally harmful effects of negative word-of-mouth (e.g., Reichheld 2006). The current study reinforced the importance of negative word-of-mouth while complicating the issue by highlighting exaggeration during consumers' word-of-mouth communications. Study 2 explored the reasons consumers engage in exaggerated negative word-of-mouth and provided some insights into management-controllable factors (e.g., poor interactional justice) that precede exaggerated negative communication. Although consumers' psychological characteristics are unknown and out of the firms' control, exaggerated negative word-of-mouth drivers, insufficient venting, dissatisfaction, and low interactional justice, are issues over which management has significant influence. Through the astute management of service and complaining systems, managers should be able to limit dissatisfaction, raise perceived justice during interaction, and provide clear opportunities for venting, thus reducing exaggerated negative word-of-mouth. Furthermore, when negative word-of-mouth is



particularly prevalent, procedures could be developed to reduce post-consumption word-of-mouth exaggeration. For example, firms could engage in additional post-complaint communication designed to reinforce consumer venting and highlight actions taken during interaction that emphasize justice. In addition, firms should stress personal experience during promotions to offset damaging exaggerated negative word-of-mouth. At a more strategic level, public policy initiatives to improve consumption-related ethical norms have proved successful in the past (e.g., anti-drinking driving campaigns have slowly altered the social acceptability of driving when intoxicated). The adoption of similar approaches to strengthen ethical norms could potentially prove valuable.

Although the studies presented generate contributions to theory and practical implications, there are three limitations of the research design and method. First, Study 1 included measures of both exaggerated and unexaggerated word-of-mouth, and Study 2 focuses on exaggerated negative word-of-mouth only. Further research is needed to explore the differences between exaggerated and unexaggerated communications forms, drivers, and consequences (particularly regarding the scope of intentional-unintentional exaggeration). Second, further research is needed into the incidence of word-of-mouth in both exaggerated and unexaggerated forms. Study 2 shows exaggerated negative word-of-mouth is more prevalent, while other studies indicate that when word-of-mouth is unexaggerated, the reverse is true. Additional research is needed to explore these differences and model the causes. Third, future research is needed to elucidate the causes of exaggerated word-of-mouth. While Study 2 generates an SMC of 0.22, additional research is needed to identify other variables that might also contribute.

These four studies are a thorough search for customer dishonesty during conversations about service experiences. When it serves their purposes customers frequently become Pinocchio Customers. Since humans can be characterized as habitually lying during social interactions, the limited academic attention to customer dishonesty while discussing service experiences is surprising. It is hoped that this inquiry will help sprout additional research into the knotty human problem of Pinocchio Customers.

