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Perceived Justice and Email Service Recovery

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Abstract

This study adds to the limited research of service recovery in an online environment, drawing on data from Australia. It is perhaps the first non-US study of email service recovery as well as the first to apply a theoretical perspective - perceived justice - to email service recovery. The results of three annual studies resemble US results and support extending perceived justice to service recovery via email. The distributive elements of replying and offering compensation, the procedural element of answering completely, and the interactional element of thanking the customer showed significant positive relationships with customer satisfaction, positive word-of-mouth and repurchase intent. Perhaps most importantly for practitioners, the results of a stepwise regression showed that incorporating the simple phrase "thank-you" in the email reply was a strong predictor of successful email service recovery. Finally, this study found that response time might be less critical than previously thought.

Keywords: Online Service Recovery, Email, Perceived Justice, Complaints, Customer Satisfaction.

Introduction

From a company perspective, complaints are double-edged. They incur short-term staffing and compensation costs, and - handled incorrectly - long-term costs of lost customers and their associated lifetime value. Yet complaints provide useful information for improving business processes, and - handled correctly - create or keep loyal customers that spread positive word-of-mouth (Smith, Bolton and Wagner, 1999; Swanson and Kelly, 2001b; Tax, Brown and Chandrashekaran, 1998; Zeithaml, Berry and Parasuraman, 1996).

Furthermore, dissatisfied customers who encounter effective service recovery may exhibit a recovery paradox – higher satisfaction and intention to give positive word of mouth than if the original transaction had gone smoothly (Maxham III and Netemeyer, 2002a; McCollough and Bharadwaj, 1992). Customers with unresolved complaints re-purchased in 19% of cases, but re-purchase intentions soared to 54% with resolved complaints, and 82% when resolved quickly (Zeithaml,

Bitner and Gremler, 2006 p. 215). While some researchers challenged the existence of a service recovery paradox (Andreassen, 2001; Kau and Loh, 2006), the best way to please customers is consistent, first time error-free service (Brown, Cowles and Tuten, 1996; Maxham III and Netemeyer, 2002a). Alternatively, organisations that compounded service failures with poor recovery risked even greater consumer dissatisfaction (Bitner, Booms and Tetreault, 1990; Hess Jr, Ganesan and Klein, 2003). Successful service recovery is important.

A popular approach for investigating service recovery, perceived justice based on social exchange theory, posits that customers evaluate recovery efforts on three criteria (Maxham III and Netemeyer, 2002b; Smith, Bolton and Wagner, 1999; Swanson and Kelly, 2001b; Tax, Brown and Chandrashekaran, 1998). Distributive justice relates to satisfaction with the outcome, such as the perceived fairness of financial compensation. Procedural justice covers the process, for instance how

much control the customer has or how fast the company reacts. Finally, interactional justice involves person-to-person exchanges, such as empathy or politeness with complaining customers.

Effective service recovery begins with multiple communication channels for customers (Hart, Heskett and Sasser, 1990), such as call centres (Mattila and Mount, 2003b) and the Internet (Lovelock, Patterson and Walker, 2004). Emerging US-based research of online service recovery resembles its offline counterpart, yet raises several research questions.

With service recovery via traditional methods, there is a research gap in what methods succeed (Homburg and Fürst, 2005). Similarly, attributes of effective email service recovery are a research priority. Despite the importance of online customer service (Barnes and Vidgen, 2001; Parasuraman, Zeithaml and Malhotra, 2005), metrics of this service are sparse (Cox and Dale, 2001; Lennon and Harris, 2002; Rust and Lemon, 2001; Zeithaml, Parasuraman and Malhotra, 2002).

Patterson and colleagues have examined cultural differences in service recovery, but usually compared Eastern and Western cultures (Mattila and Patterson, 2004; Patterson, Cowley and Prasongsukarn, 2006). Given their similar cultures (Hofstede, 1991) and technology use (NOIE, 2002), service recovery in Australia should resemble service recovery in the US. Yet despite their similarities, Australian and American consumers may differ in how they perceive recovery. For example, Wong (2004) found Australian students had responses more similar to Singaporean students than American students when evaluating service recovery efforts.

This study draws upon perceived justice and corporate responses to genuine email complaints that request a response, in order to investigate three research questions.

