WORD OF MOUTH: WHAT WE KNOW AND WHAT WE HAVE YET TO LEARN

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ABSTRACT

One of the key consequences of customer satisfaction is word of mouth communication (WOM). WOM is a concept that has attracted sustained research attention. To confirm what we already know about this important construct, this article reviews and synthesizes 60 years of WOM literature and develops a parsimonious model of WOM's most important antecedents and consequences, and outlines some approaches to its management. The authors identify three key antecedents of WOM and a large number of affective, cognitive, and behavioral consequences are also identified, illustrating WOM's far-reaching effects. Three generic approaches to utilizing WOM are identified and illustrated. Lastly, 14 research questions pertaining to WOM's antecedents, its consequences, and its management are outlined to guide future research with the aim of developing a better understanding of this important construct.

Keywords: WOM, research questions, antecedents, consequences, management, customer satisfaction

INTRODUCTION

Customer satisfaction has firmly established itself as an important construct for marketing practitioners and academics alike (Anderson and Sullivan 1993; Curtis et al. 2011; Korkofingas 2010). This article focuses on one of its key consequences: word of mouth communication (WOM). WOM is communication between a non-commercial communicator and a receiver concerning a brand, a product, or a service (Anderson 1998; Dichter 1966; Westbrook 1987). WOM can occur through online or offline channels although the vast majority of WOM (perhaps as high as 90%) appears to take place offline (Keller 2007; Keller and Fay 2009). This article focuses largely on WOM by non-commercial senders as opposed to 'commercial WOM', where senders are incentivized to spread a message.

More than 60 years ago, researchers recognized that WOM was probably "the most powerful force shaping consumer behavior" (Whyte 1954, p.204), "the dominant decision clincher" (Arndt 1967c, p.197) and "almost irresistible" (Arndt 1967b, p.8). Researchers' appraisals of WOM have not reduced since then. More recent research has described WOM as a response that "may be among the most important" (Brown et al. 2005, p.123), "a dominant force in the marketplace" (Mangold et al. 1999, p.73), the "ultimate test of the customer's relationship" (Bendapudi and Berry 1997, p.30) and "the gift that keeps on giving" (Trusov et al. 2009, p.96).

WOM is more important than ever, as spending on WOM marketing (e.g. commercially incentivized WOM by 'WOM agents', WOM media/channels, research on WOM) is expected to reach $3 billion by the end of 2013 (PQ Media 2009), yet its causes and its impact are not fully understood (Williams and Buttle 2011). WOM has become a central concern in contemporary practices of marketing as consumers increase their use of social networks (Facebook, LinkedIn, Google+), content communities (e.g. YouTube, Pinterest), blogs (e.g. WordPress), microblogs (Twitter), and various other electronic means of sharing communications about products (Lee and Youn 2009; Okazaki 2009; Prendergast, Ko, and Siu Yin 2010; Shu-Chuan and Yoojung 2011; Strutton, Taylor, and Thompson 2011). WOM's ability to reach large numbers of consumers has dramatically increased through electronic channels which has led to renewed interest in commercially incentivized WOM, where the origin of a message is a commercial entity and where some consumers may receive an incentive for spreading a message (Leskovec, Adamic, and Huberman 2007; De Bruyn and Lilien 2008; Brown, Bhadury, and Pope 2010). WOM has also become a central element in customers' engagement with market offerings (Hennig-Thurau et al. 2010; Verhoef, Reinartz, and Krafft 2010). As such, marketing in the new media can learn from a body of knowledge on principles of WOM that has built up over many decades. This review attempts to provide a baseline for what we

do know about WOM, and then points out what we have yet to learn.

RATIONALE, AIM AND STRUCTURE

The publication of hundreds of empirical studies over the past six decades has greatly increased our understanding of WOM. However, the paucity of conceptual and review papers has contributed to a fragmented understanding of WOM and a lack of theoretical development in this important area (Yadav 2010; Wells 1993), and this has led to calls for research to point out those areas that are not yet well understood (Allsop, Bassett, and Hoskins 2007). This article reviews WOM research to establish what is known and where gaps in our knowledge remain, with the aim of guiding future WOM research and assisting WOM practitioners in developing a more complete understanding of this increasingly important concept. More specific objectives are:

1. **To critically review existing literature with regard to the antecedents of WOM, the consequences of WOM, and the management of WOM; and**

2. **To formulate research questions in the above mentioned areas so as to establish a research agenda for future WOM research.**

The following sections review the literature with regard to WOM's antecedents, its consequences, and its management. **Figure 1** depicts an overview of this discussion.

FIGURE 1
Summary Model of the Antecedents, Consequences and Management of WOM
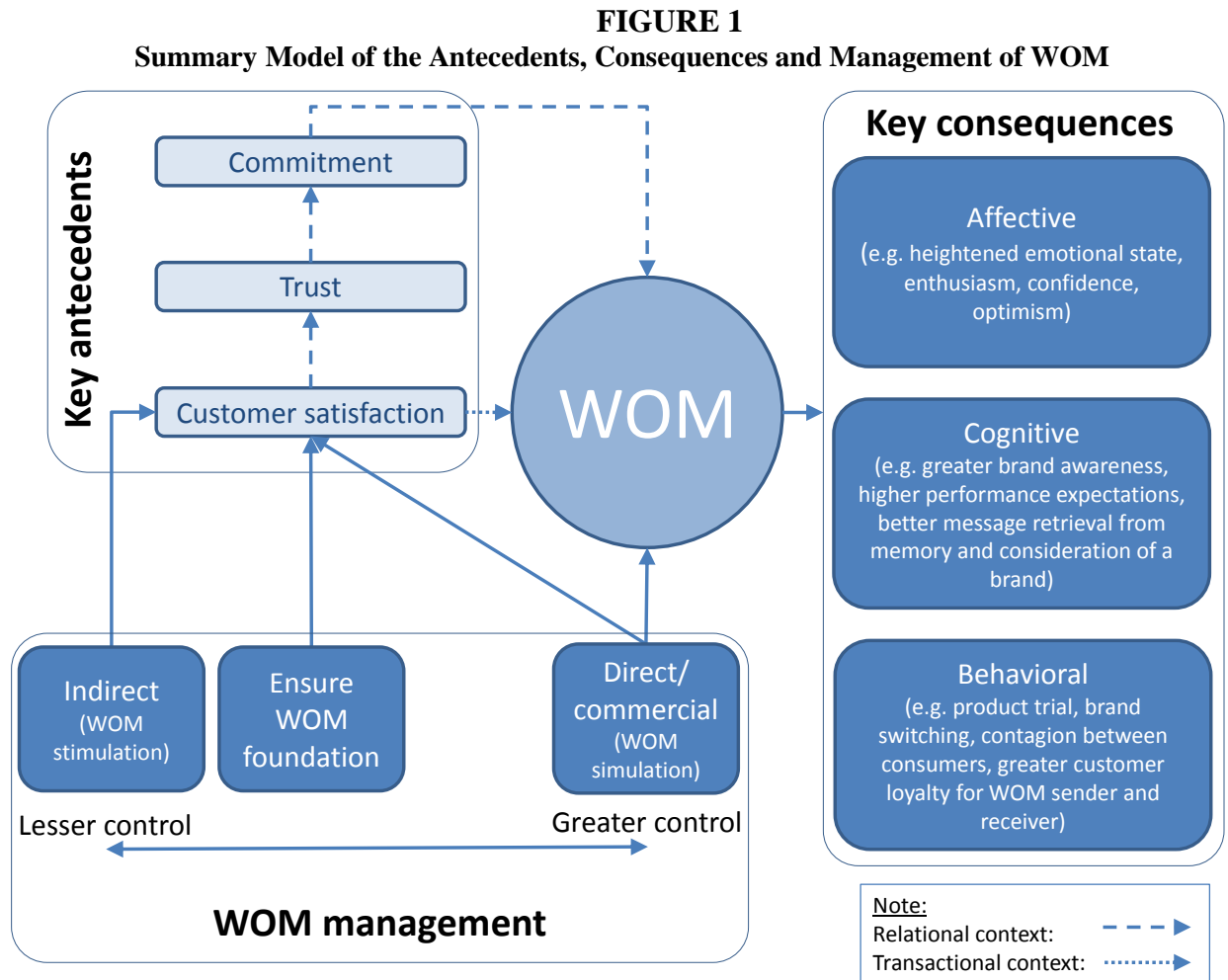
Each of the subsequent sections about the antecedents, consequences and the management of WOM concludes with a list of research questions that remain unanswered.

Table 1 provides a summary of these research questions which can serve as an agenda for future WOM research.

TABLE 1

Research Questions Regarding WOM's Antecedents, its Consequences, and its Management

Area	Research questions	
WOM's antecedents	1.	What is the role of customer commitment in relation to WOM?
	2.	How does the importance of different antecedents vary across different contexts?
	3.	Are the antecedents for positive WOM and negative WOM the same?
	4.	What is the shape of the relationship between customer satisfaction and WOM volume?
WOM's consequences	5.	What is the relationship between WOM volume and sales and what are its key moderators?
	6.	What is the relationship between WOM valence and sales?
	7.	Is WOM volume or WOM valence the better predictor of sales?
	8.	How is the relationship between WOM valence and sales moderated?
WOM's management	9.	Which indirect techniques are most effective at generating WOM?
	10.	What aspects of WOM increase its re-transmission rate?
	11.	What makes paid messengers effective?
	12.	What size of incentive is optimal?
	13.	What is the impact of disclosure on the credibility of viral marketing messages?
	14.	Why are virally acquired customers more loyal and more profitable than customers who were not virally acquired?

ANTECEDENTS OF WOM

Research has investigated the impact of a variety of variables on WOM. Early WOM research identified product attitudes as one main contributor towards WOM (Holmes and Lett 1977; Richins 1983) but later research suggested that attitudes may not be the only motivating factor behind engaging in WOM (Swan and Oliver 1989).

Due to their central position in the literature, and the fact they are amongst the most important WOM antecedents across a wide variety of circumstances, this article will focus on three antecedents of WOM: **customer commitment, trust, and customer satisfaction on WOM** (Brown et al. 2005; Harrison-Walker 2001; Hennig-Thurau, Gwinner, and Gremler 2002; Ranaweera and Prabhu 2003). Instead of adopting a broader, more general perspective that might view WOM as the

outcome of consumer motives, other aspects of consumer psychology, and situational influences, we focus on the three antecedents that to a large degree are under the control of the marketer, which makes the current analysis more relevant from a practitioner's perspective.

Customer satisfaction with a product or service has emerged as a key driver of WOM, and the importance of satisfaction has been widely acknowledged (Anderson 1998; Bowman and Narayandas 2001; Cermak, File, and Prince 1991; Dichter 1966; File and Prince 1992). Satisfaction can be described as an evaluation of an emotion in response to the ownership and/or usage of a product or service (Hunt 1977). It is usually accepted that satisfied customers or customers who are positively surprised are more likely to engage in positive WOM (PWOM) (Ranaweera and Prabhu 2003; Derbaix and Vanhamme 2003), while dissatisfaction has established itself as a key antecedent for negative WOM (NWOM) (Asugman 1998; Blodgett, Granbois, and Walters 1993; Bolfing 1989; Richins 1984). However, there is still some debate around whether satisfaction mediates WOM valence (which can range from highly positive to highly negative), as research has found that even satisfied customers may speak negatively of the products they have used (Parthasarathy and Forlani 2010). Furthermore, Anderson (1998) found the correlation of satisfaction and the amount of WOM across various products in the U.S. to average just 0.2, while the same statistic is 0.7 in Sweden. These results suggest that the relationship between satisfaction and WOM (valence and volume) varies across different contexts.

Customer commitment - a desire to maintain a relationship with a particular brand (Gustafsson, Johnson, and Roos 2005; Morgan and Hunt 1994) - has also been shown to be a key antecedent of WOM ((Harrison-Walker 2001; Okazaki 2008). Similarly, trust - being willing to rely on a business partner (Garbarino and Johnson 1999; Morgan and Hunt 1994) - has also been found to be a strong predictor of WOM (Ranaweera and Prabhu 2003). A meta-analysis by de Matos and Rossi (2008) has confirmed that commitment, trust and satisfaction are all amongst the most important antecedents of WOM across a wide variety of circumstances. Given this confirmation,

we feel that our focus on these constructs is warranted.

ANTECEDENTS OF WOM: FOUR RESEARCH QUESTIONS

These findings indicate several fruitful areas for future research regarding the antecedents of WOM.

1.   *What is the role of customer commitment in relation to WOM?*

While customer commitment has been investigated as an antecedent of WOM, it has also been shown to play different roles in relation to WOM. Studies variously show customer commitment to be an antecedent of WOM (Harrison-Walker 2001), a mediator of the relationship between customer satisfaction and WOM (Brown et al. 2005), or driven by satisfaction, with satisfaction being a more powerful construct in explaining WOM (Hennig-Thurau, Gwinner, and Gremler 2002). One could argue that the conflicting results may be reconciled by taking into account the relational context of the industries under study. Research finds commitment more important than satisfaction in predicting future loyalty intentions in highly relational contexts (Garbarino and Johnson 1999). Perhaps commitment becomes a more important antecedent of WOM and mediator of the satisfaction – WOM relationship depending on the strength of relationship between customers and a firm. However, such speculations need to be further investigated.

2.   *How does the importance of different antecedents vary across different contexts?*

Apart from commitment (research question 1, above), the importance of trust versus satisfaction, as an antecedent of WOM is also unclear. Research, with the explicit goal of determining whether trust or satisfaction is the better determinant of PWOM, found that satisfaction was marginally stronger than trust (Ranaweera and Prabhu 2003), yet a meta analytic study found trust to be a stronger correlate of WOM than satisfaction (de Matos and Rossi 2008). These results indicate

that while satisfaction is an important antecedent of WOM, there are circumstances in which other antecedents may also play a significant role (Hess and Story 2005). Strong conceptual and empirical work is needed to derive how the importance of WOM's key antecedents vary depending on the context. Two promising contextual variables could be firstly, the level of product risk (Cunningham 1965; Swaminathan 2003) with higher levels of risk likely to make trust more important than satisfaction (e.g. going to the dentist versus going to the movies) and secondly, how strongly a product contributes towards a consumer's extended (digital) self, where trust may be more important for products that relate more strongly to the consumer's extended (digital) self (Belk 2013). Future studies, particularly qualitative and experimental methods, could be used to test such speculations.

3. *Are the antecedents for PWOM and NWOM the same?*

Both PWOM and NWOM have shown to be important determinants of consumers purchase decisions (Engel, Blackwell, and Kegerreis 1969; Herr, Kardes, and Kim 1991; Wilson and Peterson 1989). But what exactly drives PWOM and NWOM about a product? Although a number of studies have investigated the antecedents of PWOM and NWOM, most have focused on PWOM (Brown et al. 2005; Ranaweera and Prabhu 2003) with few scholars choosing to investigate the antecedents of NWOM (e.g., Asugman 1998). Furthermore, few studies have investigated the antecedents of PWOM and NWOM simultaneously (Mangold, Miller, and Brockway 1999). Using the Critical Incidence Technique, Mangold et al. (1999) isolate ten catalysts that "stimulated the conversation" (p. 77), which lead to a mixture of factors such as the "receiver's felt need", and a "sender's dissatisfaction with a product". In other words, the Mangold et al. study mixes personality-based motives for engaging in WOM (i.e. altruism in the example above) with product-specific antecedents (i.e. dissatisfaction). Differences in antecedents between PWOM and NWOM are likely to exist. For example, customer participation and involvement appear to encourage the transmission of positive WOM, rather than negative WOM (File and Prince 1992; Moore,

Moore, and Capella 2005; Richins and Shaffer 1987; Stokes 1997). Conversely, NWOM may be more likely when it is difficult to complain to the organization that caused the dissatisfaction, when the buyer does not expect any redress from complaining directly to the seller, and when the consumer's blame attributions are external, that is the seller is blamed for the cause of the dissatisfaction, rather than the customer (Blodgett, Granbois, and Walters 1993; Bolfing 1989; Lawther, Krishnan, and Valle 1979; Richins 1983, 1987; Singh 1990; Watkins and Liu 1996). A mix of qualitative, survey and observational (e.g. online) research would do well to encompass both PWOM and NWOM across a variety of product categories to provide a more holistic picture of what drives PWOM and NWOM under different circumstances.

4. *What is the shape of the relationship between customer satisfaction and WOM volume?*

Customer satisfaction has established itself as a key antecedent for WOM (Hogan, Lemon, and Libai 2004) and large-scale survey research across multiple product categories has shown that positive WOM is approximately three times as common as negative WOM (East, Hammond, and Wright 2007). However, few authors have investigated the impact of different levels of satisfaction on the amount of WOM that is generated (Soderlund 1998). The limited research that has been conducted in this area supports an asymmetrical U-shaped relationship between customer satisfaction and WOM volume, with more WOM occurring at high levels of satisfaction and dissatisfaction, and lesser WOM occurring at moderate levels of satisfaction (Anderson 1998). Papers in related disciplines support this by suggesting that an asymmetric response is likely when consumers respond to positive and negative events (Cacioppo and Berntson 1994; Peeters and Czapinski 1990; Taylor 1991). Still, more research needs to be conducted to identify the shape of the relationship between different levels of customer satisfaction and WOM volume (Lang 2011). In particular, does extreme satisfaction result in greater WOM volume than extreme dissatisfaction? A close inspection of the literature reveals that there is conflicting evidence on this important question with research

supporting three different relationships: a symmetric relationship where high satisfaction and high dissatisfaction result in similar amounts of WOM volume (Derbaix and Vanhamme 2003; Engel, Kegerreis, and Blackwell 1969; Soderlund 1998), a positivity bias where high satisfaction generates higher WOM volume than high dissatisfaction (Cermak, File, and Prince 1991; Holmes and Lett 1977; Wirtz and Chew 2002), and a third stream that documents a negativity bias, where high dissatisfaction results in higher WOM volume compared to high satisfaction (Anderson 1998; Silverman 1997; TARP 1981). Thus, clarifying the shape of the relationship between customer satisfaction and WOM volume appears a fruitful area for future qualitative and experimental research. Such research should be able to manipulate satisfaction across a variety of circumstances to avoid the skewed distribution of satisfaction scores of previous studies (Soderlund 1998) and measure the resulting WOM.

CONSEQUENCES OF WOM

WOM has far-reaching effects, making it a particularly interesting construct to study for academics and a variable of great concern for many marketing practitioners. WOM's consequences can be broadly categorized as affective, cognitive, and behavioral.

Affective responses to WOM include a heightened emotional state of the receiver (Christophe and Rime 1997) and enthusiasm, confidence and optimism (Phelps et al. 2004; Sweeney, Soutar, and Mazzarol 2008). Cognitive responses include greater brand awareness (Ferguson 2008; Liu 2006; Sheth 1971), higher expectations about the product (Webster 1991; Zeithaml, Berry, and Parasuraman 1993), and better retrieval from memory and consideration of a brand (Grewal, Cline, and Davies 2003).

Behavioral responses include product trial (Anderson and Golden 1984; Grewal, Cline, and Davies 2003; Katz and Lazarsfeld 1955; Manchanda, Ying, and Youn 2008; Sheth 1971; Sultan, Farley, and Lehmann 1990; Trusov, Bucklin, and Pauwels 2009) and brand switching (Katz and Lazarsfeld 1955; Wangenheim and Bayon 2007; Wangenheim and Bayón 2004) which have been shown to take place through contagion between consumers (Du and Kamakura 2011;

Iyengar, Van den Bulte, and Valente 2011). WOM not only impacts sales, it has also been closely linked to customer loyalty, which is a customer's intention to stay with a service provider (Reinartz and Kumar 2002; Reinartz and Kumar 2000; Yu and Dean 2001). However, the relationship between WOM and loyalty is more complex than originally suspected as it is bi-directional and affects both sender and receiver. Firstly, from a sender's perspective, loyalty can lead to WOM (Gremler 1999; Reinartz and Kumar 2002) and disloyalty has also been shown to be a good predictor of negative WOM (de Matos and Rossi 2008). Conversely, from a receiver's perspective WOM can also lead to greater loyalty (Garnefeld, Helm, and Eggert 2011; Gremler 1994; Gremler and Brown 1994; Stuteville 1968). For example, customers acquired through WOM have been shown to have a higher retention rate and to be more valuable than customers acquired through other channels (Schmitt, Skiera, and Van den Bulte 2011). The linkage between WOM and loyalty may be particularly strong in an online context, where Gauri et al. (2008) found, out of 15 predictors, positive WOM was the strongest predictor of loyalty to an online store across three product categories. Thus, the relationship between WOM and loyalty is bi-directional and affects both sender and receiver.

Finally, it is worth remembering that WOM is an integral element in the diffusion of information in the marketplace (Shiomo and Rosenberg 1975).

CONSEQUENCES OF WOM: FOUR RESEARCH QUESTIONS

Despite the strong contributions of past research, the following research questions remain unanswered.

5.   *What is the relationship between WOM volume and sales and what are its key moderators?*

The relationship between WOM and sales may be more complex than previously thought. Research has shown that WOM may not only influence sales (Krishnan, Seetharaman, and Vakratsas 2012; Liu 2006; Niederhoffer et al. 2007) but also that sales are likely to influence

WOM (Godes and Mayzlin 2004). In that sense, research has yet to verify the nature of the relationship between sales and WOM. Under what conditions is either of these relationships more dominant? Customer satisfaction may serve as an important moderator of this relationship. For example, one could expect both relationships to become stronger in cases of extreme dis/satisfaction. Furthermore, a product's originality has been shown to drive WOM volume (Moldovan, Goldenberg, and Chattopadhyay 2011) and is thus also likely to moderate this relationship. For example, if a product sells in high volumes it loses some of its originality, thus one would expect the relative WOM volume to decrease. This finding is indirectly supported by a study which found that brands with a smaller market share had a higher proportion of WOM than their market share would suggest (Uncles, East, and Lomax 2010). Econometric techniques investigating multiple categories (e.g. movies, books, education, and political candidates) and experimental research would be well suited to ascertain the relationship between WOM volume and sales and what the key moderators of this relationship may be.

6. *What is the relationship between WOM valence and sales?*

Although much research effort has been expended, the relationship between WOM's valence and sales remains unclear. One stream of research suggests that NWOM can be more powerful than PWOM (Arndt 1967a, 1968; Chevalier and Mayzlin 2006; Chen, Wang, and Xie 2011), yet other research found that PWOM increases the revenues and run-time of movies far more than NWOM reduces it (Moul 2007). The relationship between WOM valence and sales is likely to depend on pre-WOM purchase probability (East, Hammond, and Lomax 2008), which in turn may depend upon the volume and valence of previous WOM, the number of competing alternatives, the size of consumers' consideration sets, and consumer-based brand equity. If pre-purchase likelihood is below 50 percent then it is reasonable to assume that PWOM may be more powerful, whereas if pre-WOM purchase likelihood is above 50 percent then NWOM may be more powerful (East, Hammond, and Lomax 2008). Related to this, Berger, Sorensen, and

Rasmussen (2010) showed that NWOM has a positive impact on brands with low levels of awareness. While awareness may not be a key driver of purchase across all product categories, researchers may wish to identify the drivers of pre-WOM purchase likelihood as this may go some way to identifying under which circumstances PWOM or NWOM may have a greater impact on sales.

7. *Is WOM volume or WOM valence the better predictor of sales?*

Many studies tend to focus on either WOM volume or WOM valence, thus preventing an assessment of which construct may be a better predictor of sales. Even studies which include both constructs have resulted in conflicting results; with some showing that WOM volume is a better determinant of sales (Liu 2006) and others showing that WOM valence has superior predictive power (Chintagunta, Gopinath, and Venkataraman 2010). Chintagunta et al. (2010), in particular, show that the box office performance of movies is more strongly related to the valence of online reviews than the volume of online reviews. Future research would do well to identify under which conditions WOM volume may be a better predictor of sales and under which conditions WOM valence may be more suited. For example, it is plausible to argue that WOM volume may serve as an 'easy to assess' heuristic in decision-making and therefore may be a better predictor of sales in low involvement product categories, whereas WOM valence and the actual content of WOM may be more important in high involvement categories. Research utilizing online reviews, for example, would be well placed to investigate such thinking.

8. *How is the relationship between WOM valence and sales moderated?*

Much research has shown that PWOM tends to increase sales, while NWOM tends to decrease sales (Chen, Wang, and Xie 2011; Chintagunta, Gopinath, and Venkataraman 2010; Niederhoffer et al. 2007; Vettas 1997). However, research has also shown that prior customer knowledge and familiarity moderate the relationship between WOM valence and sales.

Berger, Sorensen, and Rasmussen (2010) find negative reviews increase purchase likelihood of a book by an unknown author, yet decrease purchase likelihood of a book by a well-known author. Importantly, what we do not know is at what level of awareness does the impact of NWOM on sales become positive? In other words, how low does brand awareness need to be (e.g. 5%) for NWOM to increase awareness so much that this increase outweighs the detrimental effects of negative information? Furthermore, the relationship between WOM valence and sales is also likely to be moderated by pre-WOM brand attitudes. For example, one could argue that PWOM increases sales most for brands for which consumers hold a neutral or negative attitude, as this is where the greatest gains could be made from an attitude shift. Such speculations need to be explored further through studies utilizing a variety of techniques, such as surveys and experimental design.

MANAGING WOM

WOM has been acknowledged as one of the key influencers of consumers' purchase decisions (Silverman 1997), but it has also been acknowledged that marketers have only some control over WOM and that they struggle to harness its power for their organizations (Bayus, Carroll, and Rao 1985; Buttle 1998; Chew and Wirtz 2001; Dichter 1966; Dye 2000; Silverman 2001). One reason for this is that WOM is essentially a voluntary behavior. Another reason for this may be companies' lack of a coherent WOM strategy, where WOM appears to be 'incidentally managed' at multiple *ad hoc* points throughout an organization (Williams and Buttle 2011). This section identifies three mechanisms through which WOM can be influenced.

Building a WOM Foundation – The Lowest Level of Managerial Control

The first step to utilizing WOM is to build a 'WOM foundation' by ensuring strong performance on some of WOM's key antecedents, such as commitment, trust and satisfaction (Anderson 1998; de Matos and Rossi 2008; Harrison-Walker 2001; Okazaki 2008; Ranaweera and Prabhu 2003). Beyond ensuring that there is a solid WOM foundation, there are many avenues for

generating WOM (Bolen 1994; Dichter 1966; Stern and Gould 1988; Yu 2005). Attempts to elicit WOM, particularly PWOM may be broken down into indirect attempts and direct attempts (Arndt 1967c; Bayus, Carroll, and Rao 1985) with the latter representing commercial WOM marketing efforts.

Indirect WOM Management – A Moderate Level of Managerial Control

Indirect approaches are the realm of marketing communications which is said to stimulate around 20% of all WOM (Keller and Fay 2009). WOM can be stimulated through advertising in general and through the use of teaser campaigns, testimonial advertising, and celebrity endorsements in particular (Arndt 1967b; Bayus, Carroll, and Rao 1985; Guyer 2005; Wilshusen 2005; Dichter 1966). Promotional strategies appear to be particularly effective at generating WOM if they generate curiosity, interest and contain some ambiguity (Arndt 1967b; King and Tinkhan 1990). Apart from advertising, other indirect WOM strategies seek to increase the customer's knowledge of the firm and its products (Stern and Gould 1988; Gremler 1999; Silverman 1997), to strengthen the firm-customer relationship through methods such as customer membership clubs (Gremler 1999; Silverman 1997), and to encourage the employee-customer relationship (Gremler 1999). Even distribution can be used to magnify or dampen WOM's effects (Arndt 1967c, 1967b). For example, selective distribution of a movie makes it possible to capitalize on PWOM effects for movies that are expected to fare well with audiences, thus being able to reach audiences far greater than the promotional budget of the movie would have otherwise allowed (Moul 2007).

Consumers' perceptions of the actual product have also been linked to WOM activity. For example, Moldovan, Goldenberg, and Chattopadhyay (2011) found that product originality drives WOM volume, while a product's usefulness drives WOM valence. These findings have been echoed by studies which show that a product's innovativeness or its special features contribute towards how much WOM it generated (Williams and Buttle 2011; Arndt 1968). Similarly, Sundaram and Webster (1999) found that WOM has a greater impact on unfamiliar

products than familiar products. Brand features have also been shown to affect WOM, with more distinct and less common brands being talked about more frequently (Niederhoffer et al. 2007; Stuteville 1968).

Direct WOM Management – Higher Levels of Managerial Control

Direct attempts to induce WOM are the realm of viral marketing and have been greatly magnified through electronic tools, such as mobile devices, emails, and social media applications (Watts and Peretti 2007; De Bruyn and Lilien 2008; Wolfgang, Key, and Dietmar 2009). Direct attempts include the use of paid messengers to spread positive messages about the sponsor's brand and negative messages about competing brands (Arndt 1967c; Bayus 1985; Carl 2008; Magnini 2011). Similarly, rather than paying messengers, companies can also approach particularly influential members of their target market with a message to be passed on or to give them access to a product that they can then share with their network (Salzman, Matathia, and O'Reilly 2003; Walker 1995). Firms can also reward consumers in general, rather than just influentials, by incentivizing them to pass on a message through special treatment such as lower prices, special recognition, free use of a product, or directly paying for passing on the message (Gremler 1999; Silverman 1997; Walker 1995; Schmitt, Skiera, and Van den Bulte 2011). Such incentives can be effective tools to increase the likelihood of passing on a message, improve its valence, and increase the likelihood of recommendations (Bolen 1994; Stern and Gould 1988; Wirtz and Chew 2002).

MANAGING WOM: SIX RESEARCH QUESTIONS

9. *Which indirect techniques are most effective at generating WOM?*

This article has discussed a variety of techniques by which WOM can be generated. Some investigations have attempted to ascertain the underlying product related reasons for engaging in WOM (Bolen 1994; Mangold, Miller, and Brockway 1999); nevertheless, more research in this area is needed. Research would do well to determine which of the plethora of indirect approaches may be most effective at generating WOM. Are price reductions more effective than other types of sales promotion techniques? Is a humorous advertising appeal more likely to generate WOM than a testimonial? Utilizing scanner data in conjunction with survey research would be helpful in answering such questions.

10. *What aspects of WOM increase its re-transmission rate?*

A number of studies have helped us to develop an understanding of consumers' motivations for passing-on WOM (Hung-Chang et al. 2007) and for forwarding mobile messages (Palka, Pousttchi, and Wiedermann 2009). What we have yet to fully understand is why some WOM is passed on extensively (i.e. 'goes viral') while other WOM does not. One study has shown that content that triggers high emotional arousal, such as awe or anger, is more likely to be spread through viral processes (Berger and Milkman 2012). However, much remains to be discovered in this increasingly important area of research, keeping in mind consumers' increasing ability to access and disseminate information via platforms such as Twitter, Facebook, or YouTube. For example, if a large number of consumers provide a positive review for a relatively unknown artist in the iTunes store, this can quickly result in unforeseen sales successes (Salganik, Dodds, and Watts 2006). Extensive qualitative work taking into account different contexts (e.g. various product categories, traditional WOM versus eWOM) would be a good first step towards exploring this important research question.

11. *What makes paid messengers effective?*

Research has found that the emotional impact of an interpersonal message matters, with highly emotional messages being re-transmitted to more people more often (Christophe and Rime 1997). Paid messengers who are part of a WOM marketing campaign may be less emotional in how they convey a message, compared to somebody who has experienced something on an authentic, first-hand basis. If the paid messenger follows a semi-scripted conversation pattern that allows them to

portray the product as positively as possible and counter objections does this result in effective communication? Thus, which characteristics make paid messengers effective? Because of the non-incidental way in which such commercial WOM is crafted, it is likely that it positions the product strongly vis-à-vis its competition. For example, acknowledging a previous competitive weakness that through a new version of the product has been transformed into a competitive strength is likely to resonate well with consumers, thus making commercial WOM persuasive. Qualitative research and survey research would be good choices to explore what factors make paid messengers and the commercial WOM they spread effective.

12. What size of incentive is optimal?

Scholars have started to address the role of incentives in a commercial WOM context (Ryu and Feick 2007). Some research has estimated the maximum size of the incentive to stimulate referrals (Trusov, Bucklin, and Pauwels 2009), but much work remains to be done in this area. For example, while customers acquired via viral marketing appear more valuable to the organization (Schmitt, Skiera, and Van den Bulte 2011), we do not know how this is influenced by the type and the value of the incentive for the referrer. Clearly, higher value incentives reduce the added profitability of new customers, up to a point where the value of the incentive exceeds any additional profitability. In other words, future research may wish to focus on establishing whether there is an 'incentive sweet spot', which is likely to be dependent upon customers' contribution margin and their average life-time as a customer. Econometric modeling across multiple product categories (e.g. credit cards, gym memberships, and pay television) would be a good choice to investigate this research question further.

13. What is the impact of disclosure on the credibility of viral marketing messages?

The ability to reach large numbers of consumers through electronic channels increases the reach of paid endorsers dramatically (De Bruyn and Lilien 2008). One of the potential drawbacks of this strategy occurs if consumers react negatively should they detect that a commercial

source is behind these efforts (Magnini 2011). More specifically, the impact of disclosing WOM agents' commercial bonds on the credibility of their WOM has received scant research attention and results appear inconclusive. On one hand we know that senders of commercial WOM messages may be reluctant to disclose their commercial motivation (Ahuja et al. 2007), a behavior also known as 'concealment' (Kozinets et al. 2010). On the other hand, one study found that WOM episodes, where receivers were aware of the commercial nature of WOM, were rated as more credible compared to naturally occurring WOM (Carl 2008). However, these results may be confounded as the two types of messages are likely to have varied not only in their level of disclosure but also in important other ways (e.g. the level of detail provided, the strength of arguments, or whether an explicit recommendation was issued). A combination of qualitative and experimental research would be well suited to address our lack of knowledge of the causal effect of disclosure on perceived message credibility, sales, and a number of other variables.

14. Why are virally acquired customers more loyal and more profitable than customers who were not virally acquired?

While customers acquired through WOM may be more profitable, to-date we do not know why this may be the case (Schmitt, Skiera, and Van den Bulte 2011). For example, future research would do well to investigate some of the explanations that have been used in the past but that have yet to receive empirical support. For example, are virally acquired customers more profitable because they 'fit' the organization better than those who are acquired through other channels, or does the presence of a referrer, who is also a customer of the same firm, provide some social enrichment for them (Schmitt, Skiera, and Van den Bulte 2011)? Or is the greater profitability of virally acquired customers caused by an entirely different set of mechanisms such as a greater degree of commitment to the brand, a more advanced state of customer engagement, or the social norm established by the referrer? Answering these questions through qualitative and econometric work would have strong managerial implications, as well as provide important theoretical input into

a stream of research which has been dominated by empirical enquiry but seen comparatively little theoretical development.

DISCUSSION

The objectives of this article were two-fold: to critically review WOM research; and to establish what is known about its antecedents, its consequences and its management (**Figure 1**).