## REFERENCES

- Allport, G. and L. Postman (1947), *The Psychology of Rumor*. New York: Henry Holt.
- Armstrong, J. S. and Overton, T.. (1977), "Estimating Non-Response Bias in Mail Surveys," *Journal of Marketing Research*, 14 (3), 396-403.
- Arndt, J. (1967), "Role of Product-Related Conversations in the Diffusion of a New Product," *Journal of Marketing Research*, 4 (3), 291-295.
- Audrain-Pontevia, A. and A.Kimmel (2008), "Negative Word-of-Mouth and Redress Strategies: An Exploratory Comparison of French and American Managers," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 21, 124-136.
- Bansal, H. and P.. Voyer (2000), "Word-of-Mouth Processes within a Services Purchase Decision Context," *Journal of Service Research*, 2 (3), 166-177.
- Barnes, J. (1994), *A Pack of Lies: Towards a Sociology of Lying*. Cambridge, UK: Cambridge University Press.
- Bennett, R. (1997), "Anger, Catharsis and Purchasing Behavior Following Aggressive Complaints," *Journal of Consumer Marketing*, 14 (2), 156-172.
- Bentler, P. and Chih-Ping Chou (1987), "Practical Issues in Structural Modeling," *Sociological Methods and Research*, 16, 78-117.
- Blodgett, J., D. Granbois, and R. Walters (1993), "The Effects of Perceived Justice on Negative Word-of-Mouth and Repatronage Intentions," *Journal of Retailing*, 69 (Winter), 399-428.
- , D. Hill, and S. Tax (1997), "The Effects of Distributive, Procedural, and Interactional Justice of Postcomplaint Behavior," *Journal of Retailing*, 73 (2), 18-210.
- , K.Wakefield, and J.Barnes (1995), "The Effects Of Customer Service On Consumer Complaining Behavior," *Journal of Services Marketing*, 9 (4), 31-42.
- Bloemer, J. and G. Odekerken-Schroder (2002), "Store Satisfaction and Store Loyalty Explained by Customer- and Store-Related Factors," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 15, 68-80.
- Busch, P.and M. Houston (1985), *Marketing: Strategic Foundations*. New York: Irwin.
- Buss, Arnold H. (1980), *Self-Consciousness and Social Anxiety*. San Francisco: Freeman.
- Caruana, A., Ramaseshan and M. Ewing (2001), "Anomia and Fraudulent Behavior by Retail Customers: A Study among Employees," *Journal of Retailing and Consumer Services*, 8, 181-187.
- Cheung, M-S., M. Anitsal, and I. Anistal (2007), "Revisiting Word-of-Mouth Communications: A Cross-National Exploration," *Journal of Marketing Theory and Practice*, 15 (3). 235-249.
- Chung, C.and P.. Darke (2006), "The Consumer as Advocate: Self-relevance, Culture, and Word-of-Mouth," *Marketing Letters*, 17, 269-279.
- Collodi, C. (1883), *The Adventures of Pinocchio*, Originally published in Italian.
- Council of American Survey Research Organizations (1982), *On the Definition of Response Rates*, CASRO Special Report, Port Jefferson, NY: The Council of American Survey Research Organizations.
- De Angelis, M., A. Bonezzi, A.Peluso, D.Rucker, and M. Costabile (2012), "On Braggarts and Gossips: A Self-Enhancement Account of Word-of-Mouth Generation and Transmission," *Journal of Marketing Research*, XLIX (August), 551-563.
- De Bruyn, A. and G. Lilien (2008), "A Multi-Stage Model of Word-of-Mouth Influence through Viral Marketing," *International Journal of Research in Marketing*, 25, 151-163.
- DePaulo, B.. and K.Bell (1996), "Truth and Investment: Lies Are Told to Those Who Care," *Journal of Personality and Social Psychology*, 71: 703-716.
- Duan, W., B. Gu, and A.Whinston (2008), "The Dynamics of Online Word-of-Mouth and Product Sales: An Empirical Investigation of the Movie Industry," *Journal of Retailing*, 84 (2), 203-213.
- East, R. (2007), "Researching Word of Mouth," *Australasian Marketing Journal*, 15 (1), 23-26.
- , K. Hammond, and W. Lomax (2008), "Measuring the Impact of Positive and Negative Word of Mouth on Brand Purchase Probability," *International Journal of Research in Marketing*, 25, 215-224.