1. How do email characteristics relate to distributive, procedural and interactional justice?
2. What email characteristics relate to successful service recovery?
3. How does email service recovery in Australia compare to email service recovery in the United States?

The following section examines service quality in an online environment and then reviews studies of email service recovery. These two areas set the stage for hypotheses based on perceived justice and email service recovery. Next, the article describes three annual Australian studies along with the results of the hypotheses testing. The paper closes with industry implications, academic implications and suggestions for future research.

2. Literature Review

2.1   Online Service Quality and Service Recovery

While questions remain, such as the optimum amount of money to invest, research acknowledges the importance of service quality in an offline setting (Zeithaml, 2000; Zeithaml, Berry and Parasuraman, 1996). Management should meet customers' desired service levels, prevent service problems from occurring and resolve problems that do occur (Zeithaml, Berry and Parasuraman, 1996, p. 44). Service quality has a positive relationship with customer satisfaction, loyalty, and intention to purchase or re-purchase.

The Internet provides another medium for customer service and unlike traditional marketing communication whereby firms initiate customer contact, Internet users often initiate the dialogue (Rust and Lemon, 2001). With increasing numbers of consumers online, this power shift from sellers and towards buyers (Kotler, Jain and Maesincee, 2002; Strauss and Frost, 2001) underscores the importance of customer satisfaction as a measure of organisational performance, along with traditional financial measures such as net profit and return on assets (Lovelock, Patterson and Walker, 2004).

Service quality helps drive satisfaction (Bitner, Booms and Tetreault, 1990) and researchers have extended offline models of service quality such as SERVQUAL (Parasuraman, Zeithaml and Berry, 1988) to the online environment (for reviews, see Bansal et al., 2004; Evanschitzky et al., 2004; Fassnacht and Koese, 2006; Parasuraman, Zeithaml and Malhotra, 2005). Although most models focus on website quality and customer

satisfaction, customer service may be distinct from website quality or satisfaction (Bansal et al., 2004, p. 295).

Along with fulfilment/reliability, privacy/security and website design, customer service is a service quality factor leading to customer loyalty and satisfaction (Wolfinbarger and Gilly, 2003). Furthermore, a limitation of extending service quality models to the online environment is that traditional models focus on services delivered by people; instruments for measuring offline service quality may be inappropriate for measuring automated e-service quality (Parasuraman, Zeithaml and Malhotra, 2005).

While many traditional service quality dimensions resemble those of e-service quality, others are new and unique to websites (Zeithaml, Parasuraman and Malhotra, 2002, p. 374). In a series of tests on a multiple-item scale of electronic service quality, Parasuraman et al. (2005) found that two scales were necessary to capture electronic service quality, E-S-Qual and E-RecS-QUAL for service recovery. E-RecS-QUAL, which measures service recovery via websites, stems from customer responses to three dimensions: responsiveness, compensation and contact (Parasuraman, Zeithaml and Malhotra, 2005). Still, these dimensions measure service recovery via websites, not via the more personal and popular Internet application – electronic mail (Rainie and Horigan, 2005).

2.2 Email Service Recovery

With greater computer use and Internet diffusion worldwide, customers are increasingly using email to communicate their complaints to organisations (Stauss and Seidel, 2004, p. 43). Similar to telephones, toll free numbers and call centres (Mattila and Mount, 2003b), email adds another customer service option, with human interaction and subsequent opportunities for poor customer service (Naylor, 2003). A comparison of Internet purchasers and non-purchasers, for example, found bad email responses common with non-buyers and good email responses common with buyers (Yang and Jun, 2002). Handled correctly, email responses can improve

customer assessments of service quality (Bansal et al., 2004; Wolfinbarger and Gilly, 2003). Yet, as email communication differs from communication via earlier media, email service recovery may also differ.

Unlike synchronous face-to-face or telephone communication, email communication is asynchronous and virtual (Turkle, 1995), two characteristics that email complainers find advantageous (Stauss and Seidel, 2004, p. 43). Email dialogues can take on a life of their own, with recipients as active producers of meaning (Lee, Hu and Toh, 2000). With regard to email service, customers' expectations differ from business staff's expectations. The former expect a short dialogue, while staff tolerate extended discussions (Hahn, 1998). In addition, customers often omit needed information and staff often respond incompletely. Email's simplicity is no guarantee of success (Phoha, 1999).