While many variables have been researched as antecedents of WOM, customer satisfaction, trust and commitment appear most instrumental in affecting WOM. Of these three variables, customer satisfaction has been researched most intensively, which is likely due to its longevity within the marketing literature and its applicability across products, services and experiences. Both trust and commitment have established themselves as key antecedents of WOM, but their universal applicability across product categories appears more limited as they may be more prominent drivers of WOM in relational contexts, such as services, or in product categories with high levels of enduring involvement.

Next, knowledge of WOM's consequences was reviewed. WOM was shown to have far-reaching consequences that can be categorized as affective, cognitive, and behavioral. Affective consequences include a heightened emotional state and a sense of enthusiasm, confidence and optimism. Cognitive responses include greater brand awareness, higher expectations about a product, and better retrieval from memory and consideration of a brand. Behavioral responses are also manifold and include product trial and brand switching. WOM has also been closely linked to customer loyalty, although the relationship appears more complex than initially anticipated as it is bi-directional and affects both the WOM sender and the receiver.

The next section of this article reviewed the current state of knowledge in regard to the management of WOM. Despite WOM's importance, many companies, particularly small to medium sized firms do not appear to engage in on-going and rigorous management of WOM. The most obvious way to utilize WOM is to ensure the equitable treatment of customers, and to build a strong WOM foundation by aiming for high levels of customer satisfaction, commitment, and trust. Even if dissatisfaction occurs, effective complaint handling procedures can at least minimize NWOM.

Direct and indirect avenues to harness WOM were also identified in this article. Direct attempts fall into the realm of commercial WOM which spreads positive messages about a brand. Tactics to achieve this include approaching particularly influential members of the customer base, rewarding customers in general to engage in WOM, or paying commercial messengers ('WOM agents'). While appealing at first, such tactics have their own problems. For example, WOM agents are likely to "conceal" their commercial motivation for spreading WOM (Ahuja et al. 2007; Kozinets et al. 2010), which undermines the Federal Trade Commission's requirement to disclose all commercial WOM. Therefore, marketers using WOM agents are treading a thin line between violating a mandatory requirement by a Federal agency and the "commercialization of chit-chat" (Carl 2006; Martin and Smith 2008; Walker 2004).

Lastly, a multitude of indirect approaches can be used to stimulate WOM by appealing to consumers' curiosity and interest through the use of teaser campaigns, testimonial advertising, and celebrity endorsements. WOM may also be stimulated through increasing the customer's knowledge of the firm and its products, strengthening the firm-customer relationship, and by encouraging employee-customer relationships. Beyond this, distribution and the actual product design can also be linked to stimulating WOM. For example, a product's originality, its inno-vativeness, its special features, and its usefulness can serve as a basis for WOM. The distinctiveness of the brand and how common it is perceived to be also stimulate WOM.

The second objective of this article was to highlight some of the gaps which remain in our knowledge despite more than six decades of WOM research. Fourteen research questions were proposed regarding WOM's antecedents, its consequences, and its management (**Table 1**).

It is hoped that the articulation of these research questions will progress our theoretical understanding of, and our empirical enquiries into an area that has captured the imagination of marketing practitioners and academics for many decades.

Beyond the gaps outlined in this article, of course, other questions exist, ripe for further exploration. For example, many effects that are reported in the WOM literature are likely to vary, sometimes dramatically, depending on the type of WOM that is being transmitted. To illustrate: East et al. (2005) found that solicited WOM had up to twice as much impact on brand choice compared to unsolicited WOM. Chan and Cui (2011) found that a consumer's level of satisfaction and intention to purchase a product are dependent upon whether the WOM that they received was attribute-based or experience-based. Similarly, Schellekens, Verlegh, and Smidts (2010) show that the use of abstract versus concrete language magnifies the effect of WOM's valence on consumers' purchase intentions and on their attitudes towards a product. Lastly, other newly conceptualized types of WOM, such as pro-consumer WOM, may also differ from other types of WOM in terms of the effects that were discussed in this paper (Lang and Lawson 2013).

Even fundamental issues, such as how WOM is operationalized in research, and how to measure it (in survey research, experimental research, or via online data) are rare and have only recently been questioned (Sweeney, Soutar, and Mazzarol 2012). Thus, WOM researchers need to be cognizant that while we appear to be standing on firm ground, occasional crevasses in our knowledge will open and question our previously held notions regarding the seemingly well-understood area of WOM.

While the antecedents and consequences explored in this paper likely apply to eWOM, the role that consumer interactivity in electronic media plays makes the processes of eWOM somewhat different (Bickart and Schindler 2002; Blazevic et al. 2013; Dellarocas 2003). Such differences warrant a follow up study which surveys the eWOM literature and formulates a series of research questions specific to this increasingly important area of WOM.

WOM is a paramount influencer of consumer decision-making as it enables consumers to share their own product and service experiences, to receive information about other consumers' experiences, or to pass such experiences on to other consumers, thus becoming both WOM senders and receivers. WOM, and particularly eWOM, has the potential to redistribute power from corporations to consumers, through a networked coproduction model, in which marketing messages are exchanged and brand meaning is co-created by a variety of groups (Kozinets et al. 2010). Research into WOM over the past six decades has resulted in great advances in our knowledge, but much remains to be explored. We hope this article provides some guidance for such future explorations.

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THE DELINEATION AND INTERACTIONS OF NORMATIVE AND PREDICTIVE EXPECTATIONS IN CUSTOMER SATISFACTION AND EMOTIONS

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ABSTRACT

The importance of understanding and meeting customer expectations has long been recognized in the marketing literature. Scholars acknowledge the existence of various types of expectations, and there is a growing interest in the normative and predictive types; however, many aspects of their differences and connections remain unclear. A lack of clear distinction between normative and predictive expectations is fairly typical in the literature. This leads to deficiencies in recommendations for practitioners, and it hinders the development of richer, more comprehensive theory by researchers and scholars.

This article aims to remove some of confusion by carefully examining normative and predictive expectations with a focus on their differences and interactions in generating customer satisfaction and emotions.

INTRODUCTION

The importance of understanding and meeting customer expectations is long recognized in the marketing literature. Expectations are regarded as standards against which customers assess provider's performance. Researchers acknowledge existence of various classes of expectations, among which growing interest is drawn to two particular types – normative and predictive expectations. However the study of these types is still in the initial stage, and many aspects of their differences and connections remain unclear. The lack of distinction between normative and predictive expectations is quite typical in the literature and it leads to deficiencies in theoretical implications and recommendations for practitioners.

The authors of this article research endeavor to systematically analyze these two expectations types in regards to their differences and interactions in generating customer satisfaction. Due to the long recognized role that emotions play in the process (Laros and Steenkamp 2005), we have integrated them into our conceptualization as well.

DIFFERENCES BETWEEN NORMATIVE AND PREDICTIVE EXPECTATIONS

The concept of predictive (*will)* expectations emerged in customer satisfaction literature as a component of the expectation-disconfirmation model (Oliver 1980; Swan and Trawick 1981). In this framework, expectation is an experience-based prediction or anticipation of what likely will happen in the future. According to the more traditional interpretation, meeting expectations results in moderate satisfaction, positive disconfirmation leads to high satisfaction, while negative disconfirmation leads to dissatisfaction (Oliver 1981; Swan and Trawick 1981). The more comprehensive version stipulates that when expectations are positively disconfirmed, the result would be increased satisfaction; when they are negatively disconfirmed, the result would be reduced satisfaction; just meeting expectations would not add anything to satisfaction judgment (Krampf, Ueltschy, and d'Amico 2003; Oliver 2010). The less traditional interpretation takes into account other possible factors that might affect satisfaction, such as the height of expectations. The study of Oliver (1977), which showed that the positive disconfirmation of low expectations and confirmation of high result in a similar level of satisfaction, illustrates the point.

Predictive expectations have a statistical nature; their level is defined by the multiplication of subjective probability of a particular outcome on its valence; they grow when either the probability or the valence grows; and when at least one of these factors declines, expectancy decreases. Expectations of this type are performance-amended (Oliver 2010), i.e. updated constantly as a result of ongoing interactions with a provider.

They can move in both directions as a result of encounters with particular providers (Boulding et al. 1993). For example, a restaurant patron may be quite satisfied with a meal, and become even more satisfied with subsequent meals, but then experience poorly prepared food or discourteous service, and never patronize that restaurant again.

The notion of normative (*should*) expectations was developed in the service quality literature as an element of the SERVQUAL instrument (Parasuraman, Zeithaml, and Berry 1985). These expectations constitute customers' beliefs about what a service provider should offer and represent standards against which customers compare their perceptions of product or service quality. Parasuraman et al. subsequently delineated two levels of normative expectations as desired and adequate expectations. Desired expectations involve customers' beliefs of what should and can be provided. Adequate expectations constitute the minimum level of delivery that customers are willing to accept (Parasuraman, Zeithaml, and Berry 1994). The discrepancy between them constitutes the zone of tolerance, within which customers accept the variation in quality. Delivery below this zone would create dissatisfaction, while delivery above this zone would create high satisfaction (Zeithaml and Bitner 2003, p. 80).

Normative expectations are more generic than predictive expectations in that they reflect national cultural norms and institutional environments and are not relationship specific (Stewart, Morgan, Crosby, and Kumar 2010). Accordingly, American consumers predictive expectations would be different (and likely higher) for standard safety features on new cars, than would, for example, the predictive expectations of Indian consumers. Such expectations would hold regardless of the particular model of car. Every national culture involves two types of behavioral standards – actual, or 'as is' practices and values, or 'should-be' standards (House et al. 2004). The first type reflects standards of existing behavior in a certain cultural environment, while the second type reflects the standards of desirable behavior. Thus, the norms that are mirrored in normative expectations are 'should-be' values of national culture.

Normative expectations tend to increase over time. New scientific and technological developments, increasing competition and globalization, growing awareness of safety and environmental issues are among factors that lead to this trend. Better understanding of the process of growing normative expectations can be achieved if we invoke models developed by Clemmer (1990) and Kanou, Seraku, Takahashi, and Tsuji (1984). According to these models, all product features can be divided into three categories: *basic* "must be' features, the low functionality of which makes a product inferior and unacceptable for customers; *satisfiers*, whose performance can create both dissatisfaction and satisfaction; and *delighters*, or attractive features that make a product highly appealing to customers and generate their full satisfaction. Each product or service is a blend of these three groups. The boundaries between these three categories are not static. In time, a certain attractive feature may become a satisfier and eventually a standard feature. For instance, a decade ago, a company's website was considered an attractive feature, but now it is definitely a "must be" attribute. When airbags in cars were introduced, they represented the category of delighters, but now they have become a standard feature of every new car. This is similar to Olshavsky and Spreng's (1989) conceptualization of the raising of desired performance as the increased features and quality of products increase over time. Consequently, an organization that does not change performance and an assortment of its products is pushed backwards in terms of meeting growing normative expectations.

Perceived quality connects objective performance with growing customer needs and normative expectations. When these expectations rise, although performance remains the same, the result would be decline in perceived quality. The growth of normative expectations takes place when at least one of the following processes occurs: 1) growth of desired expectations; 2) growth of adequate expectations; 3) reduction of tolerance zone. The tendency to grow is one of the features that distinguishes normative expectations from predictive expectations, which can change in either direction as a result of a customer's cumulative experience. Several studies analyzed two classes of expectations in conjunction, pinpointing their differences and possible interaction. In one of early studies Barbeau (1985) maintained that predictive and normative expectations have a complementary relationship, and that the former represents an adaptation level, while the latter

represent a comparison level for the product. The adaptation level relates to the basis for cognitive perception and for purchasing a product whereas the comparison level relates to normative judgments and satisfaction/dissatisfaction. This distinction seems to be at odds with the mainstream of satisfaction literature alluding to predictive expectations and disconfirmation as the major factor leading to satisfaction/dissatisfaction.

Boulding, Kalra, Staelin, and Zeithaml (1993) argued that *will* expectations have an assimilative (positive) effect on perception of service quality due to an initial impression phenomenon; at the same time, *should* expectations have a contrast (negative) effect on perceived service quality. The authors concluded that organizations have to manage *will* expectations upward and *should* expectations downward. It seems, however, that this conclusion and recommendation are valid in only a limited area. Contrary to the above assertion, Voss, Parasuraman, and Grewal (1998) found that (predictive) expectations play an assimilative role only when there is performance/price consistency; if such consistency is absent, these authors found neither the assimilative nor the contrast effect. It is reasonable to agree with Pitt and Jeantrout's (1994) warning against overpromising, i.e. inflating *will* expectations by exaggerated advertising, as reality will inevitably fall short of expectations. The assimilative effect of predictive expectations can be explained by the self-fulfilled prophecy effect, which works only when the gap between performance and expectations is not too apparent. When low predictive expectations are followed by clearly better performance the result is positive disconfirmation and higher satisfaction. By the same token, when high predictive expectations are followed by clearly inferior performance the result is negative disconfirmation and lower satisfaction.

Laroche, Kalamas, Cheikhrouhou, and Cezard (2004) found that both types of expectations achieve sufficient convergent validity and as such are distinct constructs. They also found weak and positive correlation between the two types, but this among other possibilities may be a result of a halo effect. In addition, their study revealed that *should* expectations have higher mean and lower variability than *will* expectations. This is consistent with an assertion that normative expectations are more general, category-based, rather than provider-based; they are relatively stable and do not change as a result of a specific encounter.

Regarding the connection between the two types of expectations, Zeithaml, Berry, and Parasuraman (1993) suggested and later Zeithaml and Bitner (2003) reiterated the proposition that predictive expectations impact adequate expectations. Dean (2004) examined this proposition and did not find a relationship between them. One plausible explanation for why such a relationship was not found could be the following: Zeithaml and Bitner (2009, p. 87) used an example of contrasting the wait in a restaurant in a college town during the summer semester (shorter expected waits) and regular semester (longer expected waits). If a reasonable customer anticipates that waiting time in regular semester is likely to be longer, he will downgrade his adequate expectations. Similarly, traffic in rush hour produces lower adequate expectations than in more quiet hours. However, it can be argued that these examples show that only those situational factors that are beyond control of a provider impact adequate expectations. Customers understand that even when a provider does his best, in difficult circumstances such as rush hour, certain quality dimensions may decrease somewhat, and they are eager to accept that. In contrast, internal factors which are under a provider's control impact only predictive expectations but not adequate expectations. The process of attribution differentiates between *will* expectations and adequate expectations. Predictive expectations do not depend on attribution; they reflect both intrinsic and extrinsic forces. Conversely, factors that form adequate expectations are externally attributed. Customers are not ready to accept the reduction of performance that stems from a provider's glitches. The more aggressive an external environment is, e.g., one with stronger uncontrollable factors, the closer adequate expectations are to predictive expectations. In contrast, in a more benevolent and friendly environment, wherein internal factors play a dominant role, the dissimilarity between the two types is more apparent.

Devlin, Gwinne, and Ennew (2002) studied the antecedents of two classes of expectations. As a common ground between them, these authors found that implicit promises affect both predictive and desired expectations. As far as distinctions are concerned, explicit service promises have a certain influence on predictive explanations, while word-of-mouth impacts

desired expectations. Santos and Boote (2003) maintain that consumers' predictive expectations represent 'core' expectations whilst normative expectations belong to a peripheral class of expectations. This assertion apparently implies that predictive expectations are more important than normative ones; unfortunately, these authors do not provide thorough substantiation for this argument.

Efforts to clarify differences and relationships between the two classes of expectations deserve praise; however research on this subject is still in the initial stages and the confusion between the two classes of expectations is rather common in the literature. It is not unusual that an article (even written by the highest authorities in the field), while using the same notion of expectations, unwittingly switches from one type to another. For instance, Rust and Oliver (2000) describe customer delight as the result of exceeding customer expectations to a surprising degree. Yet, it is difficult for a reader to define which type of expectations – normative or predictive – is concerned. First, the authors refer to the previously addressed models of Clemmer (1990) and Kanou, Seraku, Takahashi, and Tsuji (1994), which distinguish between such attributes of a product as 'must be', 'satisfiers' and 'delighters'. The last category includes features that are "unexpected and surprisingly enjoyable" (Rust and Oliver 2000, p.87). Since these features relate to product quality, one should conclude that the expectations type that is implied here is normative expectations. However, later in the paper Rust and Oliver explain delight using the disconfirmation model of satisfaction by Oliver (1980), which involves predictive expectations (2000, p. 88). As the paper continues, it becomes obvious to a careful reader that it uncritically moves back and forth from one type of expectations to another (See e.g. assumptions 1 and 8, pp. 89-90). Consequently, one cannot unequivocally answer the question whether delight is a result of exceeding normative or predictive expectations. This issue will be discussed in more detail later in our article.

In another instance, Saklani, Purohit, and Badoni (2000), studying the interesting subject of the threshold separating moderate and high satisfaction, use in their analysis the traditional model of disconfirmation between expectations and performance. In concluding the paper, they point to consumers' expectations keeping pace and getting revised with ever improving quality. Yet, the type of expectations utilized in the expectation–disconfirmation model is predictive, while the ever-rising expectations are normative ones. The same term 'expectations' is used by authors in both cases without specifying the kind, and for a careful reader, this leads to confusion.

Rust, Inman, Jia, and Zahorik (1999) describe expectations as a statistical distribution rather than a single-point estimate as viewed by Parasuraman, Zeithaml and Berry (1988). However, a probability distribution point of view clearly relates to predictive expectations whereas expectations used in the SERVQUAL measurement model are normative. Pitt and Jeantrout (1994) developed a checklist for the evaluation of management expectation processes for service companies in the UK. Some statements pertain to *will* expectations (e.g. "we always attempt to provide a realistic picture of what customers can expect in the service…" (p. 185). Still others can be attributed to both types (e.g. "this organization has a good idea what its customers expect" (p.186)). Lack of discrimination between the two classes of expectations is typical in the literature, and such examples lead to confusion.

NORMATIVE AND PREDICTIVE EXPECTATIONS AS STANDARDS OF COMPARISON

One indication of the lack of a clear distinction between the two types of expectations is that normative and predictive expectations are referred to as standards or reference points for customer judgments. Very similar definitions are frequently used with regards to both classes of expectations. For example, Yi and La (2003) claim that "expectation... functions as a standard of comparison or comparative referent in perceiving product or service performance" (p. 23.). Szymansky and Henar (2001) refer to "expectations as standard against which performance outcomes are assessed" (p. 17). Zeithaml and Bitner (2003) maintain that "expectations are beliefs about service delivery that function as standards or reference points against which performance is judged" (p. 60).

A less than careful reader could easily form an impression that these essentially identical

texts apply to the same phenomenon. But, the first and the second quotations are taken from papers that address predictive expectations, while the last study refers to normative expectations. Even if we agree with the idea that multiple standards can be used in evaluating performance and satisfaction (Oliver 2010; Tse and Wilton 1988; Szymansky and Henard 2001, Zeithaml. Berry, and Parasuraman 1993), the following questions arise: Do normative and predictive expectations constitute the same caliber or power of a standard? Can it be that one of them serves as a primary reference point, while the other as a secondary reference point?

As it was previously mentioned there is a positive relationship between predictive expectations and satisfaction; that is, ceteris paribus, the higher the expectations, the higher the satisfaction (Oliver 1977; Oliver 2010; Szymansky and Henard 2001). These authors, using the expectation–disconfirmation model, operate with notions of high or low predictive expectations. It seems problematic that the standard against which another phenomenon is measured is not 'fixed' and can itself be evaluated as 'high' or 'low'. Like a rose is a rose, a standard is a standard, i.e. it should remain stable. One cannot say that a foot is long or a kilogram is light. By virtue of being a standard, it plays the role of a yardstick against which other objects are measured. By defining expectations as high or low one implicitly admits that they are measured against some other, more rigorous standard of a higher caliber.

Consider the example given by Teas and Palan (2003) of a customer, who in the context of high expectations, anticipates a wait for delivery of two days, whereas in the context of low expectations, he anticipates waiting for five days. Since two days of waiting constitutes quicker delivery, the authors define the expectations in the first scenario as high, and in the second one as low. But will this individual describe his *will* expectations in the same terms? Can an objective measure such as days of delivery in itself be sufficient in defining level of predictive expectations? If for instance a letter sent within the U.S. is expected to arrive within two days, while the letter sent overseas is expected to arrive in five days, do we term expectations in the first case *high* and in the second case *low*? Probably not, because the context is different and so is the meaning of particular number of days of waiting.

Let us alter the example and consider two different customers, one who expects to wait two days for delivery, whereas another anticipates waiting five days. Let us also assume that the first customer is extremely demanding, and he is not willing to wait more than one day. The second customer is more flexible, and is ready to wait for six days. Consequently, the predictive expectations of the first individual will fall outside his normative expectations (two days versus one), while the predictive expectations of the second one will be within his normative expectations (five days vs. six). Therefore the first customer would describe his *will* expectations as low, and the second one would describe his *will* expectations as high. In order to assess *will* expectations, we need to compare them with another point of reference.

This logic brings us to the conclusion that predictive expectations are evaluated by involved parties themselves not through objective terms such as number of days or number of follow-up calls but via their normative expectations. When somebody says: "I have high expectations from XYZ product", that means that his *will* expectations are close to his *should* expectations. Low expectations would mean that there is a significant gap between normative and predictive expectations. Furthermore since normative expectations involve the range between desired and adequate expectations, and we have to establish a 'point of reference' rather than the 'range of reference', it is our opinion that there is a need to define a primary standard for *will* expectations more precisely.

Oliver (2010, p.79) outlines predictive expectations in the following way: "High expectations: desirable outcomes will occur. Undesirable outcomes will not occur. Low expectations: undesirable outcomes will occur. Desirable outcomes will not occur". This description clearly derives predictive expectations from desirable outcomes. Since predictive expectations involve the likelihood of achieving desirable results, we can infer that they are measured relative to the highest level of normative expectations – desired expectations. The latter constitute a point of reference for assessing predictive expectations. Consequently, desired expectations are a primary point of comparison for performance, while predictive expectations represent the secondary point of comparison. That is not to say that normative expectations are more important for generating customer satisfaction than

predictive expectations; impact on satisfaction is a different subject.

Unlike *will* expectations that may be viewed as low or high, normative expectations as a primary reference point cannot be evaluated as such by a stand-alone customer. They can be expressed by an individual only through absolute terms – number of follow-up calls, waiting time, delivery time etc. Desired expectations are a yardstick for measuring other phenomena and cannot be assessed by the individual himself. If one customer loses his patience after ten minutes of waiting, while another can happily wait 25 minutes, neither of them will describe his *should* expectations as high or low. Expectations will be labeled as such only by the third party, but not by the involved players.

Normative expectations stem from cultural values of desired, or should behavior (House et al., 2004). For both individuals their own expectations would be 'normal', something that is taken for granted. Even if they are aware of other's expectations, which is not necessarily the case, they will hardly define their own expectations in 'high' and 'low' terms. The first customer will probably label the second one as too permissive, loose and lenient, whereas the second individual would view the first one as too demanding and rigid. Due to the inability of individuals to evaluate their normative expectations, the common practice of measuring normative expectations through a self-report questionnaire not anchored in some objective specific measure is questionable, and as such, is very likely a waste of marketing dollars. Consider the example used by Oliver (2010, p. 81) of desired and adequate expectations of speed of delivery, both measured on scale from 1 to 5, where 1 denotes slow, while 5 denotes fast delivery. It is difficult to imagine a customer who desires slow delivery. The desired speed of delivery will always be "fast" for every potential customer regardless of real delivery time. Without some objective measure that shows the actual amount of hours or days the numbers in such scales do not seem meaningful.

Desired expectations, even if they objectively reflect the various levels for different customers (e.g. one day delivery vs. two days or ten minutes wait vs. twenty minutes wait) or rise with technological progress (thirty five miles per gallon vs. twenty five in the past), invariably tend to be tabulated by survey recipients at the highest mark of the scale. Some variation that was reported in studies (Kettinger and Lee 2005; Parasuraman, Zeithaml, and Berry 1994) can constitute a measurement artifact. Customers may be unclear what expectations a certain survey involves and interpret them differently (Teas 1993), and this will create unwarranted variation in responses.

Normative expectations constitute a standard for evaluation not only for predictive expectations but also for a customer's perceptions. They are a reference point against which judgments of perceived performance are made. Parasuraman, Zeithaml, and Berry (1994) use this notion as an argument in defense of their SERVQUAL instrument against criticism by Cronin and Taylor (1992), who developed the SERVPERF model. While SERVQUAL measures a gap between normative expectations and perceptions, SERVPERF in contrast purportedly measures perceptions alone. Parasuraman. Zeithaml, and Berry (1994) correctly state that "there is a strong support for the general notion that the customer assessment of stimuli invariably occur relative to some norm" (p. 112).

Paradoxically, this argument works against their instrument. In their multinational study, Stewart, Morgan, Crosby, and Kumar (2010) convincingly showed that customer perceptions of the same product depend on the normative expectations in different countries: the higher the normative expectations, the lower perception of a certain product or service. Therefore the identical level of objective performance will be viewed differently in different cultures due to the variation in normative expectations. The same principle will hold in regards to different customers within the same culture – an individual with higher normative expectations will assess the same performance in less favorable terms than a person with lower demands. Variation in personal service philosophy (Zeithaml, Berry, and Parasuraman 1993), available means and other possible factors create various normative expectations which result in different perceptions of quality of the same product by different customers. Devlin. (2002, p. 121) argued that "expectations regardless of whether they are measured explicitly or not, are likely to form an anchor for quality assessments". We concur with the authors' assertion that in the SERVPERF instrument (Cronin and Taylor 1992) judgments of perceived service quality are formulated in reference to some sort of

expectations, particularly desired expectations. The closer performance to desired expectations, the higher would be customer's perception of quality. As a result, the SERVPERF instrument which arguably evaluates service quality through perceptions alone, in fact unwittingly measures disconfirmation between performance and desired expectations. Consequently, subtracting expectations from perceptions in SERVQUAL model leads to double counting of normative expectations. Perceived quality of a product/service can be expressed in the formula:

Q= f (DE–Perf)

Where: **Q = perceived product/service quality;**
DE = desired expectations;
Perf = objective (rather than perceived) performance.

Of course, the function is a reversed one – the smaller the gap, the better the perceived quality.

RELATIONSHIP BETWEEN EXPECTATIONS AND PRICE

The analysis of the link between quality and normative expectations helps to distinguish between two classes of expectations in regards to the relationship between expectations and price. The latter generally is regarded a cue of product quality (Oliver 2010) or implicit promise (Devlin, Gwinne, and Ennew 2002; Zeithaml, Berry, and Parasuraman 1993) which impacts the height of expectations. But which expectations – normative or predictive – are concerned here? Do both types depend on price, and if so, in the same way? Zeithaml, Berry, and Parasuraman (1993) argued that price as an element of implicit service promises is an antecedent of both classes of expectations. Devlin, Gwinne, and Ennew (2002) also suggested that implicit promises affect both predictive and desired expectations.

We can speculate that the most obvious type for being affected by the price is predictive expectations since they are provider-related and less general. Using price as a surrogate for quality a customer forms beliefs of what certain provider is likely to deliver especially with the absence of other sources of information. For instance, customers do not anticipate the same level of service and taste of meals from a fast-food outlet as from an expensive fine restaurant, as shown in the following formula:

$PE_1 < PE_2$
Where:

PE_1 = predictive expectations from a provider with a lower price;
PE_2 = predictive expectations from a provider with a higher price.

Similar logic can be applied to adequate expectations. What is considered acceptable in a fast-food establishment would not be satisfactory in an expensive restaurant:

$AE_1 < AE_2$

Where:

AE_1 = adequate expectations from a provider with a lower price;

AE_2 = adequate expectations from a provider with a higher price.

Going one step further, it can be argued that a customer will tolerate mistakes from a fast food restaurant, whereas glitches at the expensive one will not be tolerated. This implies that tolerance zone in the latter case is narrower than in the former case.

$TZ_1 > TZ_2$

Where:

TZ_1 = tolerance zone of a provider with a lower price;

TZ_2 = tolerance zone of a provider with a higher price.

Since tolerance zone is the difference between adequate and desired expectations and this difference is lower for the more expensive

provider, the adequate expectations for this provider are closer to desired expectations. Consequently, desired expectations do not change or change much more slowly when the price increases; for both providers these expectations would be similar or identical. That is consistent with Zeithaml, Berry, and Parasuraman (1993) who proposed that the desired service level is less prone to change than the adequate service level.

This conclusion can be reinforced by an additional argument. As mentioned earlier, perceived quality is a function of the gap between performance and *desired* expectations which are general rather than product-related. Performance is not strictly proportional to price but it should generally grow together with the latter in order to keep the comparable product/service value. For the sake of argument let us assume that desired expectations change with the price in the same fashion as performance. Then no matter how a provider improves performance, the gap between it and desired expectations would be constant, which would mean that quality remains the same. For example, the quality of food and service in a fashionable restaurant are generally regarded higher than in fast-food establishment. That means that the gap between performance and desired expectations for higher quality service is lower. The only reasonable conclusion can be that desired expectations are quite stable across different products and do not (or much less) depend on price. Adequate expectations are more prone to change than desired expectations. Tolerance zone is also changeable but more from the bottom than from the top.

THE ROLE OF NORMATIVE AND PREDICTIVE EXPECTATIONS IN SATISFACTION FORMATION

As mentioned, the concept of predictive expectations has evolved in the satisfaction literature, whereas normative expectations emerged in the service quality literature. Unlike predictive expectations, whose role in satisfaction formation has been extensively studied and well established, the role of normative expectations in satisfaction formation has not been investigated sufficiently. Comprehensive models of satisfaction that go beyond mere disconfirmation include mostly such dimensions as disconfirmation, performance and (predictive)

expectations (Oliver 2010; Szymansky and Henard 2001; Yi and La 2003). None of these constructs is seemingly associated with normative expectations. Terminology also plays a certain role in the separation between the two types of expectations and disguising the role of normative expectations. The wording of these three notions creates the impression that they are separate constructs, unrelated to normative expectations, so to speak apples and oranges that independently impact satisfaction. In reality, such a relationship with normative expectations does exist: the height of *will* expectations as discussed earlier is measured relative to desired expectations – the smaller the gap, the higher predictive expectations; perceptions of performance also involve implicitly normative expectations – the higher the normative expectations, the lower the perceived performance. In fact the model that incorporates disconfirmation, performance and predictive expectations contains three types of gaps:

Disconfirmation = a gap between predictive expectations and perceived performance;

Perceived quality or perceived performance = a function of the gap between normative (desired) expectations and objective performance;

Expectations = a reversed function of the gap between normative (desired) expectations and predictive expectations.

A descriptive model that incorporates all three dimensions can be expressed with the following notation:

S= f (PE-Perf) + f (DE-Perf) + f (DE-PE)

Where:

S = Satisfaction
PE = predictive expectations
DE = desired expectations;
Perf = objective (rather than perceived) performance.

It can be argued that this formula is not parsimonious and involves double counting. All three basic variables — desired expectations, predictive expectations and performance are included in the formula twice, which gives a notion of redundancy. If a customer has high *will* expectations and they are met or positively disconfirmed, the implication is that performance is high. Thus, when disconfirmation with predictive expectations and the height of expectations are incorporated in the model, performance is already accounted for and its additional inclusion is redundant. By the same token when disconfirmation and perceived quality or performance are incorporated in the model, the level of expectations is already taken into account as well. Redundancy of one of the variables is the reason why when all three variables are included in a hierarchical regression model, one of them becomes insignificant (Yi and La 2003). *Consequently, a more parsimonious formula for customer satisfaction would be:*

$$S= f\ (DE\text{-}Perf) + f\ (PE\text{-}Perf)$$

or

$$S= f\ (PE\text{-}Perf) + f\ (DE\text{-}PE).$$

The first formula contains perceived quality and disconfirmation; the second formula contains disconfirmation and expectations. Still, in both versions satisfaction is an outcome of interplay between performance, desired and predictive expectations.

The first model borrows partially from Olshavsky and Kumar (2001, p.63) who define satisfaction as a sum of two components: satisfaction with goods and satisfaction with information. The former is the difference between perceived performance and desires (the term similar to desired expectations); the latter is the gap between perceived performance and pre-purchased (predictive) expectations. Olshavsky and Kumar maintain that satisfaction is highest when perception is high, while desires and expectations are low. At the same time, it can be argued that these authors' division of desires into high, medium and low seems problematic. Their study uses an example of students whose desires are A, B, and C grades respectively: a student who gets B

would be dissatisfied if he belongs to the first category, highly satisfied if he belongs to the third group and moderately satisfied if he belongs to the second group. However, it is hard to imagine a student who desires to get a C grade and not an A grade. It is much more plausible that A, B, and C grades represent adequate expectations rather than desired ones. The last category of students has the lowest adequate expectations and the biggest tolerance zone; the first group has the highest adequate expectations and the smallest or even non-existent tolerance zone. Another difference between our approach and the one of Olshavsky and Kumar is that they use disconfirmation between perceptions and desires, akin to the SERVQUAL model, which was criticized earlier for double counting of desired expectations. Using actual performance which is not affected by normative expectations rather than perceived performance we believe is more theoretically sound.

TWO CLASSES OF EXPECTATIONS AND CUSTOMER EMOTIONS

Although our discussion thus far has focused on the cognitive aspect of evaluations, the affective, or emotional, aspect should be addressed as well. Prior to the marketing research of the 1980s it was commonly assumed that consumers were rational beings, emotions have come to be recognized as a valid and vital aspect of consumer decision making (Laros and Steenkamp 2005). In terms of the current topic, there is mounting evidence that customer satisfaction involves an emotional dimension in addition to cognitive evaluations. Bourgeoning research has been dedicated to affect as an essential component of customer satisfaction construct (Bagozzi, Gopinath, and Nyer 1999; Liljander and Strandvik 1997; Oliver 2010; Westbrook 1987). Scholars have established that emotions are related to the disconfirmation of expectations: if a product/service falls below consumers' expectations, they experience negative emotions; if, on the other hand, the delivery meets or exceeds expectations, customers react with positive emotions (Dube and Menon 2000; Oliver 1993; Oliver and Westbrook 1993). These relationships were studied within the disconfirmation paradigm and implicitly addressed predictive type of expectations, leaving *should* expectations mostly outside the picture. For instance, it is a common

notion in the literature that customer delight ensues when perception exceeds expectations. But which kind of expectations is actually implied here? If a customer had low *will* expectations from an encounter with a provider (emotion of apprehension), but delivery was adequate and higher than these expectations, it is unlikely that that customer will be delighted. A more plausible emotional reaction would be a relief. Customer delight will take place when not only predictive but also normative expectations are exceeded. In the latter case customer satisfaction will be higher than in the former case.