- East, R., K. Hammond, and M. Wright (2007), "The Relative Incidence of Positive and Negative Word of Mouth: A Multi-Category Study," *International Journal of Research in Marketing*, 24 (2), 175-184.
- Echebarria-Echabe. A. (2010), "Effects of Suspicion on Willingness to Engage in Systematic Processing of Persuasive Arguments," *Journal of Social Psychology*, 150 (2), 148-159
- Edelstein, R., T. Luten, P. Ekman, and G. Goodman (2006), "Detecting Lies in Children and Adults," *Law and Human Behavior*, 30, 1-10.
- Ekman, P. (1996), "Why Don't We Catch Liars?" *Social Research*, 63 (3), 801-817.
- Eisingerich, A., S.Auh and O. Merlo (2013), "Acta Non Verba? The Role of Customer Participation and Word of Mouth in the Relationship Between Service Firms' Customer Satisfaction and Sales Performance," *Journal of Service Research*, published online 30 May 2013 DOI: 10.1177/1094670513490836.
- Feick, L. and L. Price (1987), "The Market Maven: A Diffuser of Marketplace Information," *Journal of Marketing*, 51 (1), 83-97.
- Fernandes, D. and C.dos Santos (2007), "Consumer Complaining Behavior in Developing Countries: The Case of Brazil," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 20, 86-108.
- Fisk, R., S. Grove, L. C. Harris, D. Keeffe, K. Reynolds, R. Russell-Bennett, and J. Wirtz (2010), "Customers Behaving Badly: A State of the Art Review, Research Agenda and Implications for Practitioners," *Journal of Services Marketing*, 24 (6), 417 - 429.
- Fornell, C. and D.Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.
- Frenzen, J.. and H.Davis (1990), "Purchasing Behavior in Embedded Markets," *Journal of Consumer Research*, 17 (June), 1-12.
- Fukukawa, K. (2002), "Developing a Framework for Ethically Questionable Behavior in Consumption," *Journal of Business Ethics*, 41, 99-119.
- Fullerton, R.and G. Punj (2004), "Repercussions of Promoting an Ideology of Consumption: Consumer Misbehavior," *Journal of Business Research*, 57, 1239-1249.
- Garnefeld, I., S. Helm and A. Eggert (2011), "Walk Your Talk: An Experimental Investigation of the Relationship Between Word of Mouth and Communicators' Loyalty," *Journal of Service Research*, 14 (1), 93-107.
- Godes, D. and D. Mayzlin (2004), "Using Online Conversations to Study Word of Mouth Communication," *Marketing Science*, 23 (4), 545-60.
- , D. Mayzlin, T. Chen, S. Das, C. Dellarocas, B. Pfeiffer, B. Libai, S. Sen, M. Shi, and P. Verlegh (2005), "The Firms Management of Social Interactions," *Marketing Letters*, 16 (3/4), 415-428.
- Granovetter, M. (1973), "The Strength of Weak Ties," *American Journal of Sociology*, 78 (6), 1360-1380.
- Harris, L. C. (2008), "Fraudulent Return Proclivity: An Empirical Analysis," *Journal of Retailing*, 84 (4), 461-476.
- and E. Ogbonna (2006), "Service Sabotage: A Study of Antecedents and Consequences," *Journal of the Academy of Marketing Science*, 34 (4), 543-558.
- and K. Reynolds (2003), "The Consequences of Dysfunctional Customer Behavior," *Journal of Services Research*, 6 (2), 144-161.
- and K. Reynolds (2004), "Jaycustomer Behavior: An Exploration of Types and Motives in the Hospitality Industry," *Journal of Services Marketing*, 18 (5), 339-357.
- Hennig-Thurau, T., K. Gwinner, G. Walsh, and D. Gremler (2004), "Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?," *Journal of Interactive Marketing*, 18 (1), 38-52.
- Jaimovich, S. (1999), "How Medical Students View their Relationship With Patients: The Role of Private and Public Self-Consciousness," *Journal of Social Psychology*, 139 (1), 5-15.
- Jones, M., K. Reynolds, D. Mothersbaugh, and S. Beatty (2007), "The Positive and Negative Effects of Switching Costs on Relational Outcomes," *Journal of Service Research*, 9 (4), 335-355.