Email characteristics may also relate to complaint channels. Customers seeking compensation seem to prefer synchronous channels such as face-to-face and telephone, while those venting frustrations prefer asynchronous channels such as letters and email (Mattila and Wirtz, 2004). A survey found that online purchasers preferred using email twice as often as the telephone for asking questions (Ahmad, 2002). This ratio increased to over three times if the companies had no toll-free numbers. Yet for complaining, just over half of these online buyers called rather than emailed the company.

In perhaps the first study of email service recovery, 70 university students dissatisfied with a good or service in the previous six months sent an email to the offending company (Strauss and Hill, 2001). Less than half (47%) the companies replied, and replies took from under a day to 25 days to arrive. A comparable study with 103 students showed a similar response rate (48%) and responses within a day, but the slowest response trickled in after 84 days (Naylor, 2003). A third student study garnered a 100% response rate (Ahmad, 2002), but unlike the three prior studies, the 15 participants complained to an online shop about a recent purchase. Replies took from six minutes to six days to arrive.

A fourth study focused on the role of email response time. In their survey of 446 guests who complained to a hotel, Mattila and Mount (2003a) found that replying, as well as the response time, showed a positive relationship with two dependent variables, satisfaction with problem handling and repurchase intent. This positive relationship was particularly important with customers that were technology enthusiasts. The other studies showed positive results with satisfaction based on the time to reply (Naylor, 2003; Strauss and Hill, 2001) and replying to the email (Strauss and Hill, 2001). All four US-based studies, however, did not apply a theoretical approach to online service recovery.

2.3 Perceived Justice and Email Service Recovery

This study uses perceived justice, a popular service recovery theory (Maxham III and Netemeyer, 2002b; Smith, Bolton and Wagner, 1999; Swanson and Kelly, 2001b; Tax, Brown and Chandrashekaran, 1998), to examine email service recovery. Drawing on complaints in e-commerce, Cho et al. (2003) found that the complaints factored neatly into perceived distributive, interactional and procedural justice. Distributive complaints related to the product and associated delivery costs. Procedural complaints centred on online processes and timeliness, while interactional complaints related to human communication.

Another study used distributive, procedural and interactional justice to classify consumer reactions to a call centre's service recovery efforts (Mattila and Mount, 2003b). Customer perceptions on the fairness of the outcomes represented distributional justice, timeliness

and flexibility made up procedural justice, and call-centre representatives' courtesy and concern constituted interactional justice. All three perceived justice dimensions showed significant and positive relationships with customer satisfaction with problem handling.

Research supports extending perceived justice to service recovery via new technologies such as email. The few studies of email customer service suggest that responding and personalisation are important (Strauss and Hill, 2001). Timeliness is also important (Naylor, 2003; Strauss and Hill, 2001), but may depend upon the consumer's technological orientation (Mattila and Mount, 2003a). Finally, email reply quality varies widely (Murphy and Gomes, 2003; Murphy et al., 2003; Murphy and Tan, 2003).

This paper extends these studies by applying perceived justice to email and proposes the email characteristics shown in Table 1. The paper also addresses broad calls for measures of electronically mediated customer service (Cox and Dale, 2001; Lennon and Harris, 2002; Rust and Lemon, 2001; Zeithaml, Parasuraman and Malhotra, 2002).

Distributive elements relate to the perceived even handedness of the reply. If the consumer complains, at a minimum the company should reply to the email. Other distributive justice elements could include addressing any calls to action and offering compensation. While offering compensation seems applicable in any communication channel, replying and addressing calls

Table 1: Proposed classification of email service recovery and perceived justice

Justice Type	The Company:
Distributive (outcomes)	- replied to the email - addressed the call to action - offered compensation
Procedural (process)	- responded quickly - answered all questions and thus no follow-up emails necessary
Interactional (human relations)	- thanked the customer for their email - used a polite opening - used a polite closing - addressed the customer by name - included the name of the company employee

to action may take on greater importance with email as customers increasingly use email to complain, and companies become accustomed to responding to email complaints. Several studies suggest low email response rates and poor quality replies (Murphy and Gomes, 2003; Murphy and Tan, 2003; Naylor, 2003; Strauss and Hill, 2001).