We maintain furthermore that customers' satisfaction and affective responses do not result from isolated influences of normative and predictive expectations. They stem from the combination, or interaction between the two types of expectations. Interaction between normative and predictive expectations in generating satisfaction and affective responses has not been systematically explored so far. Customer expectations have been addressed in an indiscriminative way. Consider the example by Rust and Oliver (2000), who describe two situations that create customer dissatisfaction. In the first case, a one-time (hit-and-run) delight raises the bar of expectations; if in the next time period a provider reverts to the previous level of quality, he would be worse-off because performance is lower than heightened expectations and that, in turn, would result in dissatisfaction. In another scenario, if a certain provider delights customers and then keeps the newly achieved level of quality, customer expectations will also grow. If a provider's competitor is unable to keep up with the upgraded quality and newly developed expectations, it would lead to negative disconfirmation for the competitor's customers, and resulting customer dissatisfaction. According to this logic, in both scenarios performance is lower than expectations which will create similar levels of dissatisfaction. In mathematical form, both cases can be described as follows:

$S_1 = S_2 = f \{Perf < E\}$

Where:

E = expectations;
S_1 and S_2 = satisfaction in the first and second scenario.

Since the level of satisfaction is similar, it can also be suggested that emotions in both cases are alike. Previously presented speculations do not take into account existence and interplay between normative and predictive expectations. When we consider the difference between two classes of expectations, the implications would be somewhat different. In the first case, hit-and-run delight creates new and elevated normative and predictive expectations. If performance returns to the previous level, it will be lower than both of them, producing strong dissatisfaction and negative emotions:

$S_1 = f \{Perf < NE; Perf < PE\}$

In the second case, normative expectations, which are "shaped by the best quality available in the market" (Rust and Oliver 2000, p. 91) elevate, but predictive expectations of a competitor's customers are constant; therefore his performance is lower than newly developed normative expectations but is equal to unchanged predictive expectations, so dissatisfaction is not that strong:

$S_2 = f \{Perf < NE; Perf = PE\}$

Consequently, satisfaction in the former case is lower than in the latter one:

$S_1 < S_2$

It is also reasonable to suggest that emotions experienced by customers in the first scenario would be more negative than in the second one. In general, customer satisfactions and the resulting emotions are the outcomes of different combinations of normative and predictive expectations and objective performance. According to the seminal Circumplex model by Russell (1980), emotions can be characterized by two dimensions: valence (pleasantness-unpleasantness) and arousal (intensity). It can be postulated that various combinations of normative and predictive expectations and actual performance generate different emotional responses in terms of these two dimensions. It is impossible to describe all the possible situations, but several basic scenarios can be identified:

1.   Customer's predictive expectations are noticeably lower than normative expectations because previous experience from interactions with a provider was rather disappointing. Prior to an encounter a customer has strong apprehension emotions. If the actual level of performance is higher than what a customer anticipated and falls within normative expectations, i.e. between adequate and desired expectations, the emotional response would be one of pleasant surprise, followed by relief. This case represents confirmation of normative expectations and positive disconfirmation of predictive expectations:

$$\text{Perf} = \text{NE; Perf} > \text{PE}$$

The level of satisfaction in such situation is likely to be moderately high. This can be summarized in the following propositions:

P₁: Positive disconfirmation of predictive expectations and confirmation of normative expectations result in a moderate level of customer satisfaction.

P₂: Positive disconfirmation of predictive expectations and confirmation of normative expectations result in emotions characterized by a positive valence and low/moderate arousal (e.g. pleasant surprise, relief).

2.   As in the previous scenario predictive expectations are noticeably lower than normative expectations. Previous experience of encounters with a provider was rather disappointing. Repetitive encounters with a low-quality provider can be explained by the lack of choices for a customer stemming from a monopolistic position of a provider. Actual performance in the latest encounter was again poor and confirmed to low *will* expectations. There is nothing surprising about the last encounter. Once again a customer did not satisfy his needs and aspirations. The case represents confirmation of predictive expectations and negative disconfirmation of normative expectations:

$$\text{Perf} < \text{NE; Perf} = \text{PE}$$

Level of satisfaction is likely to be low but not extremely low. Since delivered quality was anticipated, emotions would be negative but not be very strong. An example of probable emotion under the circumstances would be annoyance. This logic can be summarized in the following propositions:

P₃: Negative disconfirmation of normative expectations and confirmation of predictive expectations result in moderate level of customer dissatisfaction.

P₄: Negative disconfirmation of normative expectations and confirmation of predictive expectations result in emotions characterized by negative valence and low/moderate arousal (e.g. annoyance).

3.   Delivery is poor and noticeably lower than both normative and predictive expectations:

$$\text{Perf} < \text{NE; Perf} < \text{PE}$$

If both normative and predictive expectations are negatively disconfirmed, the outcome is likely to be considerable dissatisfaction. A customer would experience an unpleasant surprise followed by strong emotions such as anger. Hence affective response would be negative and intense. The following propositions summarize this scenario:

P₅: Negative disconfirmation of both normative expectations and predictive expectations result in low customers' satisfaction.

P₆: Negative disconfirmation of both normative expectations and predictive expectations result in emotions characterized by negative valence and high arousal (e.g. anger).

4.   A provider delivered "positive outrageous service" (Gross 1994) that exceeded both normative and predictive expectations. That provider's extraordinary performance was a completely novel experience for a customer; it created a new standard that did not exist in the customer's mind before. The case represents positive disconfirmation of both *should* and *will* expectations:

Perf>NE; Perf > PE

Under these circumstances customer satisfaction will be especially high. His affective response would involve pleasant surprise and delight, i.e. emotions are positive and intense. This can be summarized in the following propositions:

P₇ Positive disconfirmation of both normative expectations and predictive expectations results in high customers' satisfaction.

P₈: Positive disconfirmation of both normative expectations and predictive expectations results in emotions characterized by positive valence and high arousal (e.g. delight).

5. Based on a previous experience a customer holds high expectations of a provider's service. This means that predictive expectations are within zone of tolerance and even close to desired level of expectations. If performance is as high as in previous encounters, both should and will expectations will be confirmed:

Perf = NE; Perf = PE

Here, there are no surprises for a customer, either pleasant or unpleasant. His confidence in the provider has been reinforced. Emotions are positive but not as strong as in the previous case. This can be summarized in the following propositions:

P₉: Confirmation of both normative expectations and high predictive expectations results in moderate/high customers' satisfaction.

P₁₀: Confirmation of both normative expectations and high predictive expectations results in emotions characterized by positive valence and low/moderate arousal (e.g. contentment, pleasure).

Needless to say, these scenarios are generic and do not take into account other factors such as the nature of a product (utilitarian vs. hedonistic), customer experience with a provider (short vs. long), market type (business-to-business vs. business- to-customer) etc.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this article hopefully will contribute to the growing stream of research and conceptual development on the role of different classes of expectations in a customer's experience. Adequate expectations incorporate external factors that are outside of providers' control while predictive expectations do not involve an attribution process. Normative expectations serve as a primary point of reference for customer judgments while predictive expectations serve as a secondary point of reference. Unlike predictive and adequate expectations, desired expectations are not prone to rise with a price. A well-developed model of satisfaction based on two classes of expectations and objective performance seems more accurate and parsimonious than those used in the literature. And although theoretical propositions on the relationship between expectations and performance on the one hand and satisfaction and emotions on the other hand, as presented in this paper, are yet to be verified, conclusions of the conceptual model developed herein are potentially significant.

If a customer's predictive expectations are low and subsequent experiences with the product or service is again poor, emotions would be moderately negative, rather than strongly negative because the customer expected poor results (propositions 3 and 4). For example, a shopper may purchase a brand of goods that is not her favorite because the favorite brand is temporarily unavailable. If she finds the brand no better than she had in the past, she may be again annoyed, but may be willing to purchase yet again if the circumstance arises.

The ten propositions delineated in this article may aid marketing managers in both their overall strategic planning, and in their shorter term tactics, as the following discussion and examples will explain. The clarifications our model provides in defining the differences in predictive and normative expectations will allow marketing managers to be more effective and efficient in their utilization of resources in order to maximize customers' level of satisfaction.

Customers will experience moderately high satisfaction characterized by pleasant surprise followed by relief as a result of exceeding their

predictive expectations that are noticeably lower than their normative expectations (propositions 1 and 2). Although it may be difficult to fathom why customers would purchase products or services that have been disappointments in the past, this can occur fairly frequently, even beyond the obvious monopolistic situation. For example, a dissatisfied hotel guest may voice her complaints on a guest card or on the hotel's website. If there is no follow-up from the hotel manager, the guest is unlikely to ever stay at the hotel again and will therefore not change her opinion. If, on the other hand, the manager heeds the complaints and follows up with an incentive, such as a future discount, the guest may very well return and be relieved by the experience. Given the power of word-of-mouth referrals, the costs of such follow-up would likely reap large rewards.

If a customer's predictive expectations are low and subsequent experiences with the product or service is again poor, emotions would be moderately negative, rather than strongly negative because the customer expected poor results (propositions 3 and 4). For example, a shopper may purchase a brand of goods that is not his favorite because the favorite brand is temporarily unavailable. If he finds the brand no better than he had in the past (expectations are confirmed), he may be again annoyed, but may be willing to purchase yet again if the circumstance arises. If the customer's current experience with the product or service is significantly lower than his normative and predictive expectations (propositions 5 and 6) his emotional response will be anger. In this instance he had anticipated a much better experience than he received. For example, if based on his past experience with driving a certain make and model car and his expectations of what today's cars are capable of, he purchases a new car of the same make and model. If, on the other hand, the car does not live up to his expectations he will be extremely angry, according to our propositions.

When both predictive and normative expectations are surpassed by a product or service the customer will respond with extremely high satisfaction (propositions 7 and 8). In this instance, the customer's current experience exceeds his past experience and it also goes beyond the level of what he feels the provider (or class of providers) is capable of. An obvious example would be a new, innovative computer feature that has just been introduced. But a more prosaic, and therefore more easily achieved, example would be a moderately priced restaurant that offers truly superb service.

When a customer's past experience with a product or service is confirmed by her present experience, her level of satisfaction will be high, as this scenario presumes not only high predictive expectations, but high normative expectations (propositions 9 and 10). Although her level of satisfaction may not reach the heights of the previously discussed customer, she will become the most coveted of all – the loyal customer.

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MEASURING SERVICE QUALITY AND SATISFACTION IN GREEK COOPERATIVE BANKING: AN EXPLORATORY STUDY

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ABSTRACT

A review of the literature has revealed that perceived quality has a direct and positive impact on overall customer satisfaction. It has also been made clear that the number and nature of underlying service quality determinants are contingent both upon country- and business-specific considerations.

In this context, and in order to identify the major determinants affecting customer satisfaction deriving from service delivery in a large cooperative bank in Greece, the present study attempts to develop a customized scale to measure service quality. Accordingly, based on relevant research findings and the views of both the customers and executives of the researched bank, a preliminary 38-item scale was developed and the corpus of data was collected from a sample comprised of this large cooperative bank's customers in Crete, Greece. The combination of exploratory and confirmatory factor analysis, following a scale purification process, which resulted in a reduced 21-item scale, has yielded seven determinants: *Communication for Building up Trust, Personnel Relationship, Quality-Price Relationship, Understanding and Consulting, Bank Set of Values, Serviceability,* and *Educational Support*. The results of regression analysis indicated that customer satisfaction with the cooperative bank is mostly affected by: *Bank Set of Values, Quality-Price relationship, Understanding and Consulting, and Communication for Building up Trust*.

Keywords: *service quality, customer satisfaction, measurement scale, cooperative banking in Greece.*

INTRODUCTION

In the face of a fiercely competitive and unpredictable global environment, the delivery of excellent or superior quality services has commonly been viewed as a strategic component of paramount importance (Maddern, Maull, Smart and Baker 2007). Service quality has often been related to its impact on the financial performance of the organization (Rust and Zahorik 1993; Rust, Zahorik and Keiningham 1995), consumer satisfaction (Spreng and Macoy 1996), and behavioral standards (Cronin and Taylor 1992; Reichheld 1993; Zeithaml, Berry and. Parasuraman 1966). Indeed, scholars have demonstrated that particularly in financial service organizations, in which any new product is quickly matched by competitors, enhancing service quality is crucial to business success (Allred and Addams 2000).

In the financial services industry, service quality has been found to be strongly related to customer satisfaction (Akviran 1994; LeBlanc and Nguyen 1988; Blanchard and Galloway 1994). High quality services and customer satisfaction have frequently resulted in repurchase and increase in market share (Buzzell and Gale 1997); consequently, enhancing service quality seems to be particularly emphasized by managers, and certainly so in the banking sector (Soteriou and Stavrinides 2000; Newman 2001; Wang, Lo and Hui 2003).

A review of the relevant literature reveals that recent research has focused on identifying service quality dimensions as well as developing instruments for measuring service quality. According to Chumpitaz and Swaen (2002), the number and nature of service quality dimensions seem to be differentiated across businesses and countries (Jabnoun and Khalifa 2005); the application, therefore, of a business- and country-specific measure is claimed to be more effective than a universal scale (Babakus and Boller 1992; Van Dyke, Kappelman, and Prybutok 1997; Caro and Garcia 2007). Especially in the banking sector, scholars have demonstrated that quality measures should not rely exclusively on "global standards" (Athanassopoulos 1999) since even subcategories of the specific sector, namely private and state banks, are likely to be greatly

differentiated. Therefore, despite any similarities among different systems, measurement should be adjusted according to country- or organization-specific standards.

With regard to cooperative banks, which seem to be greatly differentiated - both by nature and status - from state and private banks, service delivery is based on a different philosophy, due to the special cooperative culture and cooperative values (self-help, self-responsibility, democracy, equality, equity, and solidarity) it entails, and also in view of the principles followed and established, which are pertinent to the bank and its customers. In effect, their structural characteristics, guiding principles and member-driven orientation make cooperative banks fundamentally different from other types of banks.

A distinguishing feature of cooperative banking is the fact that this type of banking principally caters to small businesses and individuals, and serves a niche market. Compared with others, cooperative banks are rather small-sized and the main advantage they enjoy over other types of banks is the fact that they have a deeper knowledge of local markets, they foster a closer relationship with people and are perhaps more conscious of the special needs of local communities. Decentralized networks and greater flexibility in decision making processes, as a result of their autonomy, confers upon them the significant privilege to deliver services/products tailored to specific local conditions and needs thus removing various barriers or lack of mutual understanding during service delivery.

Notably, a significant distinction between cooperative and other types of banks is that, under the umbrella of cooperative principles, cooperative bank customers are also 'bankers'-negotiators/suppliers and customers-consumers or investors. Cooperative banks tend to form their own pricing, investing and working policies on the basis of the concept of membership and the respective fundamental cooperative principles (voluntary and open membership, democratic member control, members' economic participation, autonomy and independence, education, training and information, cooperation among cooperatives, concern for community), and they mainly aim at maximizing the benefits of their partners, who are owners and customers at the same time.

Typically, the concepts of *membership* and *member* in cooperative banking imply benefit expectations generated by each customer's different economic or ideological needs and affect not only customers' attitudes, emotions and beliefs about the delivery of bank services but also biases, consumer maturity and range of knowledge concerning banking.

Cooperative bank customers are involved in the process of "expecting to receive or receiving benefit from" the business philosophy it entails via the type and process of the delivered services, focusing mostly on the dimension of cooperative "corporate quality," which, according to the definition given by Harrison (2000), applies to the general image and perception concerning banks. As the existing indicators for measuring perceived service quality and bank customer satisfaction, as researched either in or outside Greece, have not been specifically explored in cooperative bank settings, the question still remains: which are the major quality determinants of cooperative bank customer satisfaction, according to customers' needs and the objectives-standards set by cooperative banking? In effect, the relevant research questions addressed in the present study are:

> *Research Question 1*: What are the determinants/dimensions of service/product quality in cooperative banking?
>
> *Research Question 2*: Which determinants/dimensions are most crucial to overall customer satisfaction deriving from the services delivered by cooperative banks?

Thus, based on the previous assumptions, the primary objective of the research presented in this article is to identify, from the customers' perspective, the potential determinants of service quality affecting customer satisfaction in cooperative banking, and, once identified, enabling managers to focus on designing activities that would ensure meeting or exceeding customer expectations.

The article is organized as follows: first, it provides an overview of the background literature regarding service quality, customer satisfaction and cooperative banking in Greece.

Next, it describes the objectives of the research and the methodology employed in the study, and then discusses the results of an empirical study. Finally, the article concludes by identifying managerial implications and study limitations and the author proposes future research directions.

BACKGROUND LITERATURE

Service Quality and Satisfaction

Service quality, the effective delivery of which has sometimes been disputed (Voss, Roth, Rosenzweig, Blackmon and Chase 2004), commonly has been viewed as an elusive and complicated construct. In terms of Howcroft (1991), high quality service is generally defined as a constant process of predicting and satisfying customers' requirements and expectations. Oakland (1986), in addition, states that banking quality service implies the degree to which a specific type of service meets customers' expectations.

Satisfaction is sometimes defined as an end-state resulting from a consumer's purchasing experience, which can either emerge as a cognitive reward or an emotional response to an experience. Customer satisfaction has been investigated as a 'perceptual, evaluative and psychological process' taking place during service delivery (Vavra 1997). It may derive from any dimension relevant or irrelevant to quality, and judgments may be formed by non-quality components; it also requires experience for its delivery (Taylor and Baker 1994). Scholars have identified customer- and situational-specific determinants that affect overall satisfaction (Zeithaml and Bitner 2000). In relation to high -quality confidence - related services such as those provided in the context of banking, functional quality is emphasized as the most vital driver for customer satisfaction (Shemwell, Yavas and Bilgin 1998).

Service quality and overall satisfaction have been found to be closely related (Anderson and Sullivan 1993; Babakus, Bienstock and Van Scotter 2004). The distinction and coherent relationship between service quality and satisfaction has been a pivotal concern in marketing literature and in academic- as well as practitioner-oriented relevant research (i.e. Anderson and Fornell 1994; Spreng and Mackoy

1996). Although numerous empirical works have concentrated on the causal order of the constructs at issue, there is little consensus as to whether expectations for the delivery of a specific service directly affect satisfaction or whether perceived quality is the main antecedent of satisfaction (Bahia, Paulin and Perrien 2000; Churchill and Surprenant 1982).

Bahia et al. (2000) suggest that in case of multidimensional, regularly-performed and high-contact services, such as those delivered in banking settings, service quality is most likely to affect satisfaction. Similarly, Papasolomou (2002) advocates that service quality in the banking sector, viewed as a multivariate construct encompassing dimensions, such as convenience, reliability, service portfolio and service personnel, has had a substantial impact on customer satisfaction. Overall, researchers have emphasized that perceived quality, assumed as an antecedent of customer satisfaction, has a direct and positive impact on overall satisfaction (Hume and Mort 2008).

Quality Dimensions in Banking

A comprehensive literature review has revealed that quality, on account of the rather intricate and elusive conceptualization it encompasses, has often involved -inter alia- measurement discrepancies (Sureshehandar, Rajendran and Anatharaman 2002). In this respect, no universal scale standard, particularly in the banking sector, can ensure valid and reliable measurement of perceived quality (Wang, et al. 2003). Overall, research has revealed explicit country- and culture-specific discrepancies in banking services as regards quality expectations, importance and perceptions. Snow, Bartel and Cullen (1996) have investigated ethnicity-specific customer expectations in the Canadian retail banking sector and identified several differentiating components in retail banking service expectations, depending on ethnic group. Additionally, Furrer, Liu, and Sudharshan (2002) emphasized that service quality importance and perceptions are highly contingent upon customers' values and beliefs, which are culture-specific.

Since the mid 90's, research has been focused on various quality determinants, among which the ten major determinants indicated by

Parasuraman, Zeithaml and Berry (1985) are considered more likely to generate high levels of customer satisfaction in the banking sector of various countries.

To provide a comprehensive discussion of the potential quality determinants affecting satisfaction, Akviran's (1994) BANKSERV, a versatile instrument employed for measuring perceived service quality delivered to Australian commercial banking customers, comprises four discriminating factors (totalling 17 items), namely: 1. staff conduct; 2. Credibility; 3. Communication; and 4. access to teller services. In addition, Bahia and Nantel (2000), in their research into a National Bank of Canada in Montreal, investigated customer expectations and perceptions and developed the Bank Service Quality (BSQ) measure.   They applied an exploratory factor analysis and identified six dimensions (totalling 31 items), that is, 1. effectiveness and assurance; 2.access; 3. Price; 4. Tangibles; 5. service portfolio; and 6. reliability.   Aldlaigan and Buttle (2002), by investigating quality in various British banks, employed principal component factor analysis and developed SYSTRA-SQ, which measured customer perceptions only; thus, they proposed four dimensions (totalling 21 items) : 1. service system quality; 2. behavioral service quality; 3. machine service quality; and 4. service transactional accuracy. Similarly, Jabnoun and Khalifa (2005) by using principal component extraction with an orthogonal rotation measured only customer perceptions in various banks in the Arabian Emirates that concluded in four dimensions (totalling 29 items): 1. personal skills; 2. Reliability; 3. Image; and 4. Value. Multiple regression analysis results demonstrated that, despite the fact that all four dimensions were indicative of determining quality in conventional banks by emphasizing value and image, quality in Islamic banks was determined only by personal skills and values. In addition, Athanassopoulos, Gounaris and Stathakopoulos (2001) highlighted six country-specific dimensions (totalling 25 items) in Greece: 1. employee competence to deliver bank services; 2. bank reliability; 3. product innovation; 4. Pricing; 5. physical evidence of the delivered services; and 6. consumers' convenience provided by the bank network.

Finally, the research conducted by Mihelis, Grigoroudis, Siskos, Politis and Malandrakis (2000), which involves measuring satisfaction in private banking in Greece, was based on the assumption that customer satisfaction represents a modern approach for quality based on the preference disaggregation model MUSA, and identified five dimensions (totalling 23 items): 1. bank personnel; 2. bank products; 3 bank image; 4. service delivery; and 5. access.

In conclusion, the various research efforts made in industry-specific contexts with a view to identifying quality determinants have demonstrated that service quality may be determined by the individual or aggregate perceptions of (1) the technical and functional quality of an organization, (2) service products, service delivery, and service environment, (3) reliability, response, empathy, safety and physical evidence associated with service delivery, and (4) image, value, pricing and social responsibility.

Cooperative Banks in Greece

Cooperative institutions in Europe were founded 150 years ago and it is now estimated that they are widely represented with approximately 65,000 outlets throughout the EU-27. According to the European Association of Cooperative Banks, cooperative banking in Europe enjoys a market share of 20%, representing 50 million members and 750,000 employees (EACB 2010).

In Greece, the first cooperative banks, which date back to the early 1990s, were forced to encounter a number of problems associated with customers, such as difficulty in accessing the banking system and high interest rates on loans during that period.

In Greece, the cooperative banking system, based on locally operating credit institutions, is mainly characterized by autonomy and non-homogenous development, which is due to the legal restrictions on capital and customers imposed on its credit system and which has hindered growth (Karafolas 2007).

According to the Assoc. of Greek Co-op Banks (http://www.este.gr/index.asp), until 2011 the total number of cooperative banks was 13, with a total network of 165 branches, 1,126 employees and 184,614 members (**Table 1**). Of these, 6 are locally-operated (within a prefecture), 4 were allowed to extend operation

in neighboring local areas (within a region) and only three were eligible to run a network of branches on the state level (ACBG 2011).

In addition, 8 credit cooperatives in Greece offer only a small number of services to their members until they manage to collect the required capital and become eligible for operating as cooperative banks. In combination with credit cooperatives, cooperative banks in Greece have established a nation-wide bank (Panhellinia Bank), which operates as a central bank providing network and service support. Note: 10% of the share capital of Panhellinia Bank is held by the German DZ Bank.

Typically, cooperative banks provide financial services only to members and can perform all types of banking operations except for underwriting. But they can also provide certain services to non-members, in case of secondary banking transactions or when a member takes part in secondary transactions. Until September 2006, cooperative banks were eligible to deliver services only to members, other credit institutions and the Greek State. Since then regulations have become less rigid and cooperative banks are also eligible to deliver services amounting to 50% of its loans or deposits to non-members (Karafolas and Katarachia 2009).

TABLE 1

Greek Cooperative Banks: Operational Level, Branches, Personnel and Members in 2011

Cooperative Bank Co-op. LL	*Level*	*Branches*	*Personnel*	**Members**
1. CO-OP BANK OF DRAMA	Prefecture	3	20	4,690
2. CO-OP BANK OF DODECANESE	State	20	134	21,886
3. CO-OP BANK OF EVROS	Prefecture	5	28	5,585
4. CO-OP BANK OF EVIA	Prefecture	10	55	8,285
5. CO-OP BANK OF IPEIROU	Region	8	68	9,280
6. CO-OP BANK OF KARDITSA	Prefecture	2	20	4,448
7. CO-OP BANK OF WEST MACEDONIA	Region	5	35	5,863
8. CO-OP BANK OF PELOPONNISOS	Region	14	68	4,947
9. PANCRETAN CO-OP BANK (CRETE)	State	60	401	80,150
10. CO-OP BANK OF PIERIA	Prefecture	2	14	3,500
11. CO-OP BANK OF SERRES	Prefecture	2	17	4,078
12. CO-OP BANK OF THESSALY	Region	10	72	9,701
13. CO-OP BANK OF CHANIA (CRETE)	State	24	194	22,201
13 Total	**Total**	**165**	**1126**	**184,614**

METHODOLOGY

In reviewing the relevant literature, the most common instruments used to measure service quality and customer satisfaction are SERVQUAL and SERVPERF scales. The SERVQUAL framework (Parasuraman, et al. 1985) is based on the theory of disconfirmed expectations, wherein consumers, depending on their own needs and experience, form specific expectations about the quality of the service / product delivered. Thus, on completion of their transactions, consumers tend to compare the delivered services / products on the basis of their own previous expectations. Despite the fact that SERVQUAL has been the most common instrument employed by researchers, it has been frequently criticized both theoretically and operationally (*see, e.g.* Babakus and Boller 1992; Carman 1990; Cronin and Taylor 1992; 1994). Teas (1993) raised questions about validity and expectations index specification, whereas Chiou and Spreng (1996) argued that the use of difference scores, as a psychometric issue, has fueled controversies concerning statistical validity in customer satisfaction surveys. The difference between SERVPERF**,** proposed by Cronin and Taylor (1992), and SERVQUAL lies in the fact that SERVPERF suggests that the concept of service quality should rely on customers' attitudes towards service delivery after the specific services have been used rather than on the disconfirmed expectations approach.

Since the early 1980s it was suggested that the concept of "quality" and "satisfaction" are interrelated. Based on this premise and on the dimensions introduced via SERVQUAL by Parasuraman et al. (1988), Cronin and Taylor (1992) investigated the measure of quality as a component of the degree of customer satisfaction in four different service industries (banks, fast food, cloth cleaning services, pest control companies). The results demonstrated that the SERVPERF model explained more of the variance in an overall measure of service quality than SERVQUAL and that SERVPERF is more efficient than SERVQUAL, as it can provide a better description of the concept of service quality and also a more reliable forecast of consumers' purchase intentions. Their study was replicated and extended by Brady, Cronin and Brand (2002) and the replication findings

suggest that in a number of industries the performance-only measurement of service quality outperforms SERVQUAL. Similarly, Quester, Wilkinson and Romaniuk (1995) examined the same service quality models in the Australian advertising industry. The results demonstrated that, despite any minor differentiations, SERVPERF is more efficient than SERVQUAL. In addition, Pizam and Ellis (1999) advocate that the conceptual basis of SERVQUAL enhances its efficiency mostly as a measure of satisfaction.

With a view to identifying the principal components of perceived service quality and their impact on customer satisfaction, and also assuming that decision-making is based on an intricate combination of emotional and cognitive processes, the present research adopted the rationale of the SERVPERF scale (the Perceived Performance model): to wit, that "Perceived quality is best conceptualized as an attitude" for statistical validity and reliability reasons (Cronin and Taylor 1992; 1994; Teas 1993).

Due to the fact that no commonly accepted scale has been established to measure perceived quality in the banking sector, the author of this article developed a questionnaire based on banking service and cooperative literature as well as on focused interviews of cooperative bank customers.

This first step of the project employed a convenience sample of customers/members and customers/non-members and was based on 8 in-depth personal interviews (five customers/members and three customers/non-members of the ccooperative bank). Eight personal interviews were deemed to be sufficient on account of the fact that after six interviews it was clear that the elicited answers were convergent rather than adding to research insights (Patton, 1990; Marshall, 1996). In detail, a set of graded open-ended questions was used and participants were initially asked to determine the perceived characteristics that differentiate cooperative and other types of banks. Subsequently, each characteristic was elaborated on, with a view to exploring both customers' total requirements from the Cooperative Bank and also the concepts associated with them. The interviews were focused on the cooperative bank customers' individual knowledge, perceptions and experiences concerning the corporate identity of

the bank and, particularly, the three distinct operating philosophies compatible with the cooperative principles and values inherent in the cooperative model - communication, information, education. The specific considerations enabled both investigating the determinant quality variables for cooperative bank customers and the emergence of unpredicted or un-expected answers.

The focused customers' interviews demonstrated a person-centered and parochial perception of cooperative banks. Despite considering that the relationship between customers and a bank even of their own choice is – to a greater or lesser extent - rather imposed and inevitable, customers tend to trust a cooperative bank more than other any type of bank. To illustrate, the interviews revealed views a) of customers/members who characterized cooperative banks as '*our own bank*', or argued that '*you can ask for any advice you need on your own financial matters*', '*they have a personal relationship with you and they try to help any time you need for it even if you are not an important customer*', '*they are not greater thieves than other banks because they try to work out the most suitable solution for you*', and b) of customers/non-members who claimed that '*they deliver services although you are not a member*', and '*lending procedures are easier*'.

In effect, customers prefer transactions in cooperative banks as they trust them more and consider them 'more fair' and 'honest', emphasizing that confidence is greater in case of borrowing rather than saving transactions, an issue which has to be further researched. Notably, all subjects evaluate delivered services in various banks using phrases such as '*cooperative banks ought to -have to…*' '*private banks should…*', as they are possibly influenced by social norms concerning private organizations and cooperatives. The specific norms are likely to affect customers/members' and non-members' level of expectations and requirements.

It is also worth pointing out that the distinctive cooperative identity and purpose, in the way it is communicated by the bank and is perceived by customers, have an impact on perceived banking service quality and customer satisfaction. Thus, in order to operationalize quality in cooperative bank service, the present

study, in addition to items representing facets of the SERVQUAL'S five service quality dimensions, includes items which derived from the personal in-depth interviews, without incorporating, however, expectation measures which may attract a social desirability response bias (Babakus and Inhofe 1991).

A questionnaire comprised of 42 items conceptually associated with 9 quality determinants: (identity/image of cooperative bank, social responsibility/values, membership, banking products/services – pricing, service delivery, consulting services, relation with personnel, communication, and confidence) was then developed. Additionally, and in order to ensure face and content validity, the questionnaire was examined both by 6 banking research executives in Greece and several cooperative bank executives, who were able to express their own views about item relevance, ambiguity, necessary reclassifications, possible redundancy, or even make further additions (Athanassopoulos 1997; Bahia and Nantel 2000). This process generated a 38-item questionnaire, which was employed to measure service quality in cooperative banks.

Notably, the present research includes both functional and technical quality variables, the effectiveness of which is conceived on the basis of the wide range of both emotional and cognitive responses resulting from customer satisfaction for the service quality delivered by the Cooperative Bank at issue. Therefore, a non-comparative Likert-type numeric 10-point scale with anchored endpoints was employed, with a view to the fact that it demonstrates covariance among key variables (Allen and Rao 2000; Allen and Wilburn 2002; Wittink and Bayer 1994) and is also considered an appropriate scale for research in Greece, where typically evaluation systems in primary and secondary education are based on a ten-point scale. Overall satisfaction is operationalized in terms of three measures, namely overall satisfaction, expectations - disclaim, ideal service, and is measured on the basis of a ten-point Likert-type scale (e.g., 1 *completely dissatisfied* – 10 *completely satisfied*).

To ensure scale validity, a pilot survey carried out prior to the main research involved nineteen customers representing the population of interest. The nineteen pilot interviews, which tested questionnaire cohesion and coherence, did

not demonstrate that any changes or intervention to the topic and measurement method were required.

The corpus of data was obtained by conducting personal interviews with customers who had already carried out a transaction in branches of the cooperative bank and was based on a constructed questionnaire requiring ~ 12-15 minutes to be answered. The sample was comprised of 486 customers (**Table 2**) in 22 randomly selected branches of the single biggest cooperative bank in Crete, Greece. The sampling was proportionate to the number and distribution of branches of this largest Greek cooperative bank in Crete and included 22 out of 49 branches. The initial sample was comprised of 519 customers: 339 respondents from the county of Heraclion (14 branches), 70 from the county of Rethymno (3 branches), 65 from the county of Lassithio (3 branches), and 45 from the county of Chania (2 branches). During the analysis of results 33 questionnaires were rejected as it was made evident that the respondents were basically ignorant of cooperative bank transactions; thus, the final sample was comprised of 486 respondents. To achieve representation of the actual distribution of transactions, the interviews were organized on specific working days and hours: Monday to Friday 8:00 - 10:00a.m, 10:00a.m. - 12:00p.m., and 12:00 - 4:00p.m.

TABLE 2. Demographic Information of Sample (n=486)

Demographic variable	Customers	Coop-Bank as Central Bank	Members	*Non Members*
	n=486	n=347	n=376	n=110
Gender				
Male	61%	73%	64%	51%
Female	39%	69%	36%	49%
Age				
< 24 years	4%	52%	2%	11%
25 – 34	20%	67%	18%	24%
35 – 44	23%	73%	23%	20%
45 – 54	25%	73%	26%	22%
55 – 65	16%	75%	17%	15%
> 65	12%	73%	14%	8%
Member	77%	78%		
Non-member	23%	49%		

As shown in **Table 2**, in terms of *gender*, the sample was comprised of 61% male and 39% female subjects aged up to 24 years (4%), 25-34 years (20%), 35-44 years (23%), 45-54 years (25%), 55-64 years (16%), and finally, over 65 years (12%).

The majority (77%) are customers/*members* of the cooperative bank, whereas 23% are customers/*non-members*. Of these, 78% of the members and 49% of the non-members carry out their main transactions in the researched cooperative bank; in addition, the majority of customers/members are male (64%) and the (very slight) majority of customers/non-members are also male (51%). In terms of the life cycle of the relationship-co-operation between the bank and its customers, it becomes evident that as customers/members (78%) carry out most or all of their transactions in the specific bank, where they are also members,

their relationship with the bank, according to Zineldin (1996), falls into the long-term stage, in which perceived quality is largely contingent upon the quality of interactivity and interaction.

It is important to note that although the present study is a pilot research aimed at results which will generate a substantiated basis for further investigation and validation of an explicit structure of the factors measuring cooperative bank service quality, data analysis was based on a two-stage "hybrid" approach comprised of exploratory and confirmatory factor analyses. During the first stage, a principal axis factoring method (PAF) was employed on the total research sample. As it is not possible to cross validate the obtained results on a second sampling, in the second stage the research employs both Exploratory and Confirmatory factor analysis dividing the total sample into two random samples of equal size (DeCoster, 1998).