- Jones, E., and K. Davis (1965), *From Acts to Dispositions: The Attribution Process in Person Perception*. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 2), New York: Academic Press.
- Kamins, M., V. Folkes, and L. Perner (1997), "Consumer Response to Rumor: Good News, Bad News," *Journal of Consumer Psychology*, 6 (2), 165-187.
- King, T. and C. Dennis (2003), "Interviews of Deshopping Behavior: An Analysis of Planned Behavior," *International Journal of Retail and Distribution Management*, 31 (3), 153-163.
- Kornet, A. (1997), "The Truth about Lying," *Psychology Today*, 30 (3), 52-57.
- Libai, B., R. Bolton, M. Bügel, K. de Ruyter, O. Götz, H. Risselada and A. Stephen (2010), "Customer-to-Customer Interactions: Broadening the Scope of Word of Mouth Research," *Journal of Service Research*, 13 (3), 267-282.
- Lovelock, C.. (1994), *Product Plus: How Product and Service = Competitive Advantage*. New York: McGraw Hill.
- Malhotra, N., S. Kim, and A. Patil (2006), "Common Method Variance IS Research: A Comparison of Alternative Approaches and a Reanalysis of Past Research," *Management Science*, 52 (12), 1865-1883.
- Malone, B. and B. DePaulo (2001), "Measuring Sensitivity to Deception," Pp 103-123 in *Interpersonal Sensitivity*, Judith A. Hall and Frank J. Bernieri (eds), Mahwah, NJ: Erlbaum.
- Mann, S., A. Vrij, and R. Bull (2002), "Suspects, Lies, Videotape: An Analysis of Authentic High-Stake Liars," *Law and Human Behavior*, 26 (3), 365-376.
- Marquis, M. and P. Filiatrault (2002), "Understanding Complaining Responses through Consumers' Self-Consciousness Disposition," *Psychology and Marketing*, 19 (3), 267-292.
- Marsh, H., J. Balla, and R. McDonald (1988), "Goodness-of-Fit Indexes in Confirmatory Factor Analysis: The Effect of Sample Size," *Psychological Bulletin*, 103 (3), 391-410.
- Matos, C. and C. Rossi (2008), "Word-of-Mouth Communications in Marketing: A Meta-analytic Review of the Antecedents and Moderators," *Journal of the Academy of Marketing Science*, 36 (4), 578-593.
- Maxham, J., and R. Netemeyer (2002), "A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts," *Journal of Marketing*, 66 (4), 57-71.
- and R.. Netemeyer (2003), "Firms Reap What They Sow: The Effects of Shared Values and Perceived Organizational Justice on Customers' Evaluations of Complaint Handling," *Journal of Marketing*, 67 (1), 46-62.
- McCull-Kennedy, J., P. Patterson, A. Smith, and M. Brady (2009), "Customer Rage Episodes: Emotions, Expressions and Behaviors," *Journal of Retailing*, 85 (2), 222-237.
- Meltzer, B. (2003), "Lying: Deception in Human Affairs," *International Journal of Sociology and Social Policy*, 23 (6/7), 61-79.
- Meuter, M., A. Ostrom, M. J. Bitner, and R. Roundtree (2003), "The Influence of Technology Anxiety on Consumer Use and Experiences with Self-service Technologies," *Journal of Business Research*, 56 (11), 899-906.
- Moore, S.. (2012), "Some Things are Better Left Unsaid: How Word of Mouth Influences the Storyteller," *Journal of Consumer Research*, 28 (6), 1140-1154.
- Nyer, Prashanth U. (2000), "An Investigation into Whether Complaining can Cause Increased Consumer Satisfaction," *Journal of Consumer Marketing*, 17 (1), 9-19.
- Oliver, R. (1981), "Measurement and Evaluation of Satisfaction Process in Retail Settings," *Journal of Retailing*, 57 (Fall), 25-48.
- (1996), *Satisfaction: A Behavioral Perspective on the Consumer*. New York: McGraw- Hill.
- Pizam, A. and T. Ellis (1999), "Customer Satisfaction and its Measurement in Hospitality Enterprises," *International Journal of Contemporary Hospitality Management*, 11 (7), 326-39.
- Podsakoff, P., S. Mackenzie, J-Y. Lee, and N. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (5), 879-903.
- Price, L., L. Feick, and A. Guskey (1995), "Everyday Market Helping Behavior," *Journal of Public*