Procedural elements concern the service recovery process, which with email could include timeliness and attention to detail. Finally, interactional elements account for human aspects such as politeness and personalisation. As noted earlier, many organisations fail to incorporate basic business communication principles into their email replies.

3. Conceptual Development

Research supports examining service recovery via traditional communication channels using perceived justice theory (Maxham III and Netemeyer, 2002b; Smith, Bolton and Wagner, 1999; Swanson and Kelly, 2001b; Tax, Brown and Chandrashekaran, 1998). Furthermore, US-based research of email service recovery suggests that the distributive element of replying, the procedural element of replying within a day, and the interactional element of personalisation relate to customer satisfaction (Naylor, 2003; Strauss and Hill, 2001). Given the applicability of perceived justice in traditional communication channels, perceived justice should apply to email service recovery.

Hypothesis 1: A complaining customer's satisfaction with service recovery relates positively with: (a) distributive, (b) procedural and (c) interactional justice in the company's email reply.

Hypothesis 2: A complaining customer's intention to give positive word of mouth relates positively with: (a) distributive, (b) procedural and (c) interactional justice in the company's email reply.

Hypothesis 3: A complaining customer's intention to repurchase relates positively with: (a) distributive, (b) procedural and (c) interactional justice in the company's email reply.

These hypotheses extend perceived justice to email service recovery, but they fail to investigate the relative importance of each type of justice or the components of each justice type. Drawing on literature in organisational behaviour, Maxham and Netemeyer (2002b) hypothesised and showed that compared to distributive justice, procedural and interactional justice were stronger determinants of overall satisfaction.

The three types of justice should vary in their relationships with the outcomes of email service recovery as well. Furthermore, the email components of distributive, procedural and interactional justice should vary in their contribution to successful service recovery. As this may be the first study applying perceived justice to email service recovery, a modest research question explores Hormburg and Fürst's (2005) call for investigating what methods succeed.

Research Question: How will the components of email service recovery vary in their relationships with customer: (a) satisfaction, (b) intent to repurchase and (c) intent to give positive word of mouth?

4. Methodology

This paper addresses complaints directed at the seller of the product rather than private complaints among friends and family members, or third party complaints via independent organisations that seek redress (Singh, 1988). As organisations and individuals evolve in their use of technologies (Rogers, 2003; Zmud and Apple, 1992), an annual study ran over three years in order to gauge the evolution of email service recovery as well as to examine the reliability of the results.

As part of a Services Marketing class at a large Australian university, undergraduate students kept a journal of good and bad service encounters. To minimise exaggerated complaints, there was no assessment on the number or strength of their complaints. At the end of the eighth week, students drafted a complaint to the company with the worst service. Students were not to overstate negative service encounters, and for mild service failures, request only a return email acknowledging their complaint. To mirror real-life conditions and put the students at ease, there were no

restrictions on content and length. As HTML email with embedded graphics can be more persuasive than plain text (Wilson, 2002), all complaints used plain text to help standardise the format.

To combat a potentially knowledgeable sample, the lecturer covered the topic of service recovery after collecting the data. To counter possible demand artefact effects, the students were unaware of the study hypotheses. To improve reliability and validity, the instructor verified that each email addressed a specific complaint, included an objective call to action and contained no offensive language. The students used non-university email addresses to send the complaint to avert possible bias against students, and gave companies an email address as the sole means to respond. Using email for both the complaint and response enabled the tracking of response time.

A pre-test led to minor alterations of an attitudinal survey, such as measuring the intent to repurchase given a choice of service providers, rather than simply the intent to repurchase. In some cases, such as public transport, there was no alternative service provider. Students completed the survey two weeks after sending their complaint emails, using a seven point Likert scale to answer three questions related to the company's service recovery efforts:

1. How satisfied were you with the outcome of your complaint?

2. How likely are you to give the company positive word of mouth?

3. Given the choice, how likely are you to do business with the company again?

Students recorded the response time and the word count of the complaint and response. Guidelines for traditional (Ober, 2001), online (Murphy et al., 2003; Murphy and Tan, 2003; Strauss and Hill, 2001) and complaint management (Stauss and Seidel, 2004, p. 95) communication led to five binomial