In order to obtain a parsimonious model, which could also be convenient for managers, the research employed principal component factor analysis (PCA) on one half of the data (split 0) and, subsequently, tested the generality of the extracted factors with confirmatory factor analysis (CFA) on the second half of the data (split 1). The use of multiple regression analysis with the stepwise method examined the significance of the seven factors derived from the PCA for measuring overall customer satisfaction.

ANALYSIS AND RESULTS

Stage 1

Exploratory factor analysis (PAF) was used to explore the possible underlying factor structure of the set of 38 observed variables.

Initially, the suitability of the data set for the performance of exploratory factor analysis was tested through the estimation of the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. KMO was 0.951 and Bartlett was significant $p<0.01$, indicating that the data set can be used for the analysis. All the responses to the 38 items concerning service quality were factor analyzed using principal axis extraction with an orthogonal (equamax) rotation (Vavra 1997). Due to the exploratory nature of the analysis for the extraction of factors, eigenvalues greater than 1.0 and factor loadings 0.40 or above were retained (Jabnoun and Khalifa, 2005; Caro and Garcia, 2007). Using these criteria, the analysis resulted in seven factors totaling the 38 items, which explained 68.60 of the variance. All the items and factor loadings included in the principal axis factor analysis are presented in the **Appendix**. The factors are labeled as *Bank Set of Values*, *Support, Quality-Price Relationship, Serviceability, Under-standing and Consulting, Personnel Relation-ship, and Communication for Building up Trust*. Reliability analysis was conducted for the items comprising each of the seven factors and the Cronbach alphas were 0.900, 0.846, 0.869, 0.891, 0.958, 0.923, 0.940 respectively (the alpha's are included in **Table 3**).

TABLE 3
Factors Items and Reliability Estimates

	Factors	*Items*	Cronbach's alpha
1.	bank set of values	(7)	.900
2.	support	(5)	.846
3.	quality-price relationship	(5)	.869
4.	serviceability	(5)	.891
5.	understanding and consulting	(2)	.958
6.	personnel relationship	(6)	.923
7.	communication for building up trust	(8)	.940

TABLE 4: Principal Component Analysis Results

items	Factor loadings						
	F1	F2	F3	F4	F5	F6	F7
Communication for building up Trust							
1. Information about the time needed for the approval of a product	.688						
2. Full information about the documents needed for a product	.652						
3. Detailed information about prices/ products/terms by the personnel which makes me trust them	.647						
4. Employees' behavior makes me feel secure	.617						
5. I feel secure about my transactions with the bank	.609						
Personnel relationship							
6. Friendly/polite behavior of personnel		.810					
7. Personnel willing to serve the customer		.800					
8. They work on the customer / they dedicate time		.768					
Quality-Price relationship							
9. Better loan interest rates and beneficial loan terms			.764				
10. No charge for expenses and commissions			.691				
11. Deposit interest rates compared to other banks			.675				
12. Number/range of products and services			.629				
Understanding and consulting							
13. Consulting support for any financial matter				.765			
14. Right diagnosis of customer's needs				.706			
Bank Set of Values							
15. Operates with transparency					.715		
16. Is really concerned with its customers' needs					.614		
Serviceability							
17. Promptness and speed of service						.787	
18. Speed of response to requests						.710	
19. Uses new technologies and modern systems						.624	
Educational Support							
20. Implements programs of training/ information to its customers							.794
21. Invests in personnel's training							.720
Alpha coefficient	0.951	0.898	0.869	0.971	0.885	0.867	0.780

Stage 2

For the performance of factor analysis, on one half of the random sample (split 0, n=243) in the pre-analysis testing Kaiser-Meyer-Olkin was 0.946 and Bartlett was significant p<0.01, demonstrating the adequate representation of the sample. Principal component analysis was used with equamax rotation. In the analysis the factors with eigenvalue greater than 1.0 and factor loadings equal or greater than 0.60 were retained (Dimitriades 2006). Analysis of communalities ranging from 0.616 to 0.908 is considered satisfactory and confirms an acceptable level of interpretation.

The analysis derived seven factors, which include the 21 variables that account for 79.099 of the total variance. The scales were assessed for reliability and, as the test indicated, the variable "*Sufficient information about the products, services offered by the bank*" (factor load 0.617) was excluded from factor F1 increasing reliability from 0.946 to 0.951; in addition, the variable "*Trained personnel/experts*" (factor load 0.606) was excluded from factor F4 increasing reliability from 0.916 to 0.971. Scale reliability for the seven factors including 21 variables (see **Table 4**), ranges from Cronbach alpha of 0.780 up to 0.971, indicating scale internal reliability, since 0.7 and above is usually acceptable (Nunnally 1978).

The factors derived from PCA on the half randomly selected sample verify the measurement construct which resulted from the initial exploratory (PAF) analysis. Then, Confirmatory factor analysis was employed on the second half of the sample (split 1, n=243) in order to assess the convergent and discriminant validity of the measurement model.

The procedures used to measure the fit of the model were x^2 statistics CMIN/DF and NNFI, CFI, RMSEA, and SRMR, the adequacy of which can offset the contribution of x^2 statistics, since it is sensitive to multivariate normality violations.

The results of the CFA on the second half split using AMOS 7, which are based on the reliable test statistics CMIN/d.f.=1.96, NFI=.911, CFI=,954 RMSEA=0.063, SRMR=0.055, demonstrate a good fit.

Furthermore, **Table 5** demonstrates that all loadings are significant as required for convergent validity. Scale reliability ranging from 0.78 το 0.93 and the average variance extracted (AVE) from .56 to .86 indicate adequate convergence.

In addition, the author estimated the discriminant validity of the service quality dimensions based on Fornell and Larker's (1981) criterion, according to which evidence of discriminant validity is shown if the AVE is greater than the square of the construct correlations (see **SIC**, in **Table 6**) with the other factors and the value of AVE for each construct should be at least 0.50.

All variance (AVE) estimates extracted in the study (**Table 7**) are larger than the corresponding **S**quared **I**nterconstruct **C**orrelation estimates (**SIC**) despite the fact that the difference between factor F7 and factor F5 is marginal. Therefore, the seven construct CFA model demonstrates discriminant validity.

TABLE 5
Convergent Validity

	F1	F2	F3	F4	F5	F6	F7	*Item Reliabilities*	*delta*
F1	.667							0.444	0.55
	.798							0.636	0.36
	.771							0.594	0.40
	.850							0.772	0.23
	.796							0.633	0.36
F2		.853						0.727	0.27
		.892						0.795	0.20
		.901						0.811	0.18
F3			.593					0,351	0.64
			.819					0.670	0.33
			.749					0.561	0.43
			.875					0.765	0.23
F4				.944				0.891	0.10
				.915				0.837	0.16
F5					.873			0.762	0.24
					.796			0.633	0.37
F6						.736		0.541	0.46
						.673		0.453	0.55
						.836		0.698	0.29
F7							.861	0.741	0.27
							.732	0.535	
									0.46
V.E.	62.%	84.%	59.%	86.4%	69.8%	56.5%	63.8%		
C.R.	0.89	0.91	0.85	0.93	0.82	0.79	0.78		

Notes: **VE = variance extracted; CR = construct reliability**

$$VE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n} \qquad CR = \frac{(\sum_{i=1}^{n} \lambda_i)^2}{(\sum_{i=1}^{n} \lambda_i)^2 + (\sum_{i=1}^{n} \delta_i)}$$

λ represents the standardized factor loading and i is the number of items
(δi) = the sum of the error variance terms for a construct (delta)

TABLE 6

Factor Correlations

	IC	SIC
F1<-> F2	.755	.700
F1<-> F3	.408	.1664
F1<-> F4	.628	.3943
F1<-> F5	.617	.3788
F1<-> F6	.662	.4382
F1<-> F7	.424	.1797
F2<-> F3	.214	.0457
F2<-> F4	.499	.2490
F2<-> F5	.554	.3069
F2<-> F6	.633	.4006
F2<-> F7	.321	.1030
F3<-> F4	.545	.2970
F3<-> F5	.461	.2125
F3<-> F6	.481	.2313
F3<-> F7	.539	.2905
F4<-> F5	.666	.4435
F4<-> F6	.669	.4475
F4<-> F7	.531	.2819
F5<-> F6	.685	.4692
F5<-> F7	.798	.6368
F6<-> F7	.467	.2180

TABLE 7

Discriminant Validity

	VE	SIC
(F1) Communication for building up Trust	.6158	.5700, .1664, .3943, .3788, .4382, .1797
(F2) Personnel relationship	.8376	.5700, .0457, .2490, .3069, .4006, .1030
(F3) Quality-Price relationship	.5867	.1664, .0457, .2970, .2125, .2313, .2905
(F4) Understanding and consulting	.8640	.3943, .2490, .2970, .4435, .4475, .2819
(F5) Bank set of values	.6975	.3788, .3069, 2125, .4435, .4692, .6368
(F6) Serviceability	.5646	.4382, .4006, .2313, .4475, .4692, .2180
(F7) Educational Support	.6380	,1997, .1030, .2905, .2819, .6368, .2180

A review of the specific framework follows, employing the 1-factor hypothesis of deriving satisfaction (Athanassopoulos et al. 2001). The outcomes of the two different tests were compared (**Table 8**) and demonstrated that applying one factor was not recommended.

TABLE 8

Summary Statistics of Model Fit

	7 factors	**1** factor
CMIN(chi-square x^2)	318.4	708.8
Degrees of freedom (d.f)	162	175
CMIN/ d.f	1.96	4.05
NFI [1]	0.911	0.803
CFI[1]	0.954	0.842
RMSEA [2]	0.063	0.112
SRMR	0.055	0.094

[1]NF1 and CFI values close to 1 indicate a good fit
[2] The lower the RMSEA and SRMR values, the better the model is considered to be.

In addition, although retests were carried out, by reducing one factor at a time and applying its determinant variables on the other factors, the procedure did not indicate a good fitting model compared to the 7-factor model.

According to two-step analysis results, the proposed bank service quality dimensions, which are operationalized by 21 variables for the Greek cooperative bank sector, are as follows:

Communication for Building up Trust: Communication and sufficient information concerning the terms of cooperation, the offered products and services, the time required for transactions etc., produce a conscious or unconscious feeling of cognitive trust (Johnson and Grayson 2005) in the customers' relationship with the bank, and makes customers ex ante consider the specific type of bank as more honest, fair and safer compared with other bank types.

Personnel relationship involves the interaction between the bank personnel and customers, from the perspective of the cooperative bank customers, who perceive the bank personnel's friendly attitude, willingness and loyalty as key qualities for developing strong interpersonal bonds among all those involved.

Qu*ality-Price relationship* implies the relationship between quality/price and range of delivered services by the bank, according to its set objectives and corporate identity.

Understanding and Consulting is interpreted as the complete, clear and in-depth diagnosis of customers' needs and consulting support for any financial matter in order to help or guide cooperative bank customers to pursue the best course of action.

Bank Set of Values involves the principles and values set by a cooperative bank. In accordance with their value system, customers expect cooperative banks to focus on their customers and aim at satisfying customers' needs impartially.

Serviceability is perceived as the ability to deliver banking products or services which meet customers' needs promptly and quickly and maximize utility using modern methods and procedures.

Educational Support implies social awareness and responsibility of the cooperative bank stakeholders, which is principally manifested both in the customers' and employees' education/training programs.

Following Jabnoun and Khalifa (2005), based on the seven factors derived from the principal component factor analysis, the research described in this article employed a multiple regression analysis in order to determine the relative importance of service quality dimensions in predicting overall customer satisfaction with a view to examining dimensionality. The formula of the regression model is:

OVERALL SATISFACTION=
f **(Communication for Building up Trust, Personnel Relationship, Quality-Price Relationship, Understanding and Consulting, Values of the Bank, Serviceability, Educational Support)**

The results (**Table 9**) indicate that overall customer satisfaction is mostly affected by four out of seven service quality dimensions: ***Bank Set of Values, Quality-Price relationship, Understanding and Consulting, Communication for Building up Trust.*** These empirical results demonstrate that the value system of the bank and the manifestation of emotional proximity are likely to differentiate customers' quality requirements and satisfaction from a cooperative bank more than the aspects of satisfaction from any other type of bank.

TABLE 9

Predicting Customers' Overall Satisfaction: Multiple Regression Analysis

Model	Beta	t	Sig. Level
1 (constant)	1.196	3.842	.000
Bank Set of Values	0.310	8.720	.000
Quality-Price relationship	0.207	6.859	.000
Understanding and consulting	0.178	4.946	.000
Communication for building up trust	0.187	4.074	.000

Notes: adjusted R square $= 0.617$, F $= 196.440$, p < 0.05

To conclude, cooperative banks, either consciously or unconsciously, are conceived by customers as organizations generating 'cognitive trust' and are, therefore, viewed as more equitable and honest than other types of banks. The specific perception seems to be prevalent in forming customers' expectations and is instrumental to generating satisfaction concerning customer relationship with the Bank.

DISCUSSION

In the services-sector, delivery of high quality service has long been recognized as a critical factor for developing and maintaining long-term, satisfying relationships with customers. Various authors have commented on what constitutes service quality claiming that the application of a business- and country-specific measure is more effective than a universal scale since the number and nature of service quality dimensions seem to vary across different service settings and countries.

In the financial services industry, bank institutions are distinguished in various categories, among which a vital and growing type pertains to socio- economic initiatives which belong to neither the public sector nor the private profiteering sector. Such an alternative form is cooperative banking. The fundamental difference between cooperative banks and other banks is the member- versus investor-driven orientation, which affects its operating philosophies and its relationship with customers.

The purpose of the study discussed and described in this article was to identify the dimensions of perceived quality of bank services by cooperative bank customers and to explore whether those or some of those affect overall satisfaction with a cooperative bank.

The empirical findings of our study support and extend prior research in that we demonstrated that service quality is a multidimensional construct, the dimensions of which tend to be industry- as well as country-specific and also that service quality could be a factor that leads to satisfaction (*see* Cronin and. Taylor 1992; Spreng and Macoy 1996; Babakus and Boller.1992). The results indicate that, despite the fact that service quality that satisfies cooperative bank customers' needs is rendered by several universal dimensions, the meaning and importance-hierarchy of those dimensions vary.

The empirical results of the present research, apart from providing additional insights into the possibility of establishing specific measures for service quality and customer satisfaction deriving from service delivery, demonstrate the realistic possibility of developing special scales for business-specific settings, such as cooperative banks.

In this respect, the pilot research revealed seven service quality dimensions (i.e. Communication for Building up Trust, Personnel Relationship, Quality-Price Relationship, Understanding and Consulting, Bank Set of Values, Serviceability, and Educational Support), four of which (i.e. Bank

Set of Values, Quality-Price Relationship, Understanding and Consulting and Communication for Building up Trust) seem to have a significant effect on customer satisfaction in the context studied.

Bank managers and marketers wishing to increase their customers' overall satisfaction should definitely be aware of the components inherent in service quality and of how service quality can be measured. Toward these ends, the present study can offer useful guidance to managers since it provides an efficient approach to developing an instrument for measuring service quality and the target factors which are pertinent to satisfaction and, consequently, to the priorities set for taking action to improve quality.

In terms of the customer-bank relationship, the present study demonstrates that cooperative banks tend to foster a conscious or unconscious feeling of cognitive trust among customers and anticipate a perception of being fair and more honest institutions compared with other bank types. This perception appears to affect customers' quality requirements from a bank and is crucial to fostering customer satisfaction. The components affecting customer satisfaction deriving from the perceived service quality in cooperative banks are particularly congruent with the meaning of the term '*cooperative*' itself, and they appear to imply the manifestation of bank emotional 'proximity' and image ('person-centered', mutual relationship and support). Constant and free communication with customers, mutual trust and interests, focus on customers' problems and concerns, as well as fair and consistent behavior influence customer satisfaction and, according to the findings of this study, they should be viewed as the cornerstone of established principles and practices for cooperative bank managers.

In addition, determining and understanding the specific major determinants of customer satisfaction are bound to be the basis of developing a cooperative bank differentiation strategy. The determinants "*Bank Set of Values*" and *"Understanding and Consulting",* which encompass bank identity and social responsibility features, in addition to eliminating information asymmetry ensued by the "*Communication for Building up Trust*" should

be viewed as indispensable to bank policies by all those involved in cooperative bank administration and can be employed as a competitive advantage. Provided that cooperative banks invest in communication and build their communication policies focusing on the determinants at issue, they can enhance perceived customer value and, in turn, enhance bank potential to attract cooperative assets, which are crucial to bank sustainability and growth. In addition, "*Quality-Price Relationship"* is directly associated with affective satisfaction, and appears to be instrumental to affecting customer perceptions about cooperative banks when service delivery is assessed.

LIMITATIONS

It is important to point out the several limitations of the present study and, thus, place an emphasis on the need for further research. Given that the current study is exploratory and the sample is limited to customers only of a single cooperative bank in a specific part of Greece, much additional research would be needed to ascertain validation of the approach taken and generalizability of the results.

Recent studies have focused exclusively on the effect of customer profile on the measurement of customer attitudes and perceptions (Athanassopoulos and Lamproukos 1999; Yavas, Benkenstein and Studhldreier 2004) in the context of banking.

The study described in this article took advantage of the fact that cooperative bank customers are categorized in two distinct groups, as members or non-members. However, the small size of the non-member group (n = 110) in this study was certainly problematic in terms of conducting factor and regression analyses. Consequently, the differentiation of ranking and conceptualization of the quality dimensions involved for different groups of customers in cooperative banks (customers-members / non-members or depositors / borrowers) should be further researched considering that the focus on the distinction of members – non-members is merited if for no other reason than empirical research has demonstrated that members carry out more transactions in various sectors with '*Their own bank*' than ordinary customers and also that members are more important customers

than non-members as they are more loyal (Greve. 2005).

Further research should also be expanded and focus on cooperative banks in other countries, with a view to confirming the multidimensional nature of the proposed model. Future research should also test for factors which can possibly *moderate* Cooperative Bank customers' emotions, attitudes and behaviors.

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APPENDIX A

Principal Axis Factor Analysis-Scale Items

Items	Factor loadings						
	F1	F2	F3	F4	F5	F5	F7
F1 Bank set of Values *(alpha = 0.900)*							
1. Operates with transparency						,669	
2. Is really interested in its customers' needs						,579	
3. Invests in personnel's training							,586
4. Has as a goal the mutual benefit of the bank, its customers, the employees and the society						,444	
5. You feel that it is "your own bank"						,462	
F2 Support *(alpha = 0.846)*							
6. Treats all its customers/members in the same way						,524	
7. Offers to its customers more than expected			,467				,434
8. Provides good services at a reasonable cost						,425	
9. Has a wide network of branches in distant areas							,526
10. Helps with the development of local societies						,441	
11. Implements programs of training/information to its customers							,780
12. Helps its customers cope with financial difficulties							,436
F3 Quality price reltionship*(alpha = 0.869)*							
13. Deposit interest rates compared to other banks			**,631**				
14. Better loan interest rates and beneficial loan terms			**,741**				
15. No charge for expenses and commissions			**,717**				
16. Other services (fixed commands, bill settlements, insurance services)			**,539**				
17. Number/range of products and services			**,571**				
F4 Serviceability *(alpha = 0.891)*							
18. Products adapted to customers' needs				,463	**,409**		
19. Uses new technologies and modern systems	,410				**,473**		
20. Promptness and speed of service					**,684**		
21. Speed of response to requests					**,789**		
22. Effectiveness of problems solutions					**,605**		
F5 Understanding and consulting *(alpha = 0.958)*							
23. Consulting support for any financial matter				**,703**			
24. Right diagnosis of customer's needs				**,743**			
F6 Personnel relationship *(alpha = 0.923)*							
25. Trained personnel/experts	**,567**			,497			
26. Personnel willing to serve the customer	**,803**						
27. They work on the client / they dedicate time	**,784**						
28. They understand the customer's needs	**,642**			,458			
29. Friendly/polite behavior of personnel	**,788**						
30. Well done appearance of the personnel	**,525**						
F7 Communication for building Trust *(alpha = 0.940)*							
31. Clear communication with the terms of cooperation with the cooperative bank		**,655**					
32. Sufficient information about the products, services offered by the bank		**,612**					
33. Information about the time needed for the approval of a product		**,638**					
34. Full information about the documents needed for a product		**,664**					
35. Employees' behavior makes me feel secure	,410	**,593**					
36. The Bank has no secret charges and obscure wording of terms		**,562**					
37. Detailed information about prices/ products/terms by the personnel which makes me trust them		**,639**					
38. I feel secure about my transactions with the bank		**,564**					

Extraction Method: Principal Axis Factoring. Rotation Method: Equamax with Kaiser Normalization

JUSTICE FOR CONSUMERS COMPLAINING ONLINE OR OFFLINE: EXPLORING PROCEDURAL, DISTRIBUTIVE, AND INTERACTIONAL JUSTICE, AND THE ISSUE OF ANONYMITY

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ABSTRACT

The dramatic increase in online commerce over the past decade has raised concern over the perceived fairness of complaint handling methods in this venue. The study described in this article uses justice theory to determine whether respondents who sought complaint resolution online were satisfied in the same manner as respondents who used conventional complaint mechanisms. In this study of consumers residing in several different countries, authentic complaint experiences were analyzed. The authors found that both online and offline complaining consumers experienced justice (in general) in the complaint process. Procedural justice emerged as the dominant justice dimension, but new insight was gained with respect to how interactional justice was manifested in distinctly different ways for both online and offline complaining consumers. Some online consumers seek the anonymity that technology affords while a significant portion of the offline consumers seek the transparency and openness that many of the conventional complaint mechanisms offer (e.g. face-to-face and phone). Contrary to some other studies investigating justice perceptions and complaining behavior, distributive justice did not emerge as a top theme.

INTRODUCTION

The increase in online commerce suggests the need for an increase of investigations into online complaint activity. The primary purpose of the study described herein is to determine whether consumers who seek complaint resolution online are satisfied in the same manner as consumers who use conventional (offline) complaint mechanisms.

Justice theory is used to assess consumers' perceptions of fairness in complaint handling methods. Our study is particularly interested in how interactional justice is experienced for online versus offline complaint consumers. This interactional dimension of justice becomes particularly worthy of further investigation when a technology interface is substituted for the human interface part of the complaint process. Thus, to the degree that an agent-to-consumer interaction is not as evident in an online environment, a deeper investigation of customer satisfaction and justice is warranted.

The marketplace continues to experience a healthy growth in the use of technology for furthering relationships and completing transactions between businesses and end-consumers. Global e-commerce sales are forecasted to exceed one and a quarter trillion dollars by 2013, with the United States remaining the largest online market according to the Interactive Media in Retail Group (IMRG) (Montaqim 2012). Furthermore, Forrester research predicts that U.S. online retail sales will reach $278.9 billion in 2015 (Indvik 2011). The evolution of the concept of cyber-Monday, as a follow-up to black Friday, provides additional evidence of this growth.

As commercial activity in general, and online commerce in particular continue to proliferate, entities such as the Federal Trade Commission (FTC) and the Better Business Bureau (BBB) have continued to track consumer complaints. The FTC reported in 2011 that the top ten complaints it received included shop-at-home and catalog sales, and internet services (Federal Trade Commission 2012). In 2009, the Better Business Bureau (BBB) reported that complaints to it, increased by nearly ten percent (Council of Better Business Bureau 2010). The 2009 records included increases over the previous year for complaints on cellular phone service. In addition, there were increases for complaints on television, cable and satellite service, and banking

services. Internet shopping complaints were also among the top ten for the BBB.

As the exchange of goods and services are increasingly facilitated through technological means, a subsequent outcome continues to be the need for organizations to manage any consumer dissatisfaction that occurs during these exchanges. The research discussed in this article further explores whether consumers who seek complaint resolution online are satisfied in the same manner as consumers who use conventional complaint mechanisms.

LITERATURE REVIEW AND RESEARCH QUESTIONS

Customer Satisfaction, Dissatisfaction and Complaining Behavior

According to the American Customer Satisfaction Index (2009), consumers involved in retail trade have been satisfied at the 70% level or above for at least the last decade: be it product or service-oriented businesses (Fornell, 2010). In other words, consumer-oriented businesses and their patrons enjoy, for the most part, a mutually beneficial exchange relationship. However, in some instances, customers are dissatisfied with some aspect of the exchange of their money for goods or services. According to Ahmad (2002) and Zemke and Bell (1990), a service delivery system fails when it cannot deliver service as promised. Whereas satisfaction has been associated with brand loyalty, goodwill, and repeat sales; conversely, dissatisfaction [can] lead to redress seeking behavior (i.e., a request for a refund, exchange, or repair, etc.) (Blodgett, Granbois, & Walters 1993; Ahmad 2002).

When a customer is dissatisfied, a company's ability to recover from the complaint (i.e. solve the customer's problem or otherwise appease the situation), can have significant ramifications in regards to customers' perceptions of an organization's competence, the product or services already purchased, repurchase intent, the quality of a firm's other offerings, and customers' post-complaint recovery behavior (Shankar, Smith, & Rangaswamy 2003; Harris, Grewal, Mohr, & Bernhardt 2006). When a customer's dissatisfaction is not addressed or is mishandled, negative word-of-mouth and/or discontinued use of the product, service, or business can result

(Martinez-Tur, Peiro, Ramos, & Moliner 2006). Schmidt and Kernan (1985) found that customers have described redress procedures (complaint handling) as a key component of the shopping experience and satisfaction guarantees. Hayes and Hill (1999) found that customer satisfaction is attributable in part to service success along with complaint and service recovery strategies. Therefore, online and traditional "brick and mortar" service providers and retailers have for many years been advised to focus on executing effective recovery strategies as opposed to striving for mistake free shopping experiences (Schmidt and Kernan 1985; Hayes and Hill 1999).

Complaint handling involves all of the processes that a company invokes after a service failure for the purpose of re-establishing a company's credibility from the perspective of the consumer (Hart, Heskett, & Sasser 1990). This encompasses having the requisite processes in place for initiating appropriate service recovery strategies when a failure occurs. When customers are satisfied as a result of a post-complaint experience, they often will engage in repurchase behavior. Effective recovery strategies have been said to paradoxically lead to a situation whereby the customer will rate the encounter more favorably after a problem has been corrected than if the transaction had been correctly performed the first time (Etzel & Silverman 1981; McCollough & Bharadwaj 1992).

The literature is robust with studies that have focused on traditional mechanisms/processes for complaining and subsequent behaviors (Blodgett et al. 1993; Blodgett, Hill and Tax 1997; Tax, Brown, and Chandrashekaran 1998; Smith, Bolton, and Wagner 1999; Davidow 2003). The framework used is often post-purchase satisfaction, leading to re-patronage intention and/or word-of-mouth communication. Scholars have also investigated the effect of customers' perceptions of fairness in the complaint process on their level of satisfaction, subsequent continued patronage, and favorable word-of-mouth (Blodgett et al. 1997; Tax, Brown, & Murali Chandrashekaran 1998). It is this "fairness" construct that is the focus in our research.

Justice Theory and Complaining Behavior

Constructs used to illuminate satisfaction have included service quality (Parasuraman et al.

1988), loyalty (Parasuraman and Grewal 2000; Shankar et al 2003), and justice (Blodgett el al 1993; Blodgett et al. 1997; Cho et al 2002). Our research uses justice theory to investigate online and offline complaining behavior in seeking a broader conceptual understanding of consumer complaining behavior.

Justice theory (Homans 1961; Adams 1965) has been used to evaluate consumer satisfaction with the complaint process. This theory has long been used in investigating satisfaction derived from post-complaint recovery with respect to individuals' perceptions of their fair and equitable treatment (Parasuraman et al. 1988; Bitner, Booms & Tereault 1990; Goodwin & Ross 1992; Blodgett et al. 1997; Worsfold, Worsfold, & Bradley 2007; Ha & Jang 2009). *Derived from equity theory, justice theory espouses that consumers evaluate the level of fairness in the process. This fairness is characterized as one or more of three forms of justice: distributive, procedural, and interactional.*

Distributive justice addresses the parity in the remedy received by the consumer. That is, distributive justice looks at the compensation that might have been received by the complaining consumer, in exchange for their troubles (Austin 1979; Mccoll-Kennedy & Sparks 2003; Karatepe 2006). In such cases, an individual measures the degree to which the remedy of the problem sufficiently makes the individual "feel whole" in regards to the offers by the establishment.

Procedural justice addresses the way the process of handling the complaint issue was settled. Procedural issues may include whether the problem could be handled on the premises or whether the customer had to write to headquarters or phone a customer service line to plead his/her case (Blodgett et al. 1997; de Matos, Fernandes, Leis, & Trez, 2011).

Interactional justice looks at the consumer's satisfaction with the level of care and empathy provided by the agent of the service provider while the problem was being eradicated. It is the "interpersonal treatment [one] receives from another person" (Adams 1965; Bies 2001, p. 91). This is of particular interest to the authors of this article, again because interactional justice is customarily manifested when the consumer interacts with an *individual* who represents the

company to which the problem is attributed. That agent- to-consumer interaction is not as evident in an online environment, and therefore warrants deeper investigation. Thus, the interactional dimension of justice becomes particularly worthy of further investigation when a technology interface is substituted for the human interface part of the complaint process.

With respect to complaint handling when traditional mechanisms (e.g. phone, mail, etc.) are used, Tax et al (1998) contended that justice theory provided good theoretical underpinning for addressing satisfaction with respect to complaint scenarios. However, various justice dimensions emerge as dominant depending on the study and their contexts.

Tax et al. (1998) found that all the justice dimensions were factors. In their study, distributive justice focused on financial loss and apology. They noted that apology, as a construct, represented emotional costs as well as financial costs. Their findings for procedural justice emphasized customer convenience and firm follow-up. Interactional justice included issues related to communication and behavior. These authors concluded that complaints that were left unhandled were considered unfair.

Clemmer and Schneider (1996) concluded that distributive justice was the most important factor for predicting customer satisfaction. Smith et al (1999) corroborated this finding using an experimental design scenario in which consumers evaluated various failure/recovery scenarios using an organization that they recently patronized. Distributive justice emerged as the justice dimension accounting for a relatively large percentage of the overall effect of perceived justice on satisfaction. Martinez-Tur (2006) also concluded that distributive justice was critical in predicting customer satisfaction.

These findings contradict works in relationship marketing that assume social interaction is the key to satisfied customers, and therefore procedural and interactional justice would be key to customer satisfaction (Hartline and Ferrell 1996). Goodwin and Ross (1992) suggested that procedural and interactional fairness were the key dimensions upon which consumers responded to service failures. Their research was characterized by an experimental design that manipulated levels of complaint outcome; apology, voice, and type of service.

Apology and voice figured prominently when consumers were offered a monetary or gift incentive after service failure. When there was no tangible offering, apology and voice ceased to have the same level of effect. An, Hui, and Leung (2001) determined in part, that when service providers give voice to their customers, that has led to higher perceived justice and more positive post-complaint behaviors.

Meta-analysis research has yielded insight into differences in findings based on a few conditions such as using students as the subjects in experimental design research. Gelbrich and Roschk (2011) found that the relationship between justice perceptions and satisfaction depends on the target group, the industry and the complaint type. Interestingly, distributive justice emerges as having great importance when the complainers are students.

Technology and Complaining Behavior

The technology issue brings an additional dimension to the study of consumer complaining behavior. Complaint satisfaction in an online environment has received some attention but its juxtaposition against the traditional offline environment has been limited.

A key point of our investigation involves the question of whether consumers experience complaint satisfaction in an online environment in the same way they experience complaint satisfaction in a conventional setting. As previously mentioned, justice theory is particularly instructive in this inquiry in that justice theory espouses three forms of justice; distributive, procedural, and interactional. Interactional justice specifically addresses consumers' satisfaction with the individual who represents the company with which a consumer has a complaint. This interactional dimension of justice becomes particularly worthy of further investigation when a technology interface is substituted for the human interface part of the complaint process. We posit, to the degree that an agent-to-consumer interaction is not as evident in an online environment, a deeper investigation of customer satisfaction and justice is warranted.

Bitner, Brown & Meuter (2000) inquired whether the same interpersonal service encounter in a traditional setting is relevant in a technology-based environment. In a related study,

Parasuraman and Grewal (2000) ask whether consumers' perception of the transaction value depends on their ready access to employees. Robertson, McQuilken and Kandampully (2012, p. 21) posited that when self-service technologies are in use, "service guarantees…specifically multiple attribute-specific guarantees, are associated with consumer voice complaints following self-service technology failure."

This area of inquiry is still relatively new. However, the preponderance of the studies that have addressed online complaint behavior, have done so in a discreet fashion. That is, most studies did not include complaint behavior from consumers in an online environment as compared with complaint behavior from consumers in a traditional environment.

Holloway and Beatty (2003) generated a typology of online service failures. They narrowed the categories of online service failures to: delivery problems, website design problems, customer service problems, payment problems, security problems, and a few miscellaneous items. Pointing out that the lack of human interaction is a fact that is unique to solving online service failures, these authors concluded that retailers are not adequately recovering from their service failures.

Previously, Kelley, Hoffman and Davis (1993) analyzed retail failures and recoveries, identifying fifteen different types of retail failures and twelve unique recovery strategies. Later, Forbes, Kelley and Hoffman (2005) did another study in which they focused on e-commerce retail failure and recovery strategies. They found ten e-tail failures and eleven e-tail recovery strategies used by e-commerce firms.

In a study that addressed the online environment exclusively, Abdul-Muhmin (2011) posited a model for determining the repeat purchase intentions of online consumers who had previously bought online. This inquiry resulted in the finding that experience with online purchase problems did not have a significant relationship to overall satisfaction (Abdul-Muhmin 2011).

In a study by Maxham, III and Netemeyer (2003) whereby online customers were instructed to file their complaints by phone to a customer service office, these authors found that all the justice dimensions were significant or influential in shaping customers' perceptions of fairness. Chang and Wang (2012) found that distributive justice was an effective recovery criterion by

consumers. Lin, Wang and Chang (2011) had previously found that *only* distributive justice has a significant positive influence on repurchase intention, and only interactional justice has a significant negative influence on negative word-of-mouth. They also found that influences on customer satisfaction, word-of-mouth, and repurchase intention, come from both the interaction between distributive justice and procedural justice and the interaction between distributive justice and interactional justice.

In a very recent study, Wu (2013) found that distributive and interactional justice contribute to satisfaction, but procedural justice does not. Chang, Lai and Hsu (2012) engaged in a study that explicitly expanded knowledge regarding satisfaction with recovery of online services (SROS). They point out that, "Collectively, literatures of online service recovery studies suggest that different types of service failures are encountered by consumers in online service settings [therefore]... Different remedy strategies and the level of choice options are needed to be considered when executing online service recovery." (pg. 2,200)

A few examples of empirical research have been published where comparisons of a number of aspects of the online environment to that of the traditional environment have been made. Shankar et al (2003) evaluated overall customer satisfaction and loyalty. They found that satisfaction in the online environment had parity with satisfaction offline. They also found that customer loyalty was higher online. Cho, Im, Hiltz, & Fjermestad (2002) conducted a side-by-side comparison of post-purchase evaluation factors, and determined that online customers are less likely to complain even if they are more dissatisfied than offline customers in similar situations. These online customers are also more considerate of costs associated with complaint handling. However, both online and offline customers are inclined to continue to patronize an establishment if the complaint handling and service recovery processes are good.