- Policy and Marketing*, 14, 255-266.
- Ranaweera, C. and J. Prabhu (2003), "On the Relative Importance of Customer Satisfaction and Trust as Determinants of Customer retention and Positive Word of Mouth," *Journal of Targeting, Measurement and Analysis of Marketing*, 12 (1), 82-90.
- Reichheld, F. (2006), "The Microeconomics of Customer Relationships," *MIT Sloan Management Review*, 47 (2), 73-78.
- Reynolds, K. and L.C. Harris (2009), "Modeling the Antecedents of Dysfunctional Customer Behavior: An Empirical Examination," *Journal of Retailing*, 85 (3), 321-335.
- Reynolds, W. (1982), "Development of Reliable and Valid Short Forms of the Marlowe-Crowne Social Desirability Scale," *Journal of Clinical Psychology*, 38 (1), 119-125.
- Richins, M. (1983), "An Analysis of Consumer Interaction Styles in the Marketplace," *Journal of Consumer Research*, 10 (June), 73-82.
- Rosenbaum, M. and R. Kuntze (2003), "The Relationship between Anomie and Unethical Retail Disposition," *Psychology and Marketing*, 20 (12), 1067-1093.
- Ross, W., and D. Robertson (2000), "Lying: The Impact of Decision Context," *Business Ethics Quarterly*, 10 (2), 409-440.
- Schlenker, B. and M. Weigold (1990), "Self-consciousness and Self-presentation: Being Autonomous versus Appearing Autonomous," *Journal of Personality and Social Psychology*, 59, 820-828.
- Sengupta, J., D. Dahl, and G. Gorn (2002), "Misrepresentation in the Consumer Context," *Journal of Consumer Psychology*, 12 (2), 69-79.
- Serban, G. (2001), *Lying: Man's Second Nature*. Westport, CT: Praeger.
- Singh, J. (1990), "A Typology of Consumer Dissatisfaction Response Styles," *Journal of Retailing*, 66 (1), 57-99.
- Slama, M., R. Natarajan, and T. William (1992), "Generalization of the Market Maven's Information Provision Tendency Across Product Categories," pp 90-93 in *Developments in Marketing Science*, Victoria L. Crittenden (ed), Provo, UT: Association for Consumer Research.
- Smyth, J. (2002), *The Habit of Lying: Sacrificial Studies in Literature, Philosophy, and Fashion Theory*. Dunham, NC: Duke University Press.
- Srole, L. (1956), "Social Integration and Certain Corollaries: An Exploratory Study," *American Social Review*, 21 (December), 709-716.
- Sullivan, E. (2002), *The Concise Book of Lying*. New York: Martin's Press.
- Sundaram, D.S., Kaushik M., and C. Webster (1998), "Word-of-Mouth Communications: A Motivational Analysis," pp 527-531 in *Advances in Consumer Research*, Vol. 25, J. Alba and J. W. Hutchinson (eds), Provo, UT: Association for Consumer Research.
- Van Vaerenbergh, Y., B. Larivière and I. Vermeir (2012), "The Impact of Process Recovery Communication on Customer Satisfaction, Repurchase Intentions, and Word-of-Mouth Intentions," *Journal of Service Research*, 15 (3), 262-279.
- Voorhees, C., M. Brady, and D. Horowitz (2006), "A Voice from the Silent Masses: An Exploratory and Comparative Analysis of Noncomplainers," *Journal of the Academy of Marketing Science*, 34 (4), 514-527.
- Walsh, G., Gwinner, K. and Swanson, S. (2004), "What Makes Mavens Tick? Exploring the Motives of Market Mavens' Initiation of Information Diffusion," *Journal of Consumer Marketing*, 21 (4), 109-122.
- Wangenheim, F. (2005), "Postswitching Negative Word of Mouth," *Journal of Service Research*, 8 (1), 67-78.
- Wetzer, I.M., Zeelenburg, M. and Pieters, R. (2007), "'Never Eat in That Restaurant, I Did!': Exploring Why People Engage in Negative Word-of-Mouth Communication," *Psychology and Marketing*, 24 (8), 661-680.
- Whyte, W H., Jr. (1954), "The Web of Word of Mouth," *Fortune*, (November), 140-143.
- Wiedmann, K, Walsh, G. and Mitchell, V-W (2001), "The German Mannmaven: An Agent for Diffusing Market Information," *Journal of Marketing Communications*, 7 (4), 195-212.
- Wirtz, J. and Mattila, A. (2004), "Consumer Responses to Compensation, Speed of Recovery and

- Apology after a Service Failure,” *International Journal of Service Industry Management*, 15 (2), 150-166.
- and Kum, D. (2004), “Consumer Cheating on Service Guarantees,” *Journal of the Academy of Marketing Science*, 32 (2), 112-126.
- and McColl-Kennedy J. (2010), “Opportunistic Customer Claiming During Service Recovery,” *Journal of the Academy of Marketing Science*, 38 (5), 654-675.
- Wojnicki, A.C. and Godes D. (2008), “Word-of-Mouth as Self-Enhancement (April 25, 2008), HBS Marketing Research Paper No. 06-01. Available at SSRN: <http://ssrn.com/abstract=908999> or <http://dx.doi.org/10.2139/ssrn.908999>
- Yi, Y. and Taeshik G. (2008), “The Effects of Customer Justice Perception and Affect on Customer Citizenship Behavior and Customer Dysfunctional Behavior,” *Industrial Marketing Management*, 37 (7), 767-787.
- Yoo, S. H. (2009), “Responding to Partner's Expression of Anger: The Role of Communal Responsiveness,” Doctoral Thesis, Yale University.
- Zhao, R. and Liqun C. (2010), “Social Change and Anomie: A Cross-National Study,” *Social Forces*, 88 (3), 1209-1229.