Harris, Grewal, Mohr, and Bernhardt (2006) found that online customers were more apt to blame themselves when a service failure occurred, and that offline customers had a stronger satisfaction with service failure recovery. In a different study Harris, Mohr, and Bernhardt (2006) concluded that since online consumers are more apt to blame themselves for service failures,

managers could consider providing less compensation or remuneration for online consumers than for offline consumers.

Anonymity/Pseudonymity

There are certain freedoms that online shopping and complaint handling afford. Given the ability to shop and handle complaints in the comfort of one's own home, consumers can appreciate the freedom from time restraints and/or crowds. This also affords a certain level of anonymity that consumers are gravitating towards.

The internet, for some consumers, is a venue whereby the possibility of receiving unfair treatment can be mitigated by the anonymity of the complaint handling venue. Fromkin (1999, p. 115) states, "Anonymity may turn out to be the only tool available to ordinary people that can level the playing field against corporations and governments that might seek to use new data processing and data collection tools in ways that constrain the citizen's transactional or political freedom. Thus, their main line of defense against being profiled is likely to be anonymous communication or pseudonymous transactions." Sheehan and Hoy (1999) studied online consumers' responses to privacy concerns. They determined that as privacy concerns increased, registration for websites decreased. They also noted that as consumers' privacy concerns increased, their behavior that would be considered complaint oriented decreased. Kehoe, Pitkow and Morton (1997) state that one way the internet differentiates itself is in its ability to allow patrons to participate anonymously.

In summation, distributive justice refers to the customer perception of equitable compensation; procedural justice explores the ease of filing and resolving a complaint; and interactional justice focuses on the amount of interaction and concern displayed by the company/offender (Martinez-Tur et al. 2006; McMahon-Beattie 2011). With the increase in online consumerism, interactional justice becomes particularly worthy of further investigation when a technology interface is part of the complaint process. Thus, to the degree that an agent-to-consumer interaction is not as evident in an online environment, a deeper investigation of customer satisfaction and justice is warranted.

RESEARCH QUESTIONS

As indicated previously, distributive justice refers to the customer perception of equitable compensation; procedural justice explores the ease of filing and resolving a complaint; and interactional justice focuses on the amount of interaction and concern displayed by the company/offender (Martinez-Tur et al. 2006; McMahon-Beattie 2011). With the increase in online consumerism, we believe that interactional justice becomes particularly worthy of further investigation when a technology interface is part of the complaint process. Thus, to the degree that an agent-to-consumer interaction is not as evident in an online environment, a deeper investigation of customer satisfaction and justice is warranted.

This study extracted qualitative feedback on consumers' authentic complaint experiences and ultimately their satisfaction with the complaint process for online and offline situations. The basic research questions for this study were two-fold:

1) **Will online and offline complaint respondents demonstrate significant differences in the way in which they perceive justice in the complaint handling process?**

2) **Will offline complaint respondents have a greater expectation of interactional justice than online complaint respondents?**

METHODOLOGY

With the underpinning of justice theory (distributive, procedural, interactional), the purpose of this study was to determine whether there were differences in consumers' complaint satisfaction based on consumers' use of traditional complaint mechanisms (e.g. phone, mail, fax) versus their use of online/internet options for initiating and conducting the complaint process. To extract these pieces of information, consumers were not only asked to rank popular complaint options (telephone, mail, fax, face-to-face, and online) in order of preference – but consumers were also asked to evaluate their satisfaction. This piece is a portion of a much larger instrument that looked at modeling the justice theory components and their antecedents in an effort to compare customer satisfaction with online and traditional complaint methods. The complete instrument also contained demographic questions.

The instrument as a whole was pre-tested using a convenience sample of 34 consumers. Some of the respondents in this pre-test were undergraduate and graduate students. Others in the convenience sample included individuals who attended an international multi-cultural marketing conference, and others were members of two professional business organizations. The pre-test did not lead to any adjustments to the questions used for this study.

The sample for this research was drawn from a population of individuals pursuing or hoping to pursue graduate degrees who utilized a standardized testing service. 10,921 individuals from 90 countries that included the U.S., India, Japan, and the United Kingdom were sent an e-mail letter requesting that they complete an independent survey on the testing service company's website regarding their most recent complaint experience. The Chief Information Officer of the testing service company provided a letter of endorsement that accompanied the solicitation e-mails. In addition, drawings were held for testing aids materials the testing service organization sells. These incentives were intended to increase response rate.

Prospective respondents were asked to articulate an authentic goods or service encounter experience they had that resulted in the need to launch a complaint. This is known as the critical incident method. Malhotra (1996) states that asking respondents to address an actual problem that they have experienced provides authenticity and a higher level of external validity. This technique has been used in quite a few consumer behavior research projects (e.g., Evardsson and Ross 2001; Roos 2002; Gremler 2004).

Qualitative data were gathered. Questions allowed respondents the opportunity to; 1) offer rationale for their preferred choice of complaint mechanisms (online versus offline [traditional]); 2) provide greater detail about their complaint experience; and 3) suggest possible solutions to their situation. Open-ended questions included: 1) Please explain the reason you preferred your first ranked preference; and 2) If you do not particularly prefer using the online option, please explain why.

Effective analysis of qualitative data requires the systemization and quantification of text (Taylor-Powell & Renner 2003).

Systemization is the analysis of text which eliminates biases in classification formation that support the researcher's hypothesis, and quantification is the process by which qualitative data are altered into a form amendable for statistical methods (Berelson 1952; Holsti 1969).

To maintain data integrity and authenticity while removing the doubt of bias, qualitative responses were coded independently by three researchers that were all given the same instructions with regard to the coding process. Each researcher analyzed each of the statements and extracted all themes present. If the themes were extracted by two or more researchers, it was used. If the theme did not meet this criterion for a given question, it was not included.

After the themes were extracted, they were uploaded into the CATegory Package (CATPAC) which counted the frequency of the responses. CATPAC is a self-organizing software package that organizes words by frequency, representative percentage of words based on total words responded, case frequency and case percentage (Krippendorf 1980; Thomas & Mills 2006). This is all based on the classifications after data smoothing which is a standardization procedure used to eliminate the misspelling or pluralizing of words impacting the frequency total for a response (Krippendorf, 1980; Woelfel 1990). After this standardization, the software calculates the frequency for each term while also giving the percentage of total words. This process of taking the results of direct quotes from respondents to open ended questions and quantifying these results by extracting themes from these statements is a methodology that was successfully used by Thomas & Mills (2006). This approach was also used in a study of online product or customer service failure or success, using a third party consumer evaluation website (Goetzinger, Park and Widdows 2006).

FINDINGS

The Sample

A total of 1,821 of 10,921 surveys were returned for a 16.67% response rate. Of those 1,821, there were 516 usable surveys from respondents who described a formal complaint situation. These respondents came from 56 different countries. The U.S. represented 56% of the sample. The countries outside of the U.S. with the most respondents included, India, Canada, the United Kingdom, The People's Republic of China, Brazil and Peru.

Thirty percent (30%) of the 516 respondents used an online method of complaining whereas seventy percent (70%) of the respondents engaged in a traditional complaint process. Thirty three percent of U.S. respondents complained online. Twenty five percent of respondents outside of the U.S. complained online. Fifty nine percent of the respondents who complained by fax were outside of the U.S.

Of the 516 respondents, fifty-nine percent (304) were male; thirty eight percent (196) were female. Three percent (16) did not specify gender. Nearly half were already college graduates. Fifteen percent held master's degrees, while 25% had completed some post-graduate work. Approximately half of the respondents earned more than $50,000 annually.

Consumers' Rankings of Complaint Methods

Respondents were asked to rank the following complaint methods from 1 (most preferred) to 5 (least preferred): phone, online, face-to-face, mail, and fax. The rankings were then given the following values: "1" = 5 points; "2" = 4 points; "3" = 3 points; "4" = 2 points; and "5" = 1 point. These point values were then used to calculate a complaint method score. Complaining via the telephone (176), online (161), and face-to-face (141) were the most preferred methods overall, ranking 1st, 2nd, and 3rd respectively. Complaining via the mail (33) and fax (5) ranked 4th and 5th. **Table 1** shows the method, total score, number of individuals that preferred the given method first, the number of comments provided as justification for why they preferred the complaint method, and a summary of the rationales.

TABLE 1

Reasons for Ranking Complaint Method 1st in Order of Preference

Method*	Total^ Score	N	Percent Rated 1st	n	Reason #+
Phone	2024	176	34.1	337	speed (100), feedback (47), human contact (44), convenience (41), simple (36), accuracy (27), accountability (25), anonymity (9), wide reach (5), tone (2), cost effective (1)
Online	1828	161	31.2	305	speed (75), convenience (63), simple (47), paper trail (40), feedback (24), accuracy (17), cost effective (16), anonymity (11), wide reach (7), tone (3), accountability (1), only option (1),
Face-to-face	1596	141	27.3	256	feedback (57), serious (55), human contact (45), speed (33), accuracy (29), body language (22), accountability (10), simple (3), record (1), tone (1)
Mail	1222	33	6.4	53	paper trail (21), serious (10), feedback (5), accountability (4), accuracy (4), speed (3), anonymity (2), convenience (2), simple (2)
Fax	1014	5	1.0	8	paper trail (3), speed (3), accuracy (2),

Notes:
*Methods in rank order by total score
N = number of respondents preferring the method
n = number of responses per method
^Scores were calculated by providing point values to respondent rankings.
The ranking values are as follows: "1" = 5 points; "2" = 4 points; "3" = 3 points; "4" = 2 points; and "5" = 1 point.
There were missing cases for some of the method rankings: phone (3), online (2), face-to-face (8), mail (5), fax (12)
 # Multiple themes come from a statement
+ Frequency of theme represented in ()

These rankings were in line with the mechanisms the respondents reported that they actually used in filing their complaint. Those results were that 198 (38.4%) of the respondents complained by phone, 151 (34.1%) complained using an online method (e-mail or web), eighty (15.5%) complained face-to-face, seventy complained by mail (13.6%), and seventeen (3.3%) complained by fax.

For each of the methods indicated as actually being used for filing complaints, themes emerged regarding why that method was chosen. These themes are indicated in Table 2. We ranked the top ten themes. In doing so, only twelve themes in total emerged between the online and offline respondents. Eight of the themes that emerged were the same for both online and offline respondents. Those eight themes were all procedural justice themes. Two additional procedural justice themes ranked in the top ten for either online or offline complaint consumers. The final two themes were interactional justice themes.

The common procedural justice themes were: speed, convenience, ease, paper trail, accuracy, resolution, acknowledgement, accountability. Two themes, cost and seriousness, were among the top ten themes for one genre, but not the other. Cost ranked number eight for online complainers, but number seventeen for offline complainers. Seriousness ranked number six for offline complainers but ranked number fourteen for online complainers.

A key finding was that anonymity and human interaction emerged as themes representing how interactional justice is experienced for online and offline respondents respectively. Anonymity ranked seventh for online complainers, but ranked twelfth for offline complainers. Conversely, human interaction ranked second for offline complainers, but twelfth for online complainers.

Phone Grievances

When asked to justify choosing the telephone as their preferred method for filing a grievance, the following themes emerged: speed, feedback, human contact, convenience, simplicity, accuracy, accountability, and anonymity. Speed in this instance relates to the speed of the complaint process - or the time it takes to file the complaint and receive a resolution. Respondents commented that the telephone is the "fastest, most reliable way to complain" and the "response is faster." Strongly related to the speed was the desire for acknowledgement of the complaint and perceived likelihood of a resolution. Many respondents provided comments resembling the idea that the telephone provided a venue where "you can usually get an answer to the question or issue during the first encounter."

Another theme represented among some of the phone and face-to-face respondents was interaction with a person. Interaction with an individual facilitated explaining your grievances and otherwise providing clarity, knowing that the company is properly handling your complaint, and expediting a resolution. This is evident in the following illustrative response: "You can better receive a direct answer for the steps that will be taken. You are able to ask questions and receive immediate answers and then you are able to follow up with more descriptive questions in certain cases."

Online Grievances

The main justifications for preferring to complain online focus on the issue of simplicity and the time it takes to file a complaint, have it addressed and receive feedback. Simplicity emerged when respondents specifically mentioned some of the difficulties related to filing a complaint by phone, manifested in the following comment, "Email is the easiest mode for me meaning I don't have to wait for lengthy periods on hold for example and then not have a written response returned." Also, respondents stated that, "Online was the fastest way of sending the complaints and getting answers without wasting much time." Filing complaints online was also largely categorized as convenient. Respondents appreciated the idea of being able to "register an online complaint at their own time," "doing it at any time from home," and "being able to address the complaint at their own convenience, not the company's."

<table>
<tr><td colspan="6" align="center">**TABLE 2**

Comparison of the Top Themes Extracted From Qualitative Analysis of Reasons for Preferring Online and Conventional (Phone, Face-to-Face, Mail & Fax) Complaint Methods</td></tr>
</table>

Justice Theory Dimension	Theme	Definition	Online @ Comments		Offline # Comments	
			Rank* ^	%	Rank *^	%
PROCEDURAL	Speed	Immediacy of complaint delivery & resolution	1	25.3	1	20.4
	Convenience	Availability/accessibility of complaint filing method	2	21.4	4	8.1
	Easy	Simplicity of filing and communicating throughout the process	3	15.8	7	7.0
	Paper trail	Written record of complaint	4	10.2	10	3.8
	Accuracy	Ability to convey accurate information	5	5.3	5	7.9
	Resolution	Results of the complaint process	6	4.9	3	14.3
	Acknowledgement	Company's notification of awareness of complaint	9	3.9	9	4.7
	Accountability	Knowing that a company's representative is actively addressing my concern	10	2.6	8	6.9
	Cost	Expense to customer of filing complaint	8	4.6	17	.1
	Seriousness	Feeling that the company is genuinely concerned about the failed experience	14	.7	6	7.2
INTERACTIONAL	Anonymity	The absence of face-to-face interaction and the ability to remove stereotypes from the facts	**7**	4.9	12	1.6
	Human interaction	The ability to interact with an individual	12	.9	2	14.8

*Ranking of theme within complaint group
^ Ranking bolded if the theme represented a representative percentage of responses
% Representative percentage of the theme within the complaint category
 # Total Traditional Comments 683
@ Total Online Comments 304

The most insightful finding for online complaint consumers was the theme of anonymity. These consumers enjoyed the absence of face-to-face interaction, preferring to remain anonymous. This anonymity was perceived to remove stereotypes and tone from the facts.

Sentiments on this issue included, "less confrontational ... don't have to argue."

The ability to contact, explain, and receive feedback along with written documentation of the process were also noted as reasons for preferring online complaint methods.

This written format was also associated with the respondent's ability to explain their grievance and otherwise provide clarity without fear of confrontation. These aspects were viewed as increasing the likelihood of a resolution. The following statements represent these themes: "I am able to describe in full details as I go through the event mentally which is not possible when I call or even go face-to-face" and "Having sent an e-mail I have something written to prove that I really complained." Online was also preferred because individuals from other countries were able to file complaints with relative ease.

Face-to-Face Grievances

Respondents who preferred filing grievances face-to-face felt the interaction with the company representative increased the likelihood of getting a resolution and ensured that the company was effectively handling their complaint. This was evident in the following illustrative responses: "Usually, people don't like confrontation. If you go to them in person they have no choice but to deal with you and you can quite possibly avoid the other routes;" and "By addressing the issue through a face-to-face interaction, it is a lot easier to ensure that you will get a resolution." These respondents also felt that they were able to explain their grievances and otherwise provide clarity while interpreting the nonverbal cues of the company representative.

Respondents also thought that this interaction ensured that the company was taking their complaint seriously and allowed for the filing process to be expedited and run much more smoothly. These ideas are represented in the following statements: "You are there in person and hopefully the person receiving the complaint can judge your anger and concern;" and "I think they are more willing to try to understand your situation and work things out when there is a real person there." Also, the idea of being able to hold the representative they are speaking to accountable for managing their complaint, provided them with some perceived security.

Mail and Fax Grievances

Respondents viewed the option of faxing their complaint in a very similar light as mailing – paper trail, speed, and accuracy. Justification for preferring to use the mail to file complaints highlighted interest in written documentation of the complaint. This documentation was thought to ensure that the company knows that the consumer wants results, and therefore results in acknowledgement of the complaint and likelihood of a resolution. Respondents commented that filing the response via mail provided them with "proof of the date, time, and text of the complaint" and represented a "more legit and formal" grievance submission. The U.S. mail also provided them with the option of getting a return receipt. The ability to file their complaint in writing provided respondents with anonymity and a "good way to present facts and explain a situation which shows intent and determination." Respondents felt that the formal nature of the mailed complaint ensured that their grievance would be taken seriously, and they "could send it to multiple locations (like a corporate customer service office, a regional and or/district office, and to the location where the dissatisfaction occurred)." **Table 3** (next page) is a depiction of complaint mechanism choices relative to the anonymity/human interaction need of the respondents.

Following is a description of the various grievance methods and the corresponding themes for those methods.

Comparisons of Online and Offline Themes

Table 4 shows a summary of the justifications provided by individuals that preferred to complain via online methods. This chart also shows the theme, the frequency and representative percentage of total online comments, and sample comments from the respondents.

TABLE 3 **Human Interaction/Anonymity Matrix**		
	Anonymity Low	**Anonymity High**
Human Interaction Low		Online *(Pseudonymity)* Mail /Fax
Human Interaction High	Face-to-Face	Phone *(Pseudonymity)* \

Table 5 shows a summary of the justifications provided by individuals that preferred to complain via traditional offline methods. The chart shows the theme, the frequency and representative percentage of total offline comments, and sample comments from the respondents.

The first research question for this study was, "Will online and offline complaint respondents demonstrate significant differences in the way in which they perceive justice in the complaint handling process? Our findings suggest that online and offline complaint respondents had far more common interests and preferences with respect to complaint satisfaction. Primarily, they both were keenly focused on procedural justice. The top theme for both online and offline complaint respondents was speed with 25.3% of online complaint respondents making mention of this concern and 20.4% of the offline complaint respondents indicating this factor. In fact, eight of the same themes regarding procedural justice emerged for both groups and each group had one additional procedural justice theme that was not unveiled as a top theme by the other group. Cost was a top ten theme for online respondents but not in the top ten for offline complaint respondents. It ranked eighth, accounting for 4.6% of the responses for online respondents. (It accounted for only .1% of offline responses.) For offline complaint consumers, seriousness was a top ten

theme, but not online respondents. It ranked sixth for offline consumers, accounting for 7.2% of their responses. (It accounted for only .7% of online responses.)

In addition, two themes (one for each group) emerged for interactional justice. Anonymity emerged for online consumers, while human interaction emerged for offline consumers. There were no top ten themes for distributive justice for either group.

The second research question that guided this study was, "Will offline complaint respondents have a greater expectation of interactional justice than online complaint respondents?" In fact one interactional justice theme emerged for each respondent type. These themes reflected differing preferences or requirements for interactional justice for conventional (offline) complaint respondents as compared to online complaint respondents.

For offline respondents human interaction received the second highest number of comments (14.8%). As predicted, the idea of human interaction was downplayed by online respondents receiving only .9% of responses. Anonymity received the seventh highest number of comments by online respondents with 4.9% of comments. Offline complaint respondents' comments on anonymity were only 1.6% of the total responses.

TABLE 4
Qualitative Results from Online Complaint Respondents

Theme	Definition	Freq.	Percent	Comments*
Speed	Immediacy of complaint delivery & resolution	77	25.3%	"It's the fastest way of communication and can be tracked of "; "E-mailing or filling out a web form is the fastest way to relay a complaint - no waiting on hold …"; "Speed is the biggest factor, no need to wait for an operator."; "Online is the fastest way of sending the complaints and getting answers without wasting much of time."; "efficient in time"
Convenience	Availability/accessibility of complaint filing method	65	21.4%	"saves me time and I can do it whenever I have the chance and wherever I am."; "E-mail is readily available, easy to use, and can be written/read at one's convenience."; "Ease of use, immediacy even when remote."; "I can complain at midnight from home"; "I can do it when I think of it.."
Easy	Simplicity of filing and communicating throughout the process	48	15.8%	"For the ease of use…"; "it is the easiest for me"; "Its simple to use"; "ease..."
paper trail	Written record of complaint	31	10.2%	"Because the company cannot say that they did not receive the message."; "...have a record that is easy to handle afterwards"; "...the facts of the situation can be resolved in writing, great for later problems if they continue to be left unresolved."
Accuracy	Ability to convey accurate information	16	5.3%	"All details of the complaint can be provided and documented and it does not require long waits…"; "E-mail allows one to think over what they want to say and ensures that the business received it right away"; "Ease and do not have to explain myself over and over again to a service rep";
Resolution	Results of the complaint process	15	4.9%	"I ranked them in that way considering the amount of time I invest in making the complaint, and the time of response."
Anonymity	The absence of face-to-face interaction and the ability to remove stereotypes and tone from the facts	15	4.9%	"...completely explain my position without interruption"; "less confrontational, don't have too argue…"; …"Plus it forces me to slow down and be less angry about the problem."; "words feel more rational and reasonable";
Cost	Amount of money to file	14	4.6%	"Inexpensive"; "cost least time and money on the part of the customer."; "Because i live in Peru. The fastest and cheapest mean to complain is the email";
Acknowl-edgement	Company's notification of awareness of complaint	12	3.9%	"Ease of communication and confirmation that complaints have been received and subsequently dealt with…"; "Immediate access and potential for immediate resolution."; "...most responses are fairly quick"; "you get responses easier"
Account-ability	Knowing that a company's representative is actively addressing my concern	8	2.6%	"...subject to confidence that the receiving company actually has the commitment to using the technology appropriately."; "Serious"; they have to read the comment I think it is taken more seriously"
human interaction	Interaction with individuals	3	1.0%	"...will reach the person in real time, where he can analyze the nature of complaint"

*Some comments addressed multiple themes
N = 194 respondents; n = 304 total responses

TABLE 5
Qualitative Results from Conventional Complaint Respondents

Theme	Definition	Freq.	%	Comments *
Speed	immediacy of acknowledgement and resolution	139	20.4%	"I can get answers immediately;" "A complaint should be handled immediately;" "Launching a complaint through phone is easy and additional information can be easily exchanged during the first interaction;" "efficient."
human interaction	the ability to interact with an individual	101	14.8%	"Dealing directly with humans is more effective"; "I don't have the time to meet someone face to face, but strongly prefer to actually talk to a person;" "I like to be able to explain exactly what I mean and to modify my explanation as the representative responds."
Resolution	results of the complaint process	98	14.3%	"By addressing the issue through a face-to-face interaction, it is a lot easier to ensure that you will get a resolution."; "quickest way to fix the problem."
Convenience	availability/access-ibility of the complaint filing method	55	8.1%	"Phone is convenient;" "you can perform wherever you want;" "You can speak directly to a rep.;" "can be done from anywhere;" "I can call from work at my convenience;" "I have no time to go to an office or to send papers."
Accuracy	the ability to convey accurate information	54	7.9%	"It gives better opportunity to explain the problem and get feedback on the same;" "clear communication;" "Because in this situation I can ask easily what is on my mind and can get answer as clear as I need;" "Should there be clarification needed, the problem could be resolved on the spot;" "Nothing is lost in the translation."
Serious	feeling that company is genuinely concerned about the failed experience	49	7.2%	"Least likely to forget about it;" "Face-to-face, you can understand my concerns better and the manager just can't brush you off;" "To me it seems more legitimate and formal if done by letter to the company's corporate office."
Easy	simplicity of filing and communicating throughout the process	48	7.0%	"Easiest to communicate in person;" "much easier to convey why you are unhappy, and talk about the whole situation;" "Easy to do& can be done the minute you find a problem."
Account-ability	knowing that a company representative is actively addressing my concern	47	6.9%	"It's easier to explain the situation to an actual person - plus, you KNOW that someone is there receiving your complaint;" "I would like to have the name of a person should I have to refer back to complain again;" "It gets more personal when you face someone and it is not so easy to simply dismiss or pass the issue along to someone else."
Acknowledge-ment	company's notification of awareness of the complaint	32	4.7%	"Quick reply;" "You get instant feedback on your complaint;" "I know that I am being heard;" "I know that someone actually hears me;" "immediate attention."
paper trail	written record of the complaint	26	3.8%	"Mail provides the best form of documentation;" "Provides a written and authenticated record for future reference;" "You have a receipt record and it makes it official w/ signature."
Body language	the ability to interpret nonverbal cues	19	2.8%	"Face-to-face allows me to see their body language to truly tell if they care about my problem;" "They can see you, read your body language and you can see how they react, versus the opposite;" "Facial expression allows for more understanding of my disappointment in the product/service."
Anonymity	the absence of face-to-face interaction and the ability to remove stereotypes from the facts	11	1.6%	"You have a live conversation without having the person see you and take certain factors into consideration (age, race, etc.) when handling the problem;" "The phone allows you some distance to not be put on the spot or be easily shrugged off by a salesperson/rep, yet affords an immediate way to resolve the situation without it escalating."

*Some comments address multiple themes
^ Tone (2), cost (1), and customized (1) were also themes that were mentioned; N = 322 respondents; n = 683 total comment

DISCUSSION AND MANAGERIAL IMPLICATIONS

Interactional Justice for Online and Offline Complaints

A couple of earlier studies on consumer complaint satisfaction that used justice theory as an underpinning have resulted in findings that illuminate the importance of interactional justice. This is particularly the case in research on relationship marketing (Goodwin and Ross 1992; Hartline and Ferrell 1996). Our research provides more specific insight on interactional justice based on consumers' authentic complaint occasions in both online and offline genres.

The predominant finding is that interactional justice does not have the same meaning (emphasis/importance) for online complaint consumers. Offline respondents ranked human interaction as their 2nd most important theme. Human interaction ranked twelfth for online complaint consumers. Online respondents ranked anonymity as their 7th most important theme. Online respondents enjoyed the absence of the face-to-face interaction. They also preferred filing a complaint without being interrupted, having an argument or being judged based on stereotypes. Conversely, some offline complaint consumers who used the "face-to-face" mechanism actually viewed the "confrontation" aspect of the complaint process as being conducive to getting a more favorable outcome.

Interactional justice is at the heart of understanding how online complaint consumers perceive justice in the absence of human interaction. In general, respondents who preferred the human interaction felt that their preferred method expedited the complaint resolution process. Some of these consumers preferred the face-to-face mechanism but interestingly some of the individuals who preferred the phone gravitated to the benefits of the human interaction. With the face-to-face mechanism, complaint filers could read the body language of the company representative. With the phone mechanism, the grievance filer could interpret the tone of voice or written language. Respondents viewed this as an important factor in achieving a desired result.

For these conventional complainers, interactional justice meant that the consumers wanted the tangible human interaction. This was evidenced by the conventional complainers being happy about making themselves known to the companies to which they were complaining. The online complainers, conversely, enjoyed the anonymity the use of technology afforded them. These online complainers were happy about *not* being known to the companies to which they were complaining.

These findings provide insight for justice theory in general and justice theory as it applies to the online environment in particular. The two interactional justice themes that were revealed are surrogates for the most poignant intuitive differences between the needs of online consumers versus the needs of offline consumers. Some online complaint consumers as well as some phone, mail and fax complaint consumers seek the anonymity that technology or some other form of the "lack" of close physical contact affords. Offline consumers seek the transparency and openness that predominantly face-to-face or on occasion, phone encounters afford.

Anonymity and Pseudonymity

The efficacy of human interaction is a generally accepted tenet of justice theory, and interactional justice in particular. However, we found that some consumers view the human interaction aspect of complaint handling as a less favorable attribute. These consumers perceive that they will get a more positive complaint handling outcome in an anonymous context such as an online exchange. One condition under which this sentiment can prevail is the worst case scenario whereby consumers feel there is a chance that they will not be treated fairly by the business. This can manifest when businesses and governments gather data on individuals or have them under surveillance. This can lead to "… fears of abuse or misuse, and even suspicions of discrimination and manipulation" (Zarsky 2004, p. 1,302). This concept is outlined in the human interaction/anonymity matrix in **Table 3**. The matrix accommodates all the key varieties of complaint handling mechanisms (phone, online, face-to-face, mail, and fax).

Aside from the obvious demarcation between high and low human interactions, juxtaposed against high anonymity, there lies the concept of Pseudonymity. In the context of complaint handling, Pseudonymity is viewed in two ways. On the one hand, consumers are not

completely anonymous when complaining online, or by mail or fax. They do use some kind of moniker as an identifier. This moniker may or may not provide their true identify (e.g. in the case of an e-mail address). Sheehan and Hoy (1999) suggest that technology affords consumers the opportunity to not have their behavior associated with their authentic self.

Indeed a small portion of phone complaint consumers enjoyed the anonymity of not "facing" a company representative. However, they enjoyed the human interaction regarding discerning voice intonation. These blurred lines present further evidence of Pseudonymity in that the complainer is not completely anonymous.

The other aspect of Pseudonymity is that in a few instances in analyzing the qualitative feedback from the respondents, we found that some of the online complainers viewed human interaction in the form of *guardianship over the process* as being essential to ensuring that the complaint process was run well.

Procedural Justice for Online and Offline Complaints

The common eight procedural justice themes speak to a consumer-centered complaint handling process that, regardless of venue (online versus offline), creates the perception that the company is genuinely concerned about the consumer's post purchase experience. Essentially, respondents overwhelmingly expressed that the strength of a complaint process lies in the way in which the complaint is handled. Hence, the fairness aspect or equity is predominantly tied to process, or procedural justice. This finding generates exceptional implications with respect to designing and monitoring complaint handling within a business.

According to this research, what is required with handling complaints is a timely and dependable process that keeps the consumer informed about the progression of the complaint and the status of the complaint with respect to bringing it to a close. While providing these characteristics, the process needs to be convenient, easy, accurate, and speedy. When a company receives a complaint, the company needs to acknowledge that the complaint has been received and the company needs to acknowledge that it will work to rectify the complaint.

The company also needs to indicate its accountability. Respondents desired the company that "wronged" them to receive and maintain evidence of the complaint in an efficient manner. Consumers preferring to use online, mail, and fax complaint methods were adamant that having a paper trail was necessary. This written record of filing a complaint, confirmation of receipt, and resolution provides a sense of security or "ensures" that the complaint will be taken seriously. Finally, respondents were clear that they wanted an actual resolution to their issue.

In addition, with respect to procedural justice, the ability to file a complaint from any place and at the convenience of the complaint filer was of great importance. This concept of convenience is related to time, distance, and technique. A significant portion of the respondent pool was international. They communicated that the idea of being able to file a complaint 24 hours a day, from any country, with access to the company, using the most practical means available, was deemed integral. Some of the comments that help to illustrate the concept of convenience are as follows: "It can be done from one's house as opposed to going to the post office, going to where a fax is accessible, or traveling by car to speak face-to-face"; "I have … 24 hours free access to internet and [it's] less cumbersome"; "As I reside in Vietnam, e - mail is a simple fast and cheap way to launch complaint."; and "Since I use my PC every day… it's the most convenient way to communicate."

Two of the additional themes that were important to the online and offline respondents independently were cost (for online consumers) and seriousness (for offline consumers). These too, are procedural justice themes. For online consumers, cost was one of the top ten important themes. Respondents felt that if they experience some dissatisfaction with the product or service at the fault of the product/service provider – then the complaint filing process should be able to be completed requiring minimal investment of time on the consumer's part. With respect to seriousness, offline consumers wanted to know that the company was genuinely concerned about the failed experience. The efficient communication on the part of the company makes the respondent feel that their complaint is being taken seriously.

Distributive Justice for Online and Offline Complaints

It is particularly notable that none of the distributive justice dimensions were ranked in the top ten themes. Our findings contradict those of Clemmer and Schneider (1996) and Smith et al (1999) for which distributive justice emerged as having dominant importance. The findings from our study also contradict Chang and Wang (2012) who specifically found compensation and apology (distributive justice dimensions) to be two of the four critical attributes of service recovery.

The use of authentic scenarios when analyzing justice theory in combination with qualitative research methods, resulted in procedural justice emerging as the dominant preferred justice dimension of both online and offline respondents. Conversely, research studies on justice theory that operationalize experimental design, and use undergraduate students (mostly from the U.S.), often result in findings that place greater interest on distributive justice (Gelbrich and Roschk 2011).

The absence of a distributive justice theme corroborates consumers' needs at a basic level for an expeditious, easy, convenient, communicative process that is brought to an explicit conclusion. "Apology" was conspicuously absent from the findings. In the past, "apology" has been a major issue in justice theory. The absence of apology and the absence of distributive justice themes as primary themes corroborates Davidow's assertion that apology represents psychological compensation and is therefore a distributive justice theme (Davidow 2003).

The classification of an apology in the justice typology continues to be an insightful one. Traditionally, the act of apologizing has been said to be a simple response that is not costly and satisfies the consumer (Zemke 1994). The findings in this paper that procedural justice is a key point for eradicating problems suggests that consumers are seeking more tangible evidence, as would be provided through the complaint satisfaction process, that a company is genuinely and authentically seeking to solve a problem.

Comments from respondents regarding the necessity for procedural justice also provided insight into their feelings regarding distributive justice. In essence, consumers viewed that there would be parity in the remedy (distributive justice) in part because of the speed and feedback in the process. The speed and feedback efficiency suggested that the company took the complaint seriously and was doing its very best at solving the problem in a way that would make the consumer whole. Therefore, the person complaining was inclined to be receptive to the outcome irrespective of the value of the restitution. Hence, the way the problem was handled held more importance to the respondents than a required need to receive restitution. These sentiments also echo the Cho et al (2002) study stating that online consumers are concerned with costs as they relate to the time it takes to engage in the complaint handling process.

CONCLUSIONS AND FUTURE RESEARCH

An important insight from this study was the recognition of differences in the ways in which offline (conventional) and online (web-based) complaint consumers interpret interactional justice, one of the three justice theory dimensions. Our finding was that the key aspect of interactional justice (human interaction) is not regarded as being an essential aspect of a successful complaint handling process for all consumers who complain. Although for offline consumers, human interaction ranked the second highest theme regarding their perception of justice, this theme ranked twelfth in priority for online complaint consumers. Interestingly, *anonymity* ranked seventh for online consumers and only twelfth for offline consumers. Some online consumers actually prefer a complaint mechanism for which contact or *interaction* with a company agent is *not* explicitly a part of the complaint process. This would be particularly true of consumers who do *not* view confrontation as an essential aspect of receiving equitable treatment in the complaint process. It is also true of consumers who might perceive that companies could be biased in their complaint handling. In this regard, consumers' option to have anonymity in the complaint handling process is a favorable attribute. Therefore companies can leverage the online complaint option as a way to demonstrate that those companies provide equitable, unbiased, and expedient resolution to complaints.

Another important finding from this research was that procedural justice was found to be an integral part of the process for both online and offline complaint respondents. Eight of the top themes for both sets of respondents were held in common and were procedural justice themes.

Of significant note as well was the fact that distributive justice did not emerge among the top ten themes for either online or offline complaint respondents. We attribute this latter finding, in part, to the use of authentic complaint scenarios in the study, not relying exclusively on students as subjects, and the international profile of the sample pool of consumers.

Cho et al. (2001, p. 906) state, "Well implemented complaint management, as an e-business' defensive strategy, will have a great impact on … web assessment issues, such as technological and operational issues." One way our research has managerial application is in how a business can operationalize its complaint handling processes whether it is transitioning from a "bricks and mortar" operation to an "online" venue or simply mechanizing the complaint process. There may be some services that cannot be optimally executed online. However, for those services that can be moved to the online environment, companies need not have fear of alienating or otherwise antagonizing their customer base. On the contrary, for some consumers, the ability to use technology for the complaint process, and thus in some cases avoiding "confrontation" with a company representative, is in fact preferred. Technology also affords these consumers with a level of anonymity that they often seek.

Future research is needed to reveal the balance of justice dimensions in quantitative empirical explorations based on critical incidents when online and offline venues are juxtaposed. Given that the use of authentic scenarios here resulted in procedural justice emerging as the dominant preferred justice dimension of both online and offline respondents, further research in other online contexts is needed for strengthening the generalizability of the findings. In addition, insight on what motivates one's degree of anonymity sought would assist managers in understanding and catering to customers' preferences for complaint handling interaction as we move toward a higher intensity of technological interactions around the world.

Anonymity can be a double-edged sword for online complaint handling. The side of technology anonymity that may serve the consumer, might also cause distress for companies. Consumers are now capable of airing their complaints by writing reviews, blogs, tweets, and posting YouTube videos. According to research from EURO RSCG Worldwide, 43% of Internet users feel less inhibited online, displaying bolder behaviors and more aggressive methods of consumer complaints ("Consumers Free to Speak Their Mind Online" 2009). Technology has opened up avenues to consumers that can assist or make it difficult for businesses to keep control of their complaint handling and customer satisfaction mechanisms. These conditions deserve further investigation.

Another fruitful area of future study lies in an analysis of differences in preferences of American consumers versus consumers from other parts of the world. These analyses could also look at consumers in developed countries versus consumers in developing or emerging economies.

Finally, given new forms of technology such as Skype and social media, businesses can simulate the face-to-face contact if desired. These new forms of technology may prove to be the optimal bridge between online and offline interactions. These technologies may also enhance the convenience factor.

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IMPROVING PRODUCT FUNCTIONALITY FOR CONSUMERS WITH DISABILITIES:

THE CASE OF A CUSHION TO PREVENT PRESSURE ULCERS IN WHEELCHAIR USERS WITH SPINAL CORD INJURIES

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ABSTRACT

Patients with mobility impairments who are wheelchair-bound (users) need to avoid the incidence of pressure ulcers, for which it typically is necessary to have a special cushion. The Rehabilitation Engineering Laboratory from the Instituto Nacional de Rehabilitación (INR) has developed a prototype cushion product.

The objective of this article is to demonstrate and understand how user perceptions can help to improve functionality in the product design of a wheelchair cushion. A satisfaction assessment model is developed such that a specific and holistic perspective of user perceptions regarding the prototype wheelchair cushion is taken into account. The approach taken allows for the evaluation of satisfaction over time.

Key words: customer satisfaction, improved product design, customer/user evaluation.

INTRODUCTION

Gleaning users' perceptions regarding new or upgraded products has become a requirement to allow for continuous improvement. The objective of this case study is analyze the contribution of user perception on the functionality of a wheelchair cushion product design in order to enable improvements.

When we are talking about health, any contribution to the improvement of the product should be reflected in an increased quality of life for users. As Donabedian states (1992, p. 21), the quality of health care is "the degree to which the most desirable means are used to achieve the highest possible improvements in the health of each patient-user."

Embellishing upon this definition, Ruelas-Barajas in his public health research publication "Quality, Productivity and Costs" (1993) indicates that any improvement which involves greater product quality is a concept that must be judged on two closely interrelated and interdependent dimensions:

- The first is a technical one, represented by knowledge application and techniques for solving a patient's problem, which is normally reflected by the medical team.

- The other dimension is represented by the patient-user's relationship with the product and who supplies it.

As part of health care service, the purpose of Rehabilitation is to help an individual achieve the highest level of independence and quality of life possible, after a serious injury, illness or surgery. One branch of rehabilitation service is orthotics and prosthetics, with goals to "restore the physical functioning and improve the overall welfare of patients through the provision of a device" (Peaco 2011, p. 95). Orthotics are external devices designed to modify the neuromuscular and skeletal system. A prosthetic is a device that replaces a missing body part. The design of a wheelchair cushion falls under the rehabilitation branch of medicine.

An assistive device should compensate for decreased or lost function and ability to manage daily life, maintain and preferably increase function and ability, and prevent future loss of function and ability (Samuelsson et. al, 2008). Satisfaction in this project, therefore, is defined "as a person's critical and positive evaluation of several aspects of a device" (Demers 2002, p. 102).

Assistive devices are evaluated primarily by the medical team through technical procedures, testing devices and apparatus. The user´s participation in this evaluation is typically limited to answering questions related to their health.

Peaco et al. (2011) developed a systematic literature review about assessing satisfaction with orthotic devices and services. The computerized databases analyzed were: PubMed (1950 to January 2010), CINAHL (1982 to January 2010), and RECAL Legacy (1900 to 2007). These authors found only a small number of unique publications about formalized measures of satisfaction. Several evaluations regarded specific devices other than wheelchair cushions (e.g.: elbow-wrist-hand orthotics). Other articles reported generic evaluations to apply to all services of this branch. Notably, Peaco et al.'s comprehensive literature review did not uncover even a single specific evaluation of satisfaction vis-a-vis different types of wheelchair cushions.

Another literature review specifically conducted in advance of this study found that the Quebec User Evaluation of Satisfaction with Assistive Technology Version 2.0 (QUEST 2.0) survey developed by Demers, Weiss-Lambrou and Ska (2002) and reported by Peaco et al. (2011) has been used to evaluate wheelchair cushion satisfaction in Canada (Barlow, Liu and Sekulic 2009) and China (Chan and Chan 2006).

The QUEST 2.0 is an outcome measurement instrument to evaluate a person's satisfaction with a wide range of assistive technology (Demers 2002) which evaluates both the device and the service. The device is assessed on eight variables: comfort, weight, durability, adjustments, simplicity of use, dimensions, effectiveness, and safety. The service aspect is assessed with four variables: delivery, professional service, follow up, and repairs and servicing.

Currently, the literature does not reveal a specific instrument to measure user satisfaction of wheelchair cushions that include the factors of functionality. The application of the QUEST 2.0 to evaluate general satisfaction with a wheelchair cushion is an important advance, but it does not include the evaluation of the specific factors of the wheelchair cushion's functionality, as proposed by current models of customer satisfaction. To maximize the improvement process of this product requires more specific and precise information.

The Mexican National Rehabilitation Institute (INR in Spanish), in the Rehabilitation Engineering Laboratory under the coordination of Professor Diana Gayol, designed and developed a prototype wheelchair cushion for wheelchair-bound patient/users, specifically those with spinal cord injuries. This wheelchair cushion was designed to prevent the formation of pressure ulcers, one of the most common complications of extended wheelchair use. Researchers estimate that such patients as these develop this kind of ulcer in 50% to 80% of the cases (Brienza, D., Iñigo, R., Cheng, K., 2003).

According to Cannon and Cannon (2004, p: 64), "ulcers are an area of damage caused by constant pressure, repetitive friction, and / or interruption of blood flow in a localized area, impeding the flow of oxygen to the cells of this tissue. If the pressure isn't released, the result is likely to be necrosis."

Among the devices used to prevent pressure ulcers are pressure redistribution attachments that conform themselves to the shape of the patient and distribute pressure to a larger area (Nixon, J. *et al.*, 2006). Poveda et al. (2000) present different types of wheelchair cushions:

- Foam cushions: inexpensive and low maintenance, but they become compressed over the time.
- Air cushions: lightweight and effective support but with high costs.
- Seats of water: climate comfort, but heavy.
- Gel cushions: effective support but heavy.
- Finally, custom made cushions: help to maintain posture and redistribute pressure away from high risk areas (not commercially known in Mexico).

The last type of wheelchair cushion is the object of study for this article (i.e., the prototype developed by the Laboratory of Rehabilitation).

RESEARCH PURPOSE

The last type of wheelchair cushion in the list presented above is the object of study for this article (i.e., the prototype developed by the Laboratory of Rehabilitation).

The goal is to identify how user perception, regarding the functionality of the wheelchair cushion in their daily life experiences, contributes to the product design by identifying improvement opportunities.

THEORETICAL FRAMEWORK

To measure satisfaction as a perceived quality of a product, some satisfaction models are used as the cornerstones for further research. They involve the participation of the users as the main source of evaluation. The following models for the assessment of satisfaction are cornerstones for this study:

- ACSI (American Customer Satisfaction Index, University of Michigan).

- IMSU (Mexican Satisfaction Index User-Universidad Iberoamericana, Mexico City).

- Deficiencies Model from Parasuraman, Berry and Zeithaml.

- Applications in the health field, such as the model for assessing the quality of service of a Public Health Institution (PHI) which is highly complex in its user satisfaction component (Bristow, 2001) and the model which Carina Rey (2000) entitled 'The user satisfaction: a concept on the rise,' among others.

The importance of modelling user satisfaction evaluation from different points of view is to determine the common elements of input and output that must be considered in a final, single model. Thus, we have:

Inputs:

- User Expectations.
- The perceived quality of the product.
- The activities or components of the process that influence
- perceived quality.

Processing element:

- User satisfaction.

Elements of outputs:

- Confidence in the product.
- Recommendation or opinion to offer others.
- Complaints that become improvement opportunities.

We believe that all of these elements must be considered in the development of research when evaluating a product's user perception and impact on user satisfaction.

Perception of Functioning

Very specifically and within the scope of this research, there are specialized studies in the design of seats in which the main objective is to attain good quality for spinal cord injury wheelchair users. Within these category of study, Sprigle, S., Faisant, T., K. Chung stand out, mainly because of their publication "Clinical Evaluation of Custom-Contour Cushions for the Spinal Cord Injured," in which they indicate that all seats should be functionally assessed considering the following factors:

1. Trunk control: determined by the observation of patient stability while sitting and extending forward and backward.

2. Position: estimated by palpation and observation of the symmetry of the trunk, antero-posterior tilt of the pelvis, and general appearance.

3. Transfer capacity: estimated by identifying any change in the effort or the assistance received at the moment of the evaluation.

4. Comfort: evaluated by the people at rest and during propulsion.

5. Skin reaction: estimated as redness or skin irritation in the buttocks.

6. Propulsive power: identified by changes in the stability or the skill required to navigate different slopes and soil surfaces.

7. Ability to release pressure: for laterality or weight change, estimated by the ability to (re)position on the cushion.

8. Spasticity: evaluated at each cushion.

These factors are each a benchmark for assessment of the functionality or process activities (inputs) of the wheelchair cushions developed by the Rehabilitation Engineering Laboratory within the protocol-SALUD-CONACYT 2006-01-45395.

To further understand the functional independence of a spinal cord injury patient in a wheelchair, the internationally valid independence measures scale (FIM, for its acronym in English) is

used to quantify objectively the degree of patient disability at any given time and measure changes that occur in the treatment of rehabilitation. The scale assesses a total of 18 activities, grouped in two dimensions, 13 motor items (relating to self-care, continence and ambulation) and 5 cognitive items. Each of the activities is valued from 1 to 7, where 1 indicates total dependence and 7 complete independence. The final score varies between 18 and 126 (Vilches et al. 2009).

All these references allow us to frame theoretical research through the following question: how can user perception help to improve the functionality of a product in the design stage itself?

These references form the backdrop to this research in order to help determine how the user´s perception of functioning in daily life contributes to product design and how user perception can influence the continued improvement of the cushion product.

RESEARCH METHOD

The design of the specific model of satisfaction evaluation for the prototype seat is based on the application of the methodology of the ACSI through IMSU experience as an adaptation to the satisfaction assessment system in Mexico (Lobato *et al*. 2006).

The functionality assessment factors offered by Sprigle et al. (1990) were taken into account while determining the input elements, with spasticity removed due to the fact that the sample did not have spasticity.

To arrive at a project definition, the design (see Figure 1) considered the following features:

• *Inputs:* the functionality aspects such as control of the trunk, posture, ability to transfer, comfort, skin reaction, propulsion ability and ability to relieve pressure; all of these inputs were supplied by the user. Likewise, the users' expectations and perceptions of quality are also considered as inputs.

• *Process elements:* satisfaction determination.

• *Output elements:* complaints management, ability to make recommendations to third party and confidence level.

The proposed model is formulated based on a descriptive, longitudinal study.

Subject Recruitment

Fifteen volunteers with a spinal cord injury diagnosis were recruited, all of them beneficiaries of the INR in coordination with the Humanist Foundation to Assist the Disabled (FHADI, Fundación Humanista de Ayuda a Discapacitados, in Spanish). They all signed an informed consent document to participate in the research protocol which includes the assessment of their perception and their satisfaction. The characteristic of impaired mobility of the recruited persons complicates their transfer from their home to the INR. Also, these recruited persons needed to comply with medical and psychological criteria, factors which reduced the size of the population and resulting sample of such individuals.

Inclusion criteria were: FIM (Independence of functionality measurement) of more than 75 points, more than 2 years of evolution with the injury, not having another kind of disease, both sexes, aged between 18 and 60, having their own wheelchair and experience in using it.

The average age of the 15 users was 31.5 years ($\sigma = 7.35$) within the range of 22 to 47 years; there were eight men and seven women. The time since spinal cord injury was 8.27 years on average ($\sigma = 4.81$) with a minimum of three and a maximum of 22 years in the total sample. Even though the sample size was small, it included participants whose spinal cord injuries were situated in different levels: in two cases, it was at a cervical level (13%), in four cases it was at a high thoracic level (T1-T6) (27%), in eight cases, lower thoracic (T7-T12) (53%), and one case, lumbar (7 %).

FIGURE 1

Proposed Satisfaction Assessing Model of Prototype Seat
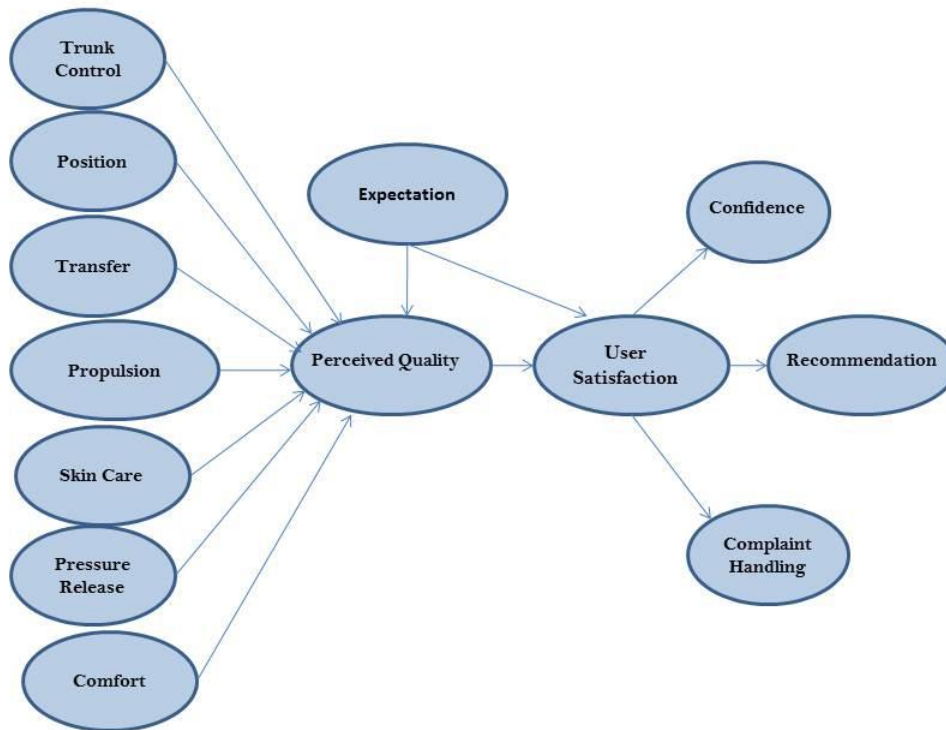
Observation Times

The methodology consisted of measurements from three different points in time in order to observe the hoped-for improvement of the wheelchair cushion design. As such, this longitudinal study provided for the possibility of a continuous, modifiable process:

• Initially, "time zero", before use of prototype wheelchair cushion.
• After one month of use of the prototype wheelchair cushion, the "time one" portion of the study was conducted by the same researcher.
• After a year (12 months) of use, the "time two" portion of the study was conducted by the same researcher.

The data collected was used to design an instrument for the assessment of the wheelchair seats from the perspective of the users, and consisted of two sections (see **Appendix 1 and 2**): the first contains user expectations and perceived quality of a previous wheelchair cushion; the second section includes information after more than a month of use about perceived quality, overall satisfaction and every aspect of the aforementioned functionality of the prototype seat.

These instruments were administered in semi-structured form and were applied by only one researcher through personal interviews (face to face). We believe that this procedure led to richer, more useful user experiences and testimonies about perception of functioning.

Assessment Procedure

Time Zero Measurements

Step 1: At the beginning of the protocol, a technical evaluation (in order to be considered in the design of the prototypes seats) was applied to

each user by medical specialists. This evaluation included elements such as:

• The International Instrument for Functional Independence Measure (FIM, by its acronym in English).
• User propulsion angle measurements once seated in his/her wheelchair with his/her previous wheelchair cushion.
• Pressure map with the Force Sensory Array® (FSA) which verified the conditions of pressure brought by the user because of his/her wheelchair and his/her previous wheelchair cushion.

Step 2: A semi-structured interview was conducted based on an instrument previously defined for each user in order to collect information on:

• The expectations the each user had when they entered the protocol.
• The perceived quality of each user's seat cushion prior to entering the protocol.

This semi-structured interview was part of the methodology IMSU used to determine user satisfaction when there is no measuring instrument defined and validated for assessing wheelchair cushions.

We believe that it is noteworthy that, according to Woods (1987), semi-structured interviews as a qualitative methodology to identify user opinion or perception is broad in its application, and allows the gathering of more information. The study of experiential cases, the comparative description of parameters, the possibility of going into complaints in depth and identifying opportunities for improvement, are just some of the benefits of a semi-structured interview in which, face to face (Lobato et al. 2006), the interviewer and the respondent create an empathetic connection in the knowledge of the situation under study.

Besides the open-ended questions, the interviewer asked about issues that were assessed through a visual analogue scale (VAS) of 10 levels for each factor, where 10 was the maximum and 1 the minimum value (see Q's in **Appendix 1**).

Step 3: A prototype wheelchair cushion adapted to each subject's anthropometric measurements and fitted to the user's wheelchair

was designed and delivered. Each prototype took into account all of the technical comments made by the physicians and engineering specialists team, as identified in step 1.

Measurements in "time one"

Step 4: A control evaluation for each user was carried out by the medical team after a month of use, applying again the FIM, the measurements of the propulsion angles and the map of pressures with the Force Sensory Array® (FSA). The results revealed that none had points of pressure.

Step 5: Another section of the semi-structured interview was conducted (see Q's in **Appendix 2**), using the 10 level VAS in order to assess elements of the proposed model, such as the perceived quality of the seat and the 7 factors of functionality for the inputs elements, and the general satisfaction for the processed element. The output elements were trust recommendations to third parties and complaints management.

Step 6: This step involved adjusting the seat design based on medical assessments and the feedback given by the users' perceptions and experiences (including graphs of pressure maps and photographs of design improvements in each case).

Measurements in "time two"

Step 7: Twelve months later, monitoring and control steps 4 and 5 were repeated.

The information gathered from the semi-structured interviews was processed in order to determine any trend in the results of the evaluation of perceived quality, satisfaction based on user perception, and every aspect of functionality of the delivered prototype wheelchair cushion.

OUTCOMES

Time "Zero"

Step 1: In the implementation of the medical assessment, the following results were obtained:

• The FIM average was 112.3 (on a scale from 0 to 126 points, where 126 is adequate).

• Only 13.3% of the patients presented propulsion angles of 120°. This angle of propulsion (120˚) is an average standard (which C. Brubaker (1992) considers adequate).

• 86.7% had inadequate propulsion angles (outside the range of 115° as a minimum and 130° as a maximum).

• Regarding the pressure maps, 100% of the patients had pressure areas above 70mmHg –which exceeds the maximum accepted value of pressure (H. Pain, 2002).

Step 2: The descriptive results of the semi-structured interviews (see Q's in **Appendix 1**):

Input elements:

• Regarding the expectation that users had to be invited to participate in the research protocol of INR prototype wheelchair cushions, an average score of 8.53 (σ=2.29) was calculated. The scale used was 1 to 10 points.

During the semi-structured interview, it was shown that the motivations for low expectations ratings were influenced by: unpleasant previous experiences and fears that unpleasant experiences from previous protocols would be repeated; lack of credibility of the product based on the status as a prototype rather than a commercial product; failure to assess the product due to a lack of cost to users; and lack of knowledge of the organizations that support the research and its scope.

Regarding high expectations ratings, it was found that they were influenced by: previous positive experiences with INR and their protocols; the need for a product to help them; and finally, positive interactions with previous users of the same protocol.

• As for the Perceived Quality of their previous seat, a mean of 5.80 was obtained (σ=2.21). The scale used was 1 to 10 points where 10 equated to outstanding high quality.

Step 3: Fifteen prototype wheelchair cushions were individually designed, adapted to the judged needs of each of the fifteen users, and delivered.

Time One and Time Two

Due to the fact that the assessment procedure was exactly the same for time one (after a month of use) and for time two (after 12 months), results are reported together and in a comparative manner.

Step 4: When making medical assessments of the user sitting in his/her prototype wheelchair cushion, the following issues were observed:

• No change had taken place in the FIM (medical assessment scale) in either a month or a year compared to time Zero. Thus, we can infer that no change had taken place in the wheelchair cushion design. However, there was variation in user perception, which was taken into account in order to adjust the wheelchair cushion design (see section below pertaining to the descriptive contributions of user perceptions).

• The angle of propulsion was adjusted to 100% in the given prototype wheelchair cushion design, and all users stayed within a range from 115° to 127°. Sixty-seven percent (67%) of the users specifically got an angle of 120°, which is considered adequate.

• The pressure maps for each wheelchair cushion scored higher distributions than the initial measures related to user support area and in compliance with the appropriate reference level of 70 mmHg (see example in **Figure 2**).

There was no skin reaction, and the formation of pressure ulcers was prevented in all cases (which was the objective of the prototype wheelchair cushion).

Step 5: When applying the semi-structured interview to user perception about the proposed model and regarding the input elements in terms of the specific features of functionality, the results were as follows (see **Table 3**).

TABLE 3

**Results of the Input Elements:
Functionality Factors after a Month and after a Year of Use of
the Delivered Prototype Wheelchair Cushion**

|	Time One		Time Two	
	1 month	**Standard deviation**	**12 months**	**Standard deviation**
Trunk control	8.20	1.78	8.54	1.33
Position	9.20	1.61	9.31	0.95
Pressure release	8.80	1.78	9.46	0.66
Transfer	7.20	3.19	8.46	2.26
Propulsion	7.93	2.40	9.23	0.93
Skin reaction	8.60	2.64	9.77	0.60
Comfort	8.80	1.93	9.62	0.77

Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR, 2009.

FIGURE 2
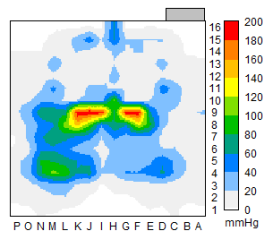**Examples of Pressure Maps for the Same User**

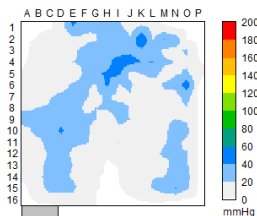User's pressure map when sitting on previous seat
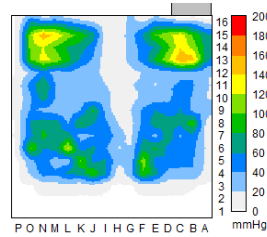
Pressure map evaluation in phase of design
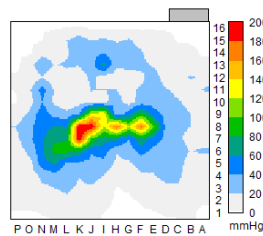
Pressure map evaluation in phase of design

Final user's pressure map when sitting on prototype

- **Source**: Members of the Draft Protocol CONACyT-SALUD-2006-1-
- 45395 INR 2009.
- **Legend**: darker areas represent areas of higher pressure. Pressure less than or equal to 70 mmHg is considered appropriate.

Note: There was no skin reaction, and the formation of pressure ulcers was prevented in all cases (which was the overriding objective of the prototype wheelchair cushion project).

Regarding Perceived Quality, the summary data is presented in **Table 4**.

TABLE 4

Results of the Input Elements:
Perceived Quality after a Month and a Year of Use of
the Delivered Prototype Wheelchair Cushion

	Time One		Time Two	
	1 month	**Standard deviation**	**12 months**	**Standard deviation**
Product perceived quality	8.80	1.37	9.23	0.73

Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR, 2009.

Process Element

The user satisfaction figures obtained are listed in **Table 5.**

TABLE 5

Process Element Results:
General Satisfaction after a Month and a Year of Use of
the Delivered Prototype Wheelchair Cushion

	Time One		Time Two	
	1 month	**Standard deviation**	**12 months**	**Standard deviation**
General Satisfaction	9.00	1.20	9.31	0.85

Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR, 2009.

Output items

Regarding the possibility of recommending the wheelchair cushion and the confidence that, in the future, this product may benefit other users, the data obtained is shown in **Table 6**.

Table 6

**Results of the Output Items:
Recommendation to Third Parties and Confidence Level
after a Month and a Year of Use of Delivered Prototype Wheelchair Cushion**

|	Time One		Time Two	
	1 month	**Standard deviation**	**12 months**	**Standard deviation**
Recommendation to third parties	9.67	0.62	9.92	0.28
Confidence Level	9.80	0.56	10.00	0.00

Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR, 2009.

To present an integrated analysis of user perceptions we established a comparison between the values of the previous seat (time zero) user's perceived quality and the delivered prototype wheelchair cushion after a month and a year of use (times one and two, respectively) (**see Figure 3**).

Figure 3

Results of the Input Element: Perceived Quality of Satisfaction Evaluation Model
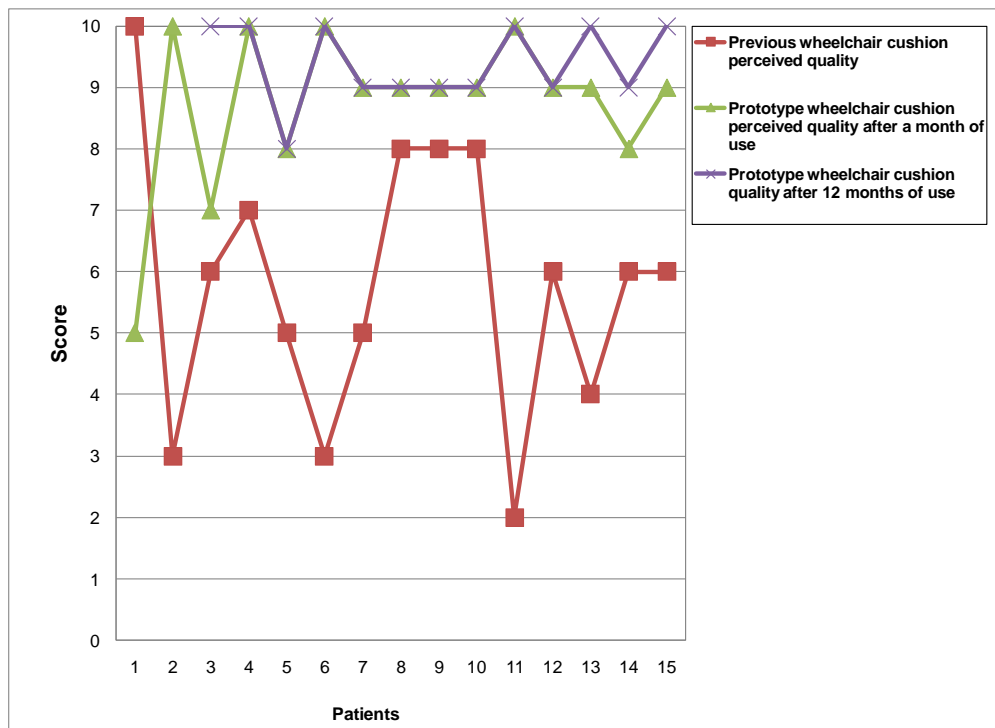
Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR 2009

Figure 3 reveals that the perceived quality of the delivered prototype wheelchair cushion was higher than that of the previous wheelchair cushion, both after a month and after a year of use. (It is important to note that for the 1-year follow-up, two of the initial 15 users were not involved in the monitoring, and they reported that they were not using the seat; so, only 13 active users remained for the complete year monitoring.)

PROTOTYPE WHEELCHAIR CUSHION DESIGN PERCEPTION: DESCRIPTIVE CONTRIBUTION TO A CONTINUOUS IMPROVEMENT PROCESS

In the semi-structured interviews, user complaints served to identify improvement opportunities for the design of the wheelchair cushion. For example:

• 26.6% of the subjects identified problems in the transfer process, and in the height of the lateral sides of their wheelchair. This feedback led to an adjustment to the design of the wheelchair cushion without laterals in the cases where this was medically and technically possible.

• 20% of the subjects commented on the problem of instability generated by the wheelchair. This feedback led to the design of the wheelchair cushion to take into account tilt angles compared to the wheelchair, ensuring balance and the pressure release of the ischial tuberosities in order to prevent ulcers.

• 20% of the subjects commented on the poor posture they had to assume in the wheelchair with the previous wheelchair cushion. These comments led to an alteration of the wheelchair cushion height and the propulsion angle, which improved not only the users' posture but also trunk control and their ability to propel the wheelchair (see **Figure 4**).

Last, but not least, it should be noted that in 46.6% of the cases, the wheelchairs themselves were incorrectly prescribed, as was identified by the specialized physicians team.

FIGURE 4

User with Prior Seat (left) and User with the Prototype Wheelchair Cushion (right)

Source: Draft Protocol User CONACyT-SALUD-2006-1-45395 INR 2009

Finally, in order to understand perception during the wheelchair cushion learning-adjustment process, we compared the perceived quality, the overall satisfaction, the general functionality and each process-functionality factor after 1 month (time one) and 12 months of use (time two) (see **Table 7**).

Table 7

Satisfaction and Functional Assessment of Prototype Wheelchair Cushions while Measuring Functionality and User Experience

		Time One		Time Two	
		1 month	Standard deviation	12 months	Standard deviation
General Questions	Product perceived quality	8.80	1.37	9.23	0.73
	General Satisfaction	9.00	1.20	9.31	0.85
	General Functionality	8.80	1.61	9.23	0.93
Functionality features	Trunk control	8.20	1.78	8.54	1.33
	Position	9.20	1.61	9.31	0.95
	Pressure release	8.80	1.78	9.46	0.66
	Transfer capacity	7.20	3.19	8.46	2.26
	Propulsion capacity	7.93	2.40	9.23	0.93
	Skin reaction	8.60	2.64	9.77	0.60
	Comfort	8.80	1.93	9.62	0.77

Source: Members of the Draft Protocol CONACyT-SALUD-2006-1-45395 INR 2009.

The results portrayed in **Table 7** support the following conclusions:

•   Although the FIM scale does not show any change in its assessment, the patients do perceive the change, as evidenced by the previous wheelchair cushion perceived quality and that of the delivered prototype wheelchair cushion.

•   While the user employs the prototype wheelchair cushion, an adaptation of movement is shown which favors perception in all functional aspects and of satisfaction over time. It is relevant to note that in all model elements (input, process and output), when comparing time one and time two, there is an improvement in the rating of user perceptions and their standard deviations are lower, which suggest more commonality of opinion after one year of use.

•   The technical design assessments are complemented by the expression of user experience and functionality.

At this stage of the research protocol, the wheelchair cushion absorbed the weaknesses of the wheelchair itself to achieve measurable characteristics such as propulsion angles and heights needed to increase transfer capabilities.

CONCLUSION

This study was designed to recruit only persons with significant mobility impairments and serious medical and psychological problems, which hinder their transfer to INR.   These recruitment requirements were one of the reasons causing the sample size to be small. Fortunately, a variety of spinal cord injuries were represented. Another limiting factor was the dependence on grants that limited the materials and human resources the authors of this study could use. The outcomes of this study, however, proved to be very useful because the design and production processes were improved upon and the protocol implemented here will be more widely used in the future.

Main Findings

Clinical measurements related to functionality (FIM) do not well-reflect user perceptions regarding the delivered prototype wheelchair cushions.

Users of the prototype wheelchair cushion define, according to their experiences in the activities of their daily life, the design features that must be incorporated on the prototype wheelchair cushions such as weight, width, height of the lateral sides, and support for the sacrum area, among others.

The proposed satisfaction assessment model allows, through all the defined elements, a specific and holistic perspective of user perceptions regarding the prototype wheelchair cushion, and also allows the evaluation of satisfaction longitudinally over time.

According to the bibliographical research which has been carried out, there are only studies that compare different pressure release systems, without evidence of their use in patients with neurological injuries (e. g., Phillips *et al*., 1999; Cullum *et al*., 2004; Brown, S., 2001; and Crane *et al*., 2007), although a pair of studies used a generic assistive technology instrument in order to evaluate satisfaction in wheelchair cushions. No published study was found that assessed the specific factors of wheelchair cushion functionality in daily life activities. The present study, therefore, can be viewed as ground-breaking.

Of course, a limitation of this study is the fact that the small sample size affects external validity, thus, limiting generalizability. We are hopeful that this exploratory inquiry will generate bigger grants to conduct larger scale studies using the protocol described herein. With a significantly larger sample size, it would then be possible to rigorously compare different groups of spinal cord injury patients (patients categorized as acute (e.g., less than two years of having the injury) and patients categorized as chronic (e.g., more than two years of having the spinal cord injury).

Practical Implications of the Research Results

A strong inference gained from this study is the necessity to establish enhanced/improved clinical assessments regarding wheetchair cushion functionality that are more specific and sensitive to the perceptual needs of patients with spinal cord injuries.

It is necessary to validate the perceived quality and its impact on user satisfaction in the seats, under the condition that the wheelchair is prescribed and properly designed, since some of the complaints-improvement opportunities reflect that the prototype cushions absorb the deficiencies of wheelchairs, such as the height of the seat (which affected the propulsion angle), the width (which influenced the design of the lateral sides of the seat and did not suit itself to transfers), the height of the back (which affected the position for propulsion), among others. Addressing all of these complaints led to significantly increased user perceptions of quality and satisfaction with the finally configured prototype seat.

Facilitating the propulsion capacity and the transfer capacity when diminishing lateral sides and the weight of the seat were seen as design improvement opportunities.

It has been possible to carry out this work due to the fact that it is immersed within the monitoring phase of the research protocol of the National Rehabilitation Institute (INR), coordinated by the Rehabilitation Engineering Laboratory, along with the Neurological Rehabilitation Service of the INR, with the support of the Universidad Iberoamericana Ciudad de Mexico, and it has had the backing of the National Council of Science and Technology (CONACYT, by its Spanish acronym), under code SALUD-2006-key 1-45395.

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APPENDIX 1
(Applied at time zero)

DATE:	dd/mm/yy

GENDER	FEMALE:			MALE:		
AGE (years)						
TYPE AND LEVEL OF INJURY	LM: COMPLETE			INCOMPLETE		
INJURY TIME						
THE SEAT YOU HAVE BEFORE THE PROTOCOL WAS:	SELECTED AN PURCHASED BY YOU	DONATED		CAME WITH THE WHEELCHAIR:	CUSTOM MADE	OTHER
SEAT TIME				Hours		
AVERAGE DAYS PER WEEK THAT:				Days		
DAILY ACTIVITIES		(Listed)				
WORK	YES:	NO:		USED SEAT	YES	NO
STUDY	YES:	NO:		USED SEAT	YES	NO
SPORT	YES:	NO:		USED SEAT	YES	NO

Number	Description	Question
1	Expectation of the overall product quality before entering the research protocol on the prototype seat of the INR	At the moment you were invited to participate as a user in the research protocol of the seats (pressure relief systems) in the INR, probably you thought something (expectation) regarding the product you would receive. Try to remember what your thought about it was.
		How this seat would contribute to you (i.e., how useful would it result)?
		Please, answer on a scale from 1 to 10, where "1" means that "you thought it wasn't going to be useful" and "10" means that "you thought it would be very useful".
		Before starting the protocol, what did you think about how this seat would help you?
2	**Previous Perceived Quality**	Try to remember the moment when you were delivered the prototype seat, here at the INR. Remember the seat you brought with you.
		How would you describe this seat you brought?
		Please, answer on a scale from 1 to 10, where "1" means "very bad" and "10" means "very good".
		How would you qualify the seat you brought?

Now, let's evaluate some functionality aspects of the delivered prototype seat on your daily activities or routine

APPENDIX 2
(Applied at time one and time two)

We'll appreciate your honesty while answering because this will enable us to achieve continuous improvements in this prototype seat.

If possible, it is important that your answers represent the generality of ALL your activities.
If you consider that there is an important event which is worth mentioning in detail, please, let us know about it.

Number	Description	Specific Questions
3	Regarding equilibrium and / or balance	While using the delivered prototype seat.
		How much did the seat help you to keep your stability or balance?
		Please, answer on a scale from 1 to 10, where "1" means "unhelpful" and "10" means "it helped a lot".
		How much did the seat help you to keep your stability or balance?

4	Regarding the position	While using the delivered prototype seat.
		How useful was the seat in maintaining a proper posture?
		Please, answer on a scale from 1 to 10, where "1" means "unhelpful" and "10" means "it helped a lot".
		How useful was the seat in maintaining a proper posture?
5	Regarding the ability to release pressure	While using the delivered prototype seat.
		How helpful was the seat in maintaining your ability to release pressure when sitting on it? (getting up, weight changes and inclinations)
		Please, answer on a scale from 1 to 10, where "1" means "unhelpful" and "10" means "it helped a lot".
		How helpful was the seat in maintaining your ability to release pressure when sitting on it? (getting up, weight changes and inclinations)
6	Regarding the ability to transfer	While using the delivered prototype seat.
		How helpful was the seat in maintaining your ability to transfer?
		Please, answer on a scale from 1 to 10, where "1" means "unhelpful" and "10" means "it helped a lot".
		How helpful was the seat in maintaining your ability to transfer?
7	Regarding the effect of propulsion	While using the delivered prototype seat.
		How helpful was the seat about the effect of propulsion in the different surfaces and levels?
		Please, answer on a scale from 1 to 10, where "1" means "unhelpful" and "10" means "it helped a lot".
		How helpful was the seat about the effect of propulsion in the different surfaces and levels?
8	Regarding the skin reaction	While using the delivered prototype seat.
		How helpful were the design and materials of the seat? Did they help with your skin care and to prevent a reaction?
		Please respond on a scale of 1 to 10, "1 " means "not conducive at all" and "10" means "very conducive".
		How helpful were the design and materials of the seat? Did they help with your skin care and to prevent a reaction?
9	Regarding comfort	While using the delivered prototype seat.
		How do you think is the comfort given by the prototype seat?
		Please respond on a scale of 1 to 10, "1 " means "not comfortable at all" and "10" means "very comfortable".
		How do you think is the comfort given by the prototype seat?

Number	Description	GENERAL QUESTIONS
11	Overall assessment of the perceived quality	In general terms, considering the product received during your stay in the research protocol of the prototype seat protocol at the INR,
		How do you rate the prototype seat?
		Please respond on a scale from 1 to 10, where "1" means "very bad" and "10" means "very good".
		How do you rate the prototype seat?
12	General satisfaction with the INR protocol prototype seat	In general terms, how satisfied or not satisfied are you about to the prototype seat?
		Please, answer on a scale from 1 to 10, where "1" means "absolutely not satisfied" and "10" means "completely satisfied".
		In general, how satisfied or not satisfied are you about the prototype seat?
13	Functionality of the prototype seat	According to all your answers
		In general terms, and considering all the daily life activities you carry on
		How functional do you find the prototype seat?
		Please, answer on a scale from 1 to 10, where "1" means "totally dysfunctional" and "10" means "completely functional".
		How functional do you find the prototype seat?

Number	Description	Question
14	Willingness to recommend or to speak well of the prototype seat.	How willing are you to recommend or to speak well of the prototype seat?
		Please, answer on a scale from 1 to 10, where "1" means "not willing" and "10" means "completely willing".
		How willing are you to recommend or to speak well of the prototype seat?
15	Confidence on the fact that the prototype seat will provide a good service to protocol users in the future	In the future, how confident do you feel on the fact that the prototype seat will provide a good service to next users?
		Please respond on a scale from 1 to 10, where "1" means "not, I don't trust on it" and "10" means "I really trust on it".
		In the future, how confident do you feel on the fact that the prototype seat will provide a good service to next users?

PLANNING FOR THE APES:

COPING WITH GUERRILLA CONSUMER BEHAVIOR
WHEN THE COURTS WON'T HELP

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ABSTRACT

The stakes are high for marketers when it comes to assuring consumer satisfaction, whether in a business-to-consumer or business-to-business setting. When consumer dissatisfaction results from an undesirable outcome, guerrilla consumer behavior, or consumers acting out beyond an expected or normative level, can result. Guerrilla consumer behavior can have immediate and long-term economic consequences for a firm.

In a study of the legal environments in the states of California and New York, the authors of this article have determined that marketers can find little assistance from the court system, with even the most egregious consumer guerrilla actions protected by the First Amendment and anti-SLAPP laws, as well as the courts' view of online communication as being of less legitimacy than print communication. The marketer's best recourse remains allowing consumers to express their voice and find an unobstructed exit from an otherwise dissatisfying consumer experience.

Keywords: customer satisfaction, dissatisfaction, guerrilla consumer behavior, SLAPP, consumer law, consumer protection, First Amendment.

INTRODUCTION

When it comes to consumer satisfaction, the stakes are high: a recent study found that in the United States alone, about $83 billion is lost by marketers each year due to poor customer experiences (Ingram 2013). While firms certainly have many ways to prevent or recover from a poor customer experience, in many situations the customer reacts in a way that causes damage to the marketer. The current study continues the exploration of guerrilla consumer behavior (Koprowski and Aron 2011) as responses to consumer dissatisfaction against which marketers have little recourse, resulting in both lost sales as well as harm to reputation and property.

Guerrilla consumer behavior" is a response by dissatisfied customers going beyond normative behavior and resorting to counterproductive, economically harmful, and even illegal activities (Koprowski and Aron 2011). This phrase describes a reaction by customers who have experienced suboptimal outcomes and resort to acting out, behaving in an irrational, compulsive way (Reber 1985) against a firm or firm representative. The term guerrilla consumer behavior is meant to evoke the same kind of desperation and reliance on limited resources as used in the terms guerrilla warfare (a type of warfare fought by irregulars in fast-moving, small-scale actions against orthodox military and police forces) and guerrilla marketing. This desperation often can be seen in the very language used by guerrilla consumers. Examples contained herein illustrate that this language can be far from rational, and may be considered quite vulgar and inappropriate, particularly in a professional context.

In the face of guerrilla consumer behavior, the impact on the firm is of great importance. A customer or group of customers, lashing out against a company can have a number of negative effects and result in substantial costs. These costs include those exacted by consumer retaliation, which has been classified as creating cost/loss (that is, creating extra work for the firm); consumption prevention; voice, exit and betrayal; and boycotting (Huefner and Hunt 2000; Funches, Markley and Davis 2009). While the tangible stakes can be significant, users of the Internet can also spread negative word-of-mouth comments even faster and to a broader audience by means of Facebook, Twitter, blogs, and anti-brand web sites.

EXAMINING GUERRILLA CONSUMER BEHAVIOR

Background

A firm confronted with guerrilla consumer behavior has a limited number of options available, at least after the behavior has occurred. Consumers may cause a commotion or damages that exact a real cost to a merchant, including physical damage or loss of reputation. The protection of the courts, in particular, seems like an appealing avenue to pursue, given that some examples of this kind of behaviors listed above may seem to be illegal, at least on the surface. Some of the most common legal recourses available to an aggrieved firm include allegations of defamation, commercial disparagement, or intentional interference with prospective economic advantage in a lawsuit.

Earlier research examined the protections offered to aggrieved firms in the State of Illinois and found surprisingly limited legal remedies available (Koprowski and Aron 2011). There is a dearth of legal solutions available to firms located in Illinois. Is this the case in other states as well?

To better understand this question, other states were examined, specifically, New York and California. The reasons for adding New York and California to this study are straightforward: Illinois is home to the authors of this study, and California and New York join Illinois among the five most populous states in the United States (the other two top-five states, Texas and Florida, offer opportunities for future research).

For some general background, Illinois hosts 1.1 million firms, and is one of the nation's manufacturing and agricultural leaders. New York is home to 1.9 million firms and has the largest economy in the United States, and the second largest in the world, featuring a high concentration of financial and service sector firms. California is the most populous of the United States and hosts 3.4 million firms.

Illinois, New York, and California are about as geographically and perhaps culturally distant as three states can be, yet they are similar in terms of their great commercial importance in the United States. They are also similar in the lack of support provided to plaintiff firms seeking redress from guerrilla consumer behavior.

With this in mind, the current study expands upon earlier work in several ways:

- Legal environments outside of the State of Illinois are examined, specifically, the states of California and New York.

- Recent legal developments regarding SLAPP (strategic lawsuit against public participation) laws are examined in the context of marketer reaction to guerrilla consumer behavior.

- Alternatives for firms outside of the courtroom to plan for, cope with, and recover from guerrilla consumer behavior are discussed.

Options and Obstacles for Combatting Guerrilla Consumer Behavior

The nature of guerrilla consumer behavior ranges from the kind of in-store activity suggested by earlier research (e.g., Huefner and Hunt 2000; Harris and Reynolds 2004) to the myriad of options available online. The latter phenomena suggest that there is little firms can do directly to combat this behavior. A store manager can't react to a negative Facebook page posting the way she might have her security guard escort a vandalizing customer off the premises. This situation leaves the justice system as the most obvious legitimate option. Firms seeking redress in the courts have three major categories of response available: *litigation*, *injunction* and *criminal prosecution*. The relevant terms are introduced and explained below.

Civil litigation, the branch of law involved in disputes among individuals and organizations, is pursued in response to defamation, commercial disparagement, and intentional interference with prospective economic advantage. Injunctive relief, which is a court-ordered ban against an act, is also possible but a less practical remedy in cases of guerrilla consumer behavior because injunctions ban future behaviors, whereas guerrilla behaviors have already occurred. Criminal prosecution can be pursued by the firm in the face of shoplifting, vandalism, and violence against property or persons.

A significant obstacle to the plaintiff firm has arisen in the form of anti-SLAPP legislation. SLAPP stands for Strategic Lawsuit Against Public Participation and this legislation is meant to dissuade businesses from pursuing lawsuits against

their critics with the intent "to censor, intimidate, and otherwise silence consumers by forcing them to stage a legal defense against the attacking firm" (SLAPP Back Transcript 2010). Anti-SLAPP rules are meant to prevent, colloquially speaking, the big firm from picking on the little customer. In fact, a plaintiff threatening a lawsuit against a critical or even a misbehaving customer might not even expect to win that case; instead, this tactic is meant to chill the defendant and inflict an expensive burden upon the defendant. It would be sobering for any customers to see themselves named as defendant in a lawsuit against a large, seemingly all-powerful corporation or even a smaller business. It is for this reason that anti-SLAPP legislation, meant to protect the citizen-consumer, can be a detriment to a firm victimized by guerrilla consumer behavior.

The history of anti-SLAPP laws is relatively recent. California was the first state to enact such a law in 1993. The purpose of the law was "to encourage continued participation in matters of public significance and to prevent the chilling of such participation" (Tate 2000, p. 801). Since then, 28 states plus the District of Columbia have enacted anti-SLAPP laws, including New York and Illinois (Public Participation Project). These SLAPP lawsuits have been described as "actions without substantial merit brought against individuals or groups with the intention of 'silencing opponents, or at least… diverting their resources'" (Tate 2000, p. 802) and have the effect of interfering with the defendant's … exercise of constitutionally protected rights." (Tate 2000, p. 803). SLAPP suits "masquerade as ordinary lawsuits." (Tate 2000, p. 804) The most frequent type of lawsuit is for defamation, but also includes business torts such as interference with prospective economic advantage (Tate 2000). Tate points out that the motive of SLAPPers is not to win, but rather to chill the defendant's activities of speech and protest and to discourage others from similar activities. SLAPPers can intimidate unsophisticated defendants with the specter of staggering defense costs even though SLAPPers lose eighty to

ninety percent of suits that actually go to trial (Tate 2000). A SLAPP plaintiff expects to lose and is willing to write off litigation expenses as a cost of doing business.

Expanding on a prior study of legal remedies available to aggrieved parties for guerrilla consumer behavior, the current study analyzes statutory and case law in the two of the largest states in the United States, California and New York. First, the relevant statutes in California and New York which are available to an aggrieved plaintiff will be examined, and then relevant cases in each state will be considered. For the purpose of this article, this study has been limited to cases from within the last five years. Also, cases are presented in which the plaintiff was a marketer (company, firm or organization), as opposed to an individual.

Examples from California

Defamation cases in California are numerous, and similar to Illinois, it appears that few cases provide a viable legal remedy to a plaintiff business's allegations of damaging statements by disgruntled consumers. Also similar to Illinois, there are few reported cases claiming unfair competition. Of the cases cited herein, many of them involve multiple causes of action forming the basis of a lawsuit. These causes of action include unfair competition, trade libel[1] or tortious interference with a prospective advantage. [2] Combining several causes of action is a common litigation tactic.

One representative example is that of *Simpson Strong-Tie Company, Inc. v Pierce Gore.* In this case, a manufacturer sued a lawyer, alleging defamation and trade libel claims arising from a newspaper advertisement by the lawyer directed at Simpson's customers, owners of wood decks built with the manufacturer's galvanized steel fasteners. The plaintiff firm, Simpson Strong-Tie Company, Inc., was a California corporation in the business of

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[1] Defined as "any intentional false communication, either written or spoken, that harms a person's reputation; decreases the respect, regard, or confidence in which a person is held; or induces disparaging, hostile, or disagreeable opinions or feelings against a person" (thefreedictionary.com 2013).

[2] Defined as "a third party's intentional interference or inducement of a contracting party to break a contract… thereby (causing) damage to the relationship between the contracting parties" (uslegal.com 2013)

designing, manufacturing, and marketing building products, including galvanized screws for use in wood frame construction.

The plaintiff asserted that the lawyer's advertisement falsely implied that its galvanized screws failed to meet appropriate industry standards and that valid claims might exist against the plaintiff based on negligence or product liability. The complaint stated that the advertisement "communicates that Simpson's galvanized screws are defective," and that the advertisement "disparaged Simpson's goods…" (Simpson Strong-Tie 2010).

Simpson retained an opinion survey firm to confirm that the advertisement had caused injury to their reputation. The survey revealed that shoppers, after reading the advertisement, were significantly more likely to believe that Simpson's galvanized screws were defective or of low quality and were significantly less likely to purchase galvanized screws manufactured by plaintiff. (Simpson Strong-Tie 2010).

The court rejected Simpson's arguments and denied relief. In a lengthy opinion, the appellate court affirmed the trial court's decision dismissing plaintiff's complaint since defendant's statements were made in furtherance of free speech on an issue of public interest.

The case of *Lisa Krinsky v. Doe 6* illustrates the enormous leeway that courts grant users of Internet chat rooms and message boards to speak anonymously under the free speech protection of the First Amendment. Krinsky, the plaintiff, was the president, board chair and chief operating officer of SFBC, a publicly traded company. Krinsky sought damages and an injunction accusing the defendant of intentional interference with a "contractual and/or business employment relationship" between plaintiff and SFBC, and a further claim of libel based on false and misleading Internet statements imputing dishonesty, fraud, improper professional conduct, and criminal activity to plaintiff (Krinsky 2008).

The alleged defamatory messages were posted on the Yahoo! message board. They suggested that there were "cockroach" executives at the company. In one message, posted on December 18, 2005, the defendant (Doe 6) stated that it is "funny and rather sad that the losers who post here are supporting a management consisting of boobs, losers and crooks." One of the messages included the following statement: "…Lisa [Krinsky]…has fat thighs, a fake medical degree, and has poor feminine hygiene" (Krinsky 2008).

In holding for the defendant, the court concluded that the language of Doe 6's posts, over a two-month period were not actionable, but rather, "fell into the category of crude, satirical hyperbole which, while reflecting the immaturity of the speaker, constitute protected opinion under the First Amendment" (Krinsky 2008). The court concluded by saying that while Doe 6's statements were "rude and childish, intemperate, insulting, and often disgusting and understandably offended plaintiff, nevertheless, offensive speech is still accorded constitutional protection."

In another Internet-related case, the plaintiff is *Eagle Broadband, Inc.*, alleging defamation arising from unflattering messages about the firm posted on Yahoo! Finance. The complaint made a number of general allegations, including fake announcements supposedly from Eagle Broadband that claimed…

- "the company had been deleted from the Russell 3000 Index due to poor performance and business failures."

- "Eagle Broadband was suffering from continued financial losses causing the share price to drop and encouraging others to '… go short to make some of your money back….' "

- "significant change is coming at Eagle. They are out of cash, sales, and time. They must pay Aggregate back the $10mm which they do not have…" (Eagle Broadband 2007)… all posted by the defendant.

An assertion by defendant concerned the plaintiff's "purported inability to sell a key product line essential to its business…." The defendant also predicted that plaintiff's share price would "continue to drop significantly," that plaintiff would be forced to make hard financial choices, which might include bankruptcy, and that the situation ahead would be "ugly." The defendant closed by stating: "This is truly a case study in professional incompetence and dereliction of fiduciary duty to shareholders" (Eagle Broadband 2007).

A California appellate court was not persuaded of the merits of the Eagle Broadband case. In denying plaintiff's claim for relief, the court cited the emerging SLAPP statute. That is, the court considered the Eagle Broadband case to be an example of "meritless lawsuits filed primarily to chill the defendant's exercise of First Amendment rights" (Eagle Broadband 2007). The California Legislature responded to a "disturbing increase" in such suits by enacting an Anti-SLAPP statute (section 425.16, an A) "to encourage continued participation in matters of public significance, and that this participation should not be chilled through abuse of the judicial process" (Eagle Broadband, 2007).

The court, in deciding the Eagle case, relied on the Anti-SLAPP statute, stated that the "offending message was published in an unregulated and freewheeling milieu [the Yahoo! message board]. Recognizing the nature of this forum, Yahoo! Finance message board users are warned not to rely on the information contained there" (Eagle Broadband 2007). The court concluded that "the average reader would recognize the (defendant, Williams) mock press release as parody. That being so, it 'does not defame [the plaintiff]...'" (Eagle Broadband 2007).

The case of *Keene v. Lake Publishing Co., Inc.,* involving allegations of defamation and trade libel, is another intriguing example of guerrilla consumer behavior. The plaintiff, Dr. Camille Keene, a neurologist, examined a local radio personality. Her preliminary diagnosis, pending an MRI and other tests, was that the radio personality was experiencing amyotrophic lateral sclerosis (ALS), a debilitating illness commonly referred to as Lou Gehrig's disease. However, after the MRI and further tests, the patient learned that he did not in fact have the disease. The defendant published an article which stated several times that the radio personality was "misdiagnosed" by the plaintiff, Dr. Keene.

Dr. Keene sued, contending that the statements were defamatory and that the "clear inference was that she was unfit to perform the duties of her neurology specialty," and that the "statements …were libelous because they injured her….professionally" (Keene 2010). The appellate court disagreed with plaintiff's assertions and upheld the trial court finding for the defendant on both counts of defamation and trade libel (commercial disparagement). In finding for the defendant, the court analyzed California law pertaining to defamation and trade libel. It stated that libel, a type of defamation, is defined by statute as "a false and unprivileged publication by writing, printing …, or which has a tendency to injure a person in his or her occupation or which has a "natural tendency to injure a person's reputation." (Civ. Code sec. 45). The elements of this tort are (1) a publication, that is (2) false, (3) defamatory, (4) unprivileged, and that (5) has a natural tendency to injure or that causes damage" (Keene 2010).

The trial court found that Dr. Keene failed to show libel because there was insufficient evidence that any of the statements from the article were false or defamatory. The appellate court stated that "'there can be no recovery for defamation without a falsehood" (Keene 2010). Moreover, the court further stated that "in an action initiated by a private person on a matter of public concern, the First Amendment requires that the *plaintiff* (in this case, Dr. Keene) bear the burden of proving falsity" and that plaintiff in this case failed to meet the burden (Keene 2010).

The appellate court also dismissed Dr. Keene's trade libel claim. Trade libel is an injurious falsehood that interferes with business. Unlike classic defamation, trade libel is "'not directed at the plaintiff's personal reputation, but rather at the goods a plaintiff sells or the character of his or her business, as such (Keene 2010). In denying plaintiff relief for trade libel, the court held that plaintiff failed to prove "actual malice," which is required element in proving a trade libel cause of action. Actual malice means a defendant publishes a statement about the plaintiff he *knows* is false; or that the defendant publishes a statement about the plaintiff with reckless disregard for whether it is false or true.

The final example we highlight from California is the case of *Balboa Village Inn, Inc. v. Lemen.* This is a rare instance in which the *plaintiff* prevailed.

The plaintiff owned and managed the Balboa Island Village Inn, a restaurant and bar which had been operating at that location for more than half a century. Defendant Anne Lemen purchased the "Island Cottage," which was across an alley from the Village Inn. She lived there part of the time and rented the cottage part of the time. Lemen was a vocal and constant critic of the Village Inn and has contacted the authorities numerous times to complain about excessive noise and the behavior of inebriated customers leaving

the bar. To bolster her case, Lemen videotaped the Inn approximately 50 times (Balboa 2007).

The plaintiff introduced evidence that for more than two years, the defendant parked across from the Inn at least one day each weekend and made videotapes for hours at a time. Customers often asked Lemen not to videotape them as they entered or left the building. Yet, numerous times, she followed customers to or from their cars while videotaping them. She took flash photographs through the windows of the Inn a couple of days each week for a year, further upsetting the customers. Lemen called customers "drunks" and "whores" and told customers entering the Inn, "I don't know why you would be going in there. The food is shitty." Overall, Lemen approached potential customers outside the Inn more than 100 times, causing many to turn away (Balboa 2007).

Lemen, also had several encounters with employees of the Village Inn. She told a bartender that she "worked for Satan," was "Satan's wife," and was "going to have Satan's children." The defendant referred to the owner's wife, as "Madam Whore" and told her, in the presence of a third party, "Everyone knows you're a whore." Three times, the defendant took photographs of cook Felipe Anaya and other employees while they were changing clothes in the kitchen.

Lemen, the defendant, told neighbors that there was child pornography and prostitution going on in the Inn, and that the Village Inn was selling drugs and was selling alcohol to minors. She said that sex videos were being filmed inside the Village Inn, and that it was involved with the Mafia. Concurrent with Lemen's guerrilla consumer attack, Village Inn's sales dropped more than 20 percent (Balboa 2007).

In holding for the plaintiff against the defendant, the court held that while the First Amendment right of free speech is stated in broad terms, the right is not absolute (Balboa 2007). The court held that there are categories of communication and certain special utterances to which the First Amendment does not extend.

These cases, with the exception of the final example, can lead one to conclude that, at least in the State of California, individuals have free license to engage in guerrilla consumer behavior, and disparage, defame, or otherwise damage the reputations of companies with little to fear from the judicial process. Primarily on First Amendment

grounds, disgruntled consumers are given a wide berth and seem to be able to attack firms and individuals with impunity. In the next section, the conditions for combatting guerrilla consumer behavior in the State of New York will be explored.

Examples from New York

Unlike California, New York has no statute defining defamation, commercial disparagement or tortious interference with prospective advantage. But just like California and Illinois, not only are there numerous court cases involving defamation, but also plaintiff complaints tend to allege multiple causes of action such as unfair competition and tortious interference with business opportunity.

In the example of *Schoolman Transportation System v. Aubrey*, a 2011 case, the guerrilla consumer is actually the representative of an educational institution, the New York Institute of Technology ("NYIT"). The plaintiff, Schoolman Transportation System, Inc., conducted business as Classic Coach and was contracted to provide transportation services to the NYIT. However, a representative of NYIT, Leonard Aubrey (NYIT's Vice President for Financial Affairs and its Chief Financial Officer and Treasurer), unilaterally terminated the contract.

The transportation provider sued for defamation against the defendant. The complaint alleged that, in Aubrey's termination letter, the defendant defamed Classic Coach by falsely stating that plaintiff engaged in "egregious overbilling practices." The complaint also alleged that Aubrey published those statements to third parties, causing damage to Classic Coach's business reputation. The question therefore is can Schoolman Transportation prove that in this act of guerrilla consumer behavior, Aubrey conducted on behalf of NYIT a "willful course of malicious conduct." According to the court, the strong words against the bus company were made as part of Aubrey's job, "in the scope of his employment" (Schoolman 2011). In this case, it is the protection of NYIT that allows Aubrey's behavior to go unchecked.

Protection for guerrilla consumers can also come from the Internet. In the case of *Sandals Resorts International Limited v. Google, Inc.*), the plaintiff (Sandals) sought damages for defamation from an unknown writer arising out of an email sent to multiple recipients. Here, Sandals is taken

to task for their presence in Jamaica in light of the economic conditions of the island's population. The unknown writer contrasted the financial circumstances of the people of Jamaica with that of a corporation that operates multiple resorts in Jamaica, criticizing the corporation's treatment of native Jamaicans.

The email contained the following comments:

- "Why are poverty-stricken Jamaican taxpayers subsidizing the billion dollar tourist industry?"

- "Menial-low paying jobs for Jamaicans; high profile luxury-style jobs for foreigners!"
- "Making foreign millionaires at Jamaicans's expense?"

The court held for the defendant finding the "the communication is not actionable, since the writing as a whole was "pure opinion." Moreover, the "content of the whole communication, its tone and apparent purpose") and its very anonymity, would signal to any reasonable reader that the writer's purpose is to foment questioning by native Jamaicans regarding the role of Sandals' resorts in their national economy (Sandals 2011).

It is the very nature of this guerrilla consumer behavior, through a medium provided by the Internet, which affords it protection. The court's opinion is instructive and provides insight into judicial thinking in general about Internet libel. According to that document:

- The culture of Internet communications, as distinct from that of print media such as newspapers and magazines, has been characterized as encouraging a "freewheeling, anything-goes writing style."

- Bulletin boards and chat rooms are often the repository of a wide range of casual, emotive, and imprecise speech, and that the online recipients of [offensive] statements do not necessarily attribute the same level of credence to the statements [that] they would accord to statements made in other contexts.

- The low barrier to speaking online allows anyone with an Internet connection to publish his thoughts, free from the editorial constraints that serve as gatekeepers for most traditional media of disseminating information.
- The observation that readers give less credence to allegedly defamatory remarks published on the Internet than to similar remarks made in other contexts, specifically addresses posted remarks on message boards and in chat rooms. However, it is equally valid for anonymous Web logs, known as blogs (Sandals 2011).

The Internet bears and in some ways promotes outrageous claims where the words used online are considered to be of lesser weight than they would be in another medium. This includes an online culture of casual writing, unfiltered, emotional and imprecise speech, and low barrier to entry among contributors. Guerrilla consumers choosing to communicate online are often free of editorial constraint and therefore their words are given "less credence." The language used online might be of a lower standard but the power of social media in terms of marketing communications and digital word-of-mouth communication between and among consumers remains influential.

The sections concerning the States of California and New York present only examples of the few cases that have been found. The courts historically and continually offer little relief against guerrilla consumer behavior. This lack of judicial relief means that marketers must be proactive in their own defense. Being proactive is key among the implications described in the next section.

MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

Previous research on guerrilla consumer behavior pertaining to Illinois indicates that the legal remedies to firms are limited and that court decisions tend to favor defendants (Koprowski and Aron 2011). Similarly, in New York and California, there are a limited number of legal options available to aggrieved parties seeking remedies for alleged harm due to defamation (disparaging a person's reputation), commercial disparagement (disparaging goods or services), or

tortious interference (intentionally damaging) with contract or with prospective advantage. Plaintiffs who believe that they have been wrongfully disparaged or damaged by allegedly aggrieved consumers seem to have little legal recourse available to them.

The anti-SLAPP legislation and the general unwillingness of the courts to support plaintiff firms against guerrilla consumer behavior (and other consumer criticism in general) leave few options for an affected firm. Moreover, since courts rely heavily upon Constitutional free speech rights, there is little likelihood that any attempts to limit baseless claims through the legislative process would be fruitful. Therefore, in order to combat guerrilla consumer behavior, we refer back to the seminal work of Hirschman (1970) to offer two recommendations: voice and exit.

Consumer voice, in this case complaint management, has become not only an accepted outlet for frustrated consumers (Fornell and Birger 1988) but has also become a vital source of information for a firm and can even play a role in facilitating service recovery and enhancing customer satisfaction and loyalty (McCullough and Bhadradwaj 1992). In short, a firm is well-advised to allow customers (whether dissatisfied or not) a voice, a connection to empowered employees and management, before any decision or impulse is followed to employ guerrilla consumer behavior and broadcast their dismay throughout the store or across the Internet.

Encouraging complaining behavior might have once seemed an indefensible option, and the success of this approach still relies on the company managing consumer expectations for the resolution of the complaint and applying the appropriate level of correction to the situation (Singh and Wilkes 1996; Susskind 2005).

Recent events suggest that an even more surprising approach might help in defusing guerrilla consumer behavior: supporting, allowing, and even encouraging exit behavior. The notion of a business firing its customers is not new. In fact, this notion really just represents a sophisticated kind of marketing in which a firm seeks to maximize its "return on customer" while propelling poorly-matched customers toward other sources, even competitors, more likely to satisfy their needs.

Netflix, the Internet-based entertainment provider, offers an example letting customers who want to leave escape without barriers or costs to exit. Netflix recently pursued the strategy of raising prices while splintering into two separate entities. Consumer confusion and anger ensued (Sandoval 2012). The managerial decisions behind this price increase have been subject to great criticism, and indeed, led to an estimated loss of 800,000 subscribers (Sandoval 2012). Facebook, a popular stage for guerrilla consumer behavior, hosted several sites that railed against Netflix (http://www.facebook.com/search/results.php?q=anti%20netflix&init=quick&tas=0.23507100078382903).

Yet a Facebook page aggressively entitled "1,000,000 people who will not stand for Netflix's new prices" garnered support from just over 5,000 people. At that time, a consumer who wanted to leave their relationship with Netflix could simply exit. For consumers and marketers, letting unhappy customers leave may be a mutually acceptable path of least resistance. Admittedly, this is one example, but it is one that illustrates that even a corporate misstep costing hundreds of thousands of lost customers, can avoid the added negative retaliatory impact of guerrilla consumer behavior.

LIMITATIONS AND FUTURE RESEARCH

The exploration of guerrilla consumer behavior started with the state of Illinois and with the current research has expanded to include New York and California. The focus of this work has been the legal environment of these states and the lack of courtroom responsiveness to plaintiff firms affected by guerrilla consumer behavior. This leads to several avenues for future research.

The current study, as well as past research (Koprowski and Aron 2011) has recounted a variety of legal cases involving guerrilla consumer behavior, as well as offering recommendations for proactive measures to obviate the need for such a consumer response. This has provided an important foundation for the study of guerrilla consumer behavior. An imperative next step in this area is the integration of this consumer response with existing conceptual and theoretical propositions to explain this type of activity. The research on consumer dissatisfaction and complaining cited throughout, as well as recent and related phenomena such as *consumer grudgeholding* (Aron 2001), serve to illustrate the

importance of integrating guerrilla consumer behavior into the existing areas of consumer research.

Some of the cases presented in this current study make it apparent that guerrilla consumer behavior can be enacted by individuals and groups that are not actually customers of a particular vendor and may have had no direct interaction with a targeted firm. This sort of response can be seen in other cases, wherein individuals participate in protests, pickets, strikes, or simply sign petitions to demonstrate their allegiance and shared concerns with others who might be more directly affected by a firm's behavior. The study of consumers acting out frustration that they have only experienced indirectly is another approach to understanding guerrilla consumer behavior.

Laws change and regulations, like the anti-SLAPP laws, will continue to be enacted. While anti-SLAPP laws offer protection for "the little guy" consumer against a resource-rich corporation, there remain few options for businesses to respond to guerrilla consumer behavior. Future research might continue to examine how the courts respond, particularly in states which have yet to enact anti-SLAPP laws, including Ohio, Michigan, and North Carolina, each among the ten most highly populated states in the United States (WorldAtlas.com 2013).

CONCLUSION

The current study continues the exploration of guerrilla consumer behavior and the responses available to firm under attack. An examination of a sample of court decisions found in California and New York, along with past research on Illinois, suggests that in the courtroom, firms have little hope of fighting consumer dissatisfaction which manifests itself as guerrilla consumer behavior. From the cases presented herein, it seems as though the courts will almost never support a plaintiff firm that is assailed by guerrilla consumer behavior. The one exception that was found, California's case of *Balboa Village Inn, Inc. v. Lemen,* offers that the First Amendment right of free speech is not absolute (Balboa 2007). It is that very right, though, that is invoked in support of the guerrilla behavior illustrated in the other cases in New York, California, and Illinois (Koprowski and Aron 2011). The First Amendment has been broadly interpreted, and the

line that demarcates going beyond this protection has not been clearly drawn.

While there are still another 47 states to consider, not to mention other countries and cultures throughout the globe, the outlook in terms of legal protection is not encouraging. In fact, anti-SLAPP laws are a further attempt to level the playing field between David, the consumer, and Goliath, the firm. Firms continue to have, or at least appear to have, ample resources to combat and perhaps intimidate dissatisfied customers into silence. However, Anti-SLAPP laws offer the consumer yet another shield while the Internet, social media, and mobile communications offer an effective array of weaponry. This, combined with the protection of the First Amendment, suggest that while the voice of the consumer must not be silenced, protection and recourse for an embattled merchant, damaged by guerrilla consumer behavior, must remain available.

The fundamental approaches to customer satisfaction still offer preemptive and recovery responses to guerrilla consumer behavior that the courts do not seem to provide. Consumer voice, that is, allowing and responding to complaining behavior, is an important approach to relieving consumer dissatisfaction and frustration. Facilitating exit behavior, in contrast to voice, can be seen as counterintuitive even in this era of empowered consumers. Many firms and entire industries, such as mobile phone or cable television service provision, rely on long-term contracts, access to consumer bank accounts, and automatic renewals to not only hide the exit doors from consumer but to lull consumers into forgetting that exits even exist. In other words, some firms thrive by making "one crucial element of the customer experience as difficult and frightening as possible…. the experience of *disconnecting*" (Fox 2013). It remains incumbent upon marketers to remove the possibility of guerrilla consumer behavior by making voice and exit possible, and by providing consumers incentive to stay.

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INVESTIGATING THE MEDIATING EFFECT
OF CUSTOMER SATISFACTION IN THE
SERVICE QUALITY – CUSTOMER LOYALTY RELATIONSHIP

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ABSTRACT

This article aims to elaborate on the concepts of service quality, customer satisfaction and customer loyalty and their relationships with the goal of establishing greater clarity on the path of relationship flow in the life insurance industry. The authors propose a model based on a thorough review of the literature and offer an empirical investigation into the mediating role of customer satisfaction in the hypothesized model.

The study begins with an identification of relevant variables and then moves to relationship testing. The authors use Multiple Regression Analysis to test the proposed causal relationships. The results empirically substantiate Customer Satisfaction as an intervening variable that offers directional influence as a mediator of the relationship between Service Quality and Customer Loyalty. The mediation model established in this study is found to be partial and complementary.

The study establishes customer satisfaction as a mediator in a service quality – customer loyalty relationship in the context of the life insurance industry in India.

Keywords: Service Quality, Customer Satisfaction, Customer Loyalty, Life Insurance Industry in India.

INTRODUCTION

Customer loyalty has not only found its way into the strategy rooms but it also features as a foremost theme of marketing research in most mid-to-large size organizations. It has turned into an indispensable managerial concern for all and a strategic obsession for some. Apart from intense competitive forces working in the background, the current customer relationship orientation of business has also set up a platform for customer loyalty to emerge as the heart of marketing activities across various industries, and especially ones that deal in services.

Such escalating focus on customer loyalty can be attributed to the significant benefits that it offers to businesses successfully engaged in loyalty practices. Prominent scholars in the field of loyalty research such as Rosenberg and Czepiel (1984) opine that acquiring a new customer can be as much as six times costlier than keeping existing customers. Reichheld (1996) also agreed that retaining a customer is less costly in comparison to acquiring a new one. He also indicated that the growing power of customers made them more demanding and less loyal. It therefore became a matter of immense importance for service providers to build and maintain loyalty among their current customers.

Formation of customer loyalty has been an interesting area of research for over 25 years. Parasuraman et al. (1988) established a causal relationship between service quality perceptions and customer satisfaction. Reichheld and Sasser (1990) established a causal relationship between service quality perceptions and customer loyalty. Bloemer and de Ruyter (1998) ascertained the positive relationship between customer satisfaction and customer loyalty. Apart from directly determining the state of loyalty among customers, satisfaction also influences the relationship between customer loyalty and other cognitive, affective and conative variables as well as customers' evaluative judgements such as service quality which is a major antecedent of loyalty. To more fully understand the relationship among these constructs, it is imperative to understand the conceptual framework of the constructs and then, their relationship along with directional influences.

LITERATURE REVIEW

In order to construct a literature framework, relevant studies have been thoroughly reviewed and are presented to first elaborate the conceptual framework of all three constructs examined in the study. Attention is then focused on exploring the relationship among them from the perspective of service industries in general and the

life insurance industry in particular. Subsequently, the directional flow of the relationships are discerned through literature search and review. These steps then result in the establishment of the research model tested and described in this article.

Service Quality

Kandampully (1998) reflected that a prime objective of any business, either manufacturing or services, is to achieve economic survival by developing and providing offerings that fulfil customer needs which can be understood by analyzing customers' quality evaluations and their decision making criteria in terms of repeat patronage and preference. Leonard & Sasser (1982), Takeuchi & Quelch (1983) and Joseph & Walker (1988) opined that ever-increasing competition and escalating customer expectations pose considerable challenges to organizations. Albrecht & Zemke (1985) noted that customers have grown extremely serious about the quality of services they receive.

Fisk et al. (1993) pointed out that service quality is among the principal themes of research related to services. Swan and Combs (1976) explained that consumers tend to compare their experience of quality with their pre-consumption expectations which forms the above mentioned paradigm. Such comparison, as put by Woodruff et al. (1983), results in emotion based reactions which forms the satisfaction or dissatisfaction with the products or services.

Gronroos (1984) found that extrinsic product related cues such as brand image are used by customers to ascertain service quality. Purer services such as life insurance heavily rely on extrinsic cues as there is hardly any tangible feature that can give an idea of its quality. Insurance is a credence product with high variability in pricing. Such differences in pricing, mainly used to meet customers' specific needs, make comparing different options difficult which again poses a challenge in service quality evaluation. Another notable feature of life insurance is that the consequences of choosing a particular offering typically attain clarity only after a considerable period of time. Therefore, immediate post-purchase evaluation cannot take place which alters the basis for overall satisfaction.

Johnston et al. (1984) posited that sporadic purchase and usage of credence products make it difficult for customers to form service expectations due to limited understanding and awareness about the service. However, as Berry (1995) suggested, customers look for long-term association with the life insurance provider and agents so as to reduce the perception of financial risks and other uncertainties. Given the above mentioned aspects of life insurance services, it is likely that they entail distinct expectations as suggested by Toran (1993).

Sherden (1987) pointed that delivery of high quality services where customers' expectations are exceeded is unusual in the life insurance industry though increasingly demanded by the customers. Toran (1993) offered the opinion that quality should be treated as the core element of the insurance industry's operations. Walker and Baker (2000) suggested that expectations act as standards or reference points for service evaluation and thus, agents need to understand customers' expectations of their services.

Siddiqui and Sharma (2010) posited that although a good number of empirical studies related to service quality have been conducted in various service industries, service quality modelling has not been fully examined in the context of life insurance services.

Customer Satisfaction

Oliver (1997) stated that satisfaction is the consumer fulfilment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under-or over-fulfilment. Johnson (2001) proposed that there are mainly two conceptualizations of customer satisfaction. The first category of concept-ualization can be represented by Oliver (1980) who suggested that measurement of satisfaction should be based on particular product or service transactions which can be defined as post-selection evaluative judgements related to specific buying decisions. Another conceptualization was established by such researchers as Anderson et al. (1994); Garbarino and Johnson (1999); Mittal et al. (1999) who perceived satisfaction in terms of a consumer's total cumulative experiences with a firm, product or service.

According to Yu and Dean (2001) and Bennett and Rundle-Thiele (2004) the antecedents of satisfaction can be emotional or cognitive. Solomon et al. (2002) posit that satisfaction is largely determined by the feelings or attitudes

about a product or service generated post purchase or consumption. Rai (2013) defined satisfaction as "a buyer's emotional or cognitive response post-subjective assessment and comparison of pre-purchase expectations and actual performance subsequent to the consumption of the product or service, meanwhile evaluating the costs incurred and benefits reaped in a specific purchase even or over time in course of transacting with an organization" (p. 105).

There have been limited published studies that investigate various forms and roles of satisfaction in a life insurance context. Joseph et al. (2003) in their study suggested that life insurance agents should constantly monitor the satisfaction levels among their customers through routine dialogue and never fail to communicate with them as more and more clients expect their agents to recognize them personally and communicate accordingly. These authors further reiterated that customer satisfaction is essential to survival of agents in the volatile insurance climate and thus, agents should try to maintain a high level of customer satisfaction by providing free or minimally charged services such as offering routine insurance evaluation updates, customized estate planning services, suggesting tax saving investment products, and so on.

Customer Loyalty

Yi (1990), Hallowell (1996) and Homburg and Giering (2001) have noted that initially, customer loyalty has been perceived to be a behavioral concept entailing repeat buying of product or service measured as the series or share of purchases, referrals, magnitude of relationship or all of the above mingled together. Day (1969) found the behavioral conceptualization of loyalty is insufficient for distinguishing true loyalty from fake loyalty and suggested that loyalty should be evaluated through both behavioral and attitudinal measures. Researchers such as Jacoby and Kyner (1973), Dick and Basu (1994), Oliver (1997) and Berné et al. (2001) have highlighted the attitudinal dimension of loyalty. The need of incorporating an attitudinal component of loyalty has been emphasized by Bandyopadhyay and Martell (2007) who revealed that situational factors like unavailability of stock, individual factors like resistance to change and socio-cultural factors like social bonding differentiate behavioral loyalty from attitudinal loyalty. Fournier and Yao (1997),

Macintosh and Lockshin (1997), Pritchard et al. (1999), Bowen and Chen (2001), Rundle-Thiele and Mackay (2001), Wong and Sohal (2003), Koo (2003) and Kumar and Shah (2004) recommend to combine the behavioral and attitudinal measures of loyalty. Rai and Srivastava (2012) stated that "a customer can express his degree of loyalty towards a service provider by either displaying a positive attitude or indulging in favorable actions or making conscious evaluations and finding a particular service worth sticking to." (pp. 66).

Guillen et al. (2008) noted that the number of empirical studies on customer loyalty in the insurance sector is low. They contended that it is important to monitor customer loyalty and business risk for life insurance companies due to reasons such as access to information related to the quality of portfolio, effective handling of customer recruitment and retention strategies, evaluation of competitiveness in the insurance sector and a company's position in that market. Lombardi (2005) stated that keeping customers is crucial for life insurers as a long-lasting association with those customers results in greater instances of cross-selling and positive recommendation intentions.

Slattery (1989) stated that the agent's relationship with his customers and quality of his service are decisive factors in selling a policy and retaining the customers. Toran (1993) believed that an agent's perceived integrity and the quality of his advice plays a major role in customers' decision for life insurance services. Solomon et al. (1985); Grönroos (1990) found that customer's discernment of face-to-face interaction with the service employee is taken as a significant determinant of customer loyalty.

Putting this all together, then, Customer Loyalty in the context of insurance services can be comprehended as a psychological construct formed by sustained satisfaction of the customer coupled with emotional attachment formed with the service provider that leads to a state of willingly and consistently being in the relationship with preference, patronage and premium.

CAUSAL MODELS AND HYPOTHESES

The concepts discussed above provide a base for creating relational models involving service quality, customer satisfaction and customer loyalty which depict the causal as well as directional flow that these constructs obey. The

relationships among the principal constructs form three different paths, each of which are discussed in the following sections.

Path 1: The Service Quality – Customer Loyalty Relationship:

Service Quality ⟶ Customer Loyalty

Zeithaml et al. (1996) found a positive relationship between service quality and willingness to pay more as well as loyalty. Baker and Crompton (2000) reported a positive relation between service quality and willingness to pay higher prices and to customer loyalty. Chow et al. (2007) carried out their study in restaurant industry and found that frequent patronage of guests is related to high levels of service quality. Wong and Sohal (2003) attempted to assess the impact of service quality dimensions on customer and found that there is a positive association between service quality and customer loyalty.

Cronin and Taylor (1992) stated that service quality has no significant effect on repurchase intentions. Cronin et al. (2000) posited that the association of perceived service quality with behavioral intentions differs from industry to industry. Bei and Chiao (2001) also posited that high levels of perceived service quality had an indirect but significant positive effect on customer loyalty via customer satisfaction. Olorunniwo et al. (2006) reported that in the context of a service factory, the indirect effect of service quality on behavioral intentions with customer satisfaction mediating the effect is stronger than the direct effect of service quality on behavioral intentions. Tsoukatos and Rand (2006) verified the findings of Parasuraman et al. (1988), Reichheld and Sasser (1990), Fornell (1992), Cronin and Taylor (1992) and Anderson and Sullivan (1993) about the causal relations between service quality perceptions, satisfaction and loyalty and accepted the path service quality – customer satisfaction – loyalty to be valid in the Greek insurance industry. Caceres and Paparoidamis (2007) empirically verified the mediating role of relationship satisfaction in a business to business context and asserted that the relationship between functional and technical dimensions of service quality and business loyalty is mediated by relationship satisfaction whereas no support has been found for the direct effect of service/product performance on customer loyalty.

Juga et al. (2010) studied and supported a satisfaction-loyalty model (Oliver, 1980) in a logistics outsourcing context and stated that instead of directly influencing loyalty, service perceptions influence loyalty through the shipper's overall satisfaction with the service provider.

Based upon the above discussion, the following hypothesis is proposed:

H1: There exists a significant relationship between Service Quality and Customer Loyalty in the context of Insurance Services.

Path 2: The Service Quality – Customer Satisfaction Relationship:

Service Quality ⟶ Customer Satisfaction

Hurley and Estelami (1998) posited that a customer's level of satisfaction with an organization or a service provider is determined by the evaluation of service quality along with other factors. Murray and Howat (2002) reviewed Crompton & MacKay (1989), Oliver (1993), Buttle (1996), De Ruyter, Bloemer & Peeters (1997) and Liljander & Strandvik (1997) and noted that substantial amounts of discussions have been undertaken about the distinctiveness of service quality and customer satisfaction as constructs as well as whether satisfaction is an antecedent or an outcome of service quality. Their findings suggested that service quality acts as an antecedent to satisfaction.

Dabholkar et al. (2000) and Santouridis et al. (2009) found that service quality has been quoted as the most influential predictor of customer satisfaction in the literature. Arasli et al. (2005) and Al-Hawari et al. (2009) noted that service quality has been the focal point of recent inquiries into the parameters affecting degree of customer satisfaction in the context of financial services. Kassim and Abdullah (2010) in their study conducted among the customers of Malaysia and Qatar agreed that service quality is an antecedent of customer satisfaction. Chen et al. (2012) confirmed the well-established relationship between service quality and customer satisfaction and suggested that although service quality can increase customer satisfaction both directly and indirectly… but in a financial services context,

service fairness is also considered along with service quality while forming satisfaction levels.

Based upon the above discussion, following hypothesis is proposed:

H2: There exists a significant relationship between Service Quality and Customer Satisfaction in the Context of Insurance Services.

Path 3: Customer Satisfaction – Customer Loyalty Relationship:

Customer Satisfaction ⟶ Customer Loyalty

Henning-Thurau and Klee (1997) partitioned studies related to customer satisfaction – loyalty link into three groups:

1. Studies originating from literature of service management investigating the relationship at an aggregated, company-wide level. Here, satisfaction has been considered as an antecedent of customer loyalty, which is capable of influencing firms' profitability (e.g., Rust and Zahorik, 1993; Anderson et al., 1994; Heskett et al., 1994).

2. Studies accepting the impact of satisfaction on loyalty while questioning the assumption of a linear and symmetric structure of the relationship between the two (e.g., Anderson and Sullivan, 1993; Oliva et al., 1995; Mittal et al., 1998).

3. Studies analyzing the satisfaction loyalty link on an individual level with real purchasing data (e.g., Bolton, 1998; Mittal and Kamakura, 2001).

Over the years, several researchers such as Ganesan (1994), Mittal et al. (1998), Mittal and Kamakura (2001) and others have portrayed customer satisfaction to be influencing the factors that link to the long-term orientation of a relationship. Geyskens et al. (1999) considered customer satisfaction as an essential factor responsible for the long-term association between suppliers and buyers. It has often been stated that the affect component of satisfaction could stimulate a satisfied customer to patronize the service provider as well as referring its services to others. The positive effect of customer satisfaction on these dimensions of loyalty has been repeatedly voiced in the literature.

Heskett et al. (1997) posited that a rapid increase in customer loyalty can be expected once customer satisfaction crosses a definite threshold. In other words, the relationship between customer satisfaction and customer loyalty experiences rising returns to scale. Oliver et al. (1997) reflected the threshold argument in their research findings pertaining to customer delight which suggested that "tremendously satisfied" or "delighted" customers have a stronger tendency to stay with the organization than merely "satisfied" ones.

Oliver (1999) and Bennett and Rundle-Thiele (2004) pointed out that satisfaction in commercial relationships could act as a proxy. Oliver (1999) perceived customer satisfaction as a "seed" which may produce customer loyalty in certain conditions but not always. Egan (2000) and McIlroy and Barnett (2000) suggested that though a necessary requisite, customer satisfaction is not sufficient for loyalty building. Egan (2000) noted that satisfied customers are likely to switch if they are convinced of receiving better value, whether in terms of convenience or quality, somewhere else.

Noordhoff et al. (2004) regarded satisfaction as an important factor that may affect customer loyalty in retailing industries characterized with growth. Keh and Lee (2006) analyzed the moderating effect of satisfaction on rewards in loyalty programs and found that satisfaction does affect the effectiveness of rewards.

Based upon the above discussion, the following two hypotheses are proposed:

H3: There exists a significant relationship between Customer Satisfaction and Customer Loyalty in the context of Insurance Services.

H4: Customer Satisfaction mediates the relationship between Service Quality and Customer Loyalty in the context of Insurance Services.

RESEARCH METHODOLOGY

The research method and tools employed in this study are detailed in the following sections.

The Research Problem

A comprehensive survey of such literary sources as were highlighted in the previous sections of this article revealed that the relationships between service quality, customer satisfaction and customer loyalty have been examined by numerous scholars, in many studies conducted in varied business/services settings. A thorough review of these studies led the author to look more closely at the possible mediating role of customer satisfaction in the quality - loyalty link.

Some work of this type has been conducted, but virtually no published work has been found in the context of life insurance industry.

Also, the form and strength of the mediating role of customer satisfaction has not been paid adequate attention to in most of the studies that have examined mediation. This, in this author's opinion, establishes the need for testing the relational impact of Service Quality on Customer Loyalty as well as the directional influence of Customer Satisfaction on this relationship in the context of the life insurance industry. The proposed conceptual research model of the study is given below.

$$M = \beta_{20} + \beta_{21} X$$

$$Y = \beta_{30} + \beta_{31} X + \beta_{32} M$$

$$Y = \beta_{10} + \beta_{11} X$$
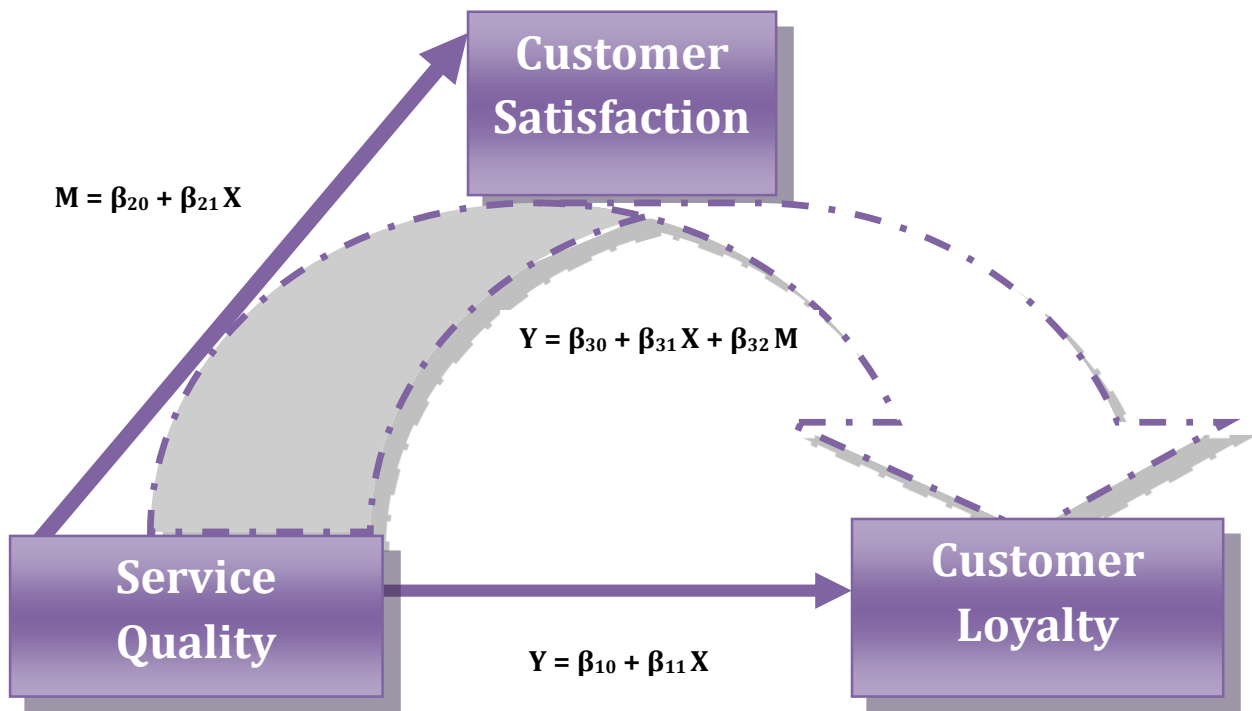
Where, Y = dependent variable (customer loyalty), X = independent variable (service quality) and, M = mediating variable (customer satisfaction).

Baron and Kenny (1986) provide guidelines for establishing indirect effects and declare the following three conditions as requisites for establishing mediation.

1. **The independent variable must affect the mediator in the first equation;**
2. **The independent variable must be shown to affect the dependent variable in the second equation; and**
3. **The mediator must affect the dependent variable in the third equation.**

The Research Objectives

The objectives that determine the direction of the study follow.

1. **To explore the relationship between service quality and customer loyalty and ascertain the strength.**

2. **To examine the role and impact of customer satisfaction as an upshot of service quality and predecessor of customer loyalty.**

3. **To investigate the mediating role of customer satisfaction in the relationship of service quality and customer loyalty.**

The Research Design

The research is both exploratory and descriptive: the identification of variables for the study is the initial step, and relationship testing follows.

Development of the Survey Instrument

A thorough review of the customer loyalty literature revealed seven factors that can be considered antecedents of customer loyalty. These seven antecedents served as the basis for construction of the survey instrument used in this study. In order to design a questionnaire to assess loyalty among customers, individual scales of these antecedents have been found and reviewed. Items which were considered most relevant in the context of present research have been taken from these scales and put together to form a new questionnaire. The total number of items at the initial stage was 77. This pool of items was again scanned to remove irrelevant or redundant items with the goal of achieving parsimony, validity and objectivity. After thorough examination, 38 items were found to be appropriate for the questionnaire. These items were then pilot tested by academicians, industry experts, loyalty practitioners and some of consumers drawn from the population of life insurance customers. Based upon the feedback received, the questionnaire was redesigned. 35 items were chosen to be included in the actual questionnaire used in the study.

Data and Sample

The data acquired for testing the proposed research model was collected through a survey among the customers of the top three life insurance companies (based on their relative shares of the market of life insurance policies in India. These companies were: the Life Insurance Corporation of India; ICICI Prudential Life Insurance; and SBI Life. For the selection of respondents, Snowball Sampling was used since the target population consisted of only those customers who hold one or more policies worth Rs. 5 lakh or above for a minimum period of 5 years.

Prospective respondents were requested to register their responses to measurement items (see **Appendix A**) in the questionnaire designed to observe their evaluative judgements and emotional reactions towards their life insurance service provider and consequently, their loyalty intentions. All of the measurement items were anchored on a seven point Likert scale (1 = strongly disagree, 7 = strongly agree). A total of 400 usable questionnaires were obtained from a possible 450 customers, a response rate of 88 percent, and the average age of the respondents was 33 years. Of these, 70 percent were male and 30 percent female. These 400 customers broke down as follows: 220 were customers of LIC of India; 107 were customers of SBI Life; and 73 were customers of ICICI Prudential.

The internal consistency of the 35 items scale used in this study was determined by computing Cronbach's coefficient alpha which came out to be .955. The items were presented in English as well as Hindi to remove language related hindrances.

The data collected was subjected to Multiple Regression Analysis so that the relationships among the primary constructs understudy i.e., service quality, customer

satisfaction and customer loyalty and any possible directional influence over these relationships can be tested. The results of the analysis and detailed discussion are presented in the section of findings.

Scope of the Study

The present study is centered on investigating and establishing a relationship between customers' evaluative judgements of life insurance services and their relational outcomes. It is focused on the relationship between service quality and customer loyalty with customer satisfaction exerting indirect effects on the aforementioned relationship. There may be other variables that play potentially strong roles in the inter-relationships of service quality, customer satisfaction and customer loyalty. However, for purposes of this particular inquiry, they have largely been assumed to have a null effect in the above depicted research model. Notably, this study has taken into account the responses of Indian life insurance customers only, thus limiting the generalizability of any results. The study also does not include the whole insurance industry (auto; home; health, etc.) thus limiting the generalizability of any results.

RESULTS

The study's findings have been partitioned into three sections in line with the aforementioned conditions of Mediation analysis:

a) The dependent variable Customer Loyalty has been regressed on the independent variable Service Quality. The result substantiated that the independent variable, service quality, is a significant predictor of the dependent variable, customer loyalty.

The relationship between service quality and customer loyalty was examined through linear regression analysis, the test results which are presented in **Table 1**. The value of R^2 **(.829)** suggests the model to be very strong. H1 proposed that service quality and customer loyalty would share a significant relationship. The significance value of β_{11} was found to be smaller than the default value of .05 thus demonstrating that a

significant relationship between service quality and customer loyalty exists.

b) The mediating variable Customer Satisfaction has been regressed on the independent variable Service Quality in an attempt to establish Service Quality as a significant predictor of customer satisfaction.

H2 was related to the effect of service quality on customer satisfaction and to assess this, linear regression analysis was undertaken. As can be seen in **Table 1**, the value of R^2 **(.495)** suggests the model to be moderately strong. $\beta_{21} = 1.142$ which is significant as the value of significance is smaller than the default value (.05) thus demonstrating that customer satisfaction is significantly related to service quality.

c) Regressing the dependent variable on both the mediator and independent variable confirmed that the mediator is a significant predictor of the dependent variable. Also, as per the conditions laid down by Baron & Kenny (1986), the coefficient of the independent variable in a multiple regression equation where the dependent variable was regressed on both mediator and independent variable should be smaller than the coefficient of independent variable in the first equation.

In order to assess the mediating role of customer satisfaction, its' effect on customer loyalty has been tested through regression analysis while controlling for service quality. As revealed in **Table 1,** the model is very strong given the value of R^2 **(.959)**. Also, $\beta_{32} = .360$ which is significant and the value of significance is smaller than the default value (.05) thus demonstrating that there is a statistically significant relationship between customer satisfaction and customer loyalty.

H4 proposed that there would be a mediating role of customer satisfaction in the service quality – customer loyalty relationship. The third condition of Baron & Kenny's (1986) mediation model also holds true in the present study as β_{31} (.636) < β_{11} (1.047)…thus the implication that Customer Satisfaction mediates the relationship between Service Quality and Customer Loyalty.

TABLE 1

Results of Multiple Regression Analysis

Models (Steps in Mediation Analysis)	Service Quality	Customer Satisfaction	R^2
Model 1			
(DV = Customer Loyalty	1.047*	-	.829
IV = Service Quality)			
Model 2			
(DV = Customer Satisfaction	1.142*	-	.495
IV = Service Quality)			
Model 3			
(DV = Customer Loyalty			
IV = Service Quality	.636*	.360	.959
MV = Customer Satisfaction)			

*p value < 0.005

Also the VIF values for service quality and customer satisfaction were found to be well within the prescribed limit of 5 which suggests that there is no problem of multicollinearity between the predictors in this model.

The result of Sobel's Test are presented in **Table 2.** This result suggests that the proposed mediation model is statistically significant since the p-value of Sobel test statistic is smaller than the default value of .05.

TABLE 2

Sobel Test Statistic

Test Statistic	Std. Error	p-value
17.27469982	0.02379897	0

The Predictive Equation for the entire model is:

CL = -.183 + .636 SQ + .360 CS

(**.360 is significant** as the value of significance is lower than the default value of .05; **β31 (.636) < β11 (1.047).** Thus, Baron and Kenney's third condition also holds true.)

DISCUSSION AND IMPLICATIONS

Customer Satisfaction has been found to be a significant predictor of Customer Loyalty in the context of life insurance in India. The p-values associated with β_{11} (1.047) and β_{21} (1.142) indicate a statistically significant relationship of Service Quality with Customer Loyalty and Customer Satisfaction respectively, which in turn is significantly associated with Customer Loyalty (β_{32} = .360). Also, the role of Service Quality in determining Customer Loyalty diminishes

significantly (.636 < 1.047) once the intervening variable Customer Satisfaction enters the equation. Baron and Kenny (1986) recommended Sobel's test to examine the significance of mediation model. They stated that "Sobel (1982) provided an approximate significance test for the indirect effect of the independent variable on the dependent variable via the mediator." The Sobel Test statistic for the mediation proposed in this study is **17.27469982** with a significant p-value. The significance of Sobel test statistic validates the proposed mediation model.

Thus, present study corroborates the literature that suggests Customer Satisfaction to play a greater role than just being a prominent antecedent to Customer Loyalty. The study empirically demonstrates Customer Satisfaction as an intervening variable that offers directional influence to the relationship between the constructs Service Quality and Customer Loyalty. Another interesting finding stems from the statistical significance of the direct relationship between service and customer loyalty which implies that customer satisfaction only partially mediates the aforementioned relationship.

To examine whether the mediation established in this study is complementary or competitive in nature, the sign of product of all three coefficients needs to be determined. By following the procedure stated by Zhao et al. (2010), the mediation established in this study is classified as complementary mediation.

It can be concluded that Indian customers' evaluation of superior service quality of their life insurance provider leads them to satisfaction and continued episodes of customer satisfaction will result in a solid base of loyal customers for the life insurers. Thus, Customer Satisfaction enhances the relationship between Service Quality and Customer Loyalty.

Life insurers all across the world are in a fix as the industry dynamics have vastly changed and retaining a customer is becoming increasingly difficult. According to World Insurance Report (2007) by Capegemini, the Insurance industry has become more transparent due to the increased usage of the internet which enables customers to have easier access to product and price related information, thereby increasing their bargaining capacity. This information transmission has made customers self-reliant, more price sensitive and less loyal. Guillén et al. (2009) opined that customer defection poses a very real threat to companies operating in the insurance industry. Though defection can be compensated for by new customer acquisition, this alone is not a good solution because of government regulations around the world: typically, in the event of contract cancellation, the composition and quality of insurance risks are distorted leading to a negative impact on the judged solvency of the company and thus the rating of that company. So, life insurers have endeavored to enhance customer loyalty among their existing customer base. With an understanding of the two major antecedents of customer loyalty i.e., service quality and customer satisfaction, customer loyalty can be more effectively managed and sustained. Also, the directional influence established in this study offers a framework to the loyalty practices of the life insurers who can plan and implement a sequence of activities and allocate their limited marketing resources accordingly.

In order to achieve desirable and effective results, life insurers need to establish performance standards for all three constructs analyzed in this study. Such benchmarking will provide them direction and focus required to outperform the competition and ensure a better service experience for their customers. A regular monitoring of customer loyalty can serve as a yardstick and help in managing business risks while ensuring long-term profitability.

LIMITATIONS OF THE STUDY

The study is confined to the geographical boundaries of Varanasi city in India which affects the generalizability of the results. Also, the findings are restricted to the information furnished by the respondents which suffers from the risk of biasness and human errors. While assessing the mediating role of customer satisfaction, it has been assumed that customer satisfaction is directly related to service quality as well as customer loyalty which means that the possibility of multiple mediations in the research model has been ignored. However, these potential relational or directional influences may have a huge role to play in the context of commercial relationships. The study is conducted in the context of the life insurance industry in India which restricts the results from being extrapolated to other service industries with different sets of entry and exit barriers, switching costs, relationship tenure and customer responses.

FUTURE RESEARCH

Scholars in the future may explore the possibilities beyond the main mediation model established in the present study by testing the existence of other variables and their potential effects on the relationships discussed and demonstrated here. It would be interesting to see if the relationships of customer satisfaction with service quality and customer loyalty are also mediated through some other variables such as perceived value, trust, switching costs, etc. Also, the possibility of some variables exerting moderating influences on the mediating relationship discussed in the present study cannot be discarded without testing. Such variables and their exact effects need to be identified in order to generate a comprehensive understanding of the aforementioned relationships. Future studies may enhance the explanatory power and predictability of the above model by testing and verifying the existence of multiple mediations as well moderated mediation in the model.

The present study can be replicated in varied service contexts such as entertainment and recreational services, postal services, etc. in other cultural settings. Future studies can also concentrate on identification of other mediating variables that provide directional influence to service quality – customer loyalty link.

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APPENDIX A

MEASUREMENT ITEMS

1. The company provides sufficient range of life insurance products (children plans, joint life plan, pension plans, and special plan for women with different benefits options).
2. The company's cost of policy is reasonable.
3. The company's service delivery process is highly standardized and simple.
4. The company has technological capability and innovative processes to meet your expectations.
5. The company shows willingness to help and is always ready to respond to request.
6. The company's branch location is convenient.
7. The ambience of the company's branch premises gives positive impression.
8. The company does ensure confidentiality of its clients.
9. The company provides timely and trustworthy information.
10. Company will point out the best alternative for you at any time.
11. The company gives appropriate advice (related to investments /tax benefits etc.) at critical times.
12. Services of the company are reliable and dependable.
13. The company is concerned with the customers.
14. The company is honest to you.
15. The company can be trusted in what it says and does.
16. The company is firmly established and stable.
17. The company deserves your repeat purchasing as well as recommendations.
18. The company never fails to fulfil your expectations.
19. The company has never disappointed you so far.
20. The company appoints well-trained agents.
21. The agents are able to instil confidence through their behaviour.
22. The agents are knowledgeable and competent enough to answer specific queries and requests.
23. The agents' approach is empathetic and reassuring.
24. The agents have professional appearance.
25. You feel that your decision to choose this company for life insurance solutions was wise.
26. You are contented with your decision of choosing your present life insurance provider.
27. Overall, you are satisfied with your life insurance provider.
28. You feel a strong sense of belongingness to the company.
29. You stay with company because you are happy to be their customer.
30. Company has a great deal of personal meaning to you.
31. You stay with the company because it would be too costly to leave it.
32. You stay with the company because it provides greater benefits in comparison of other available options.
33. You are not sure that the policy charges of a new life insurance provider will be better for you.
34. You should compare all life insurance providers in order to switch to a new company.
35. Comparing the life insurance providers with one another takes a lot of energy, efforts and time even if all the information is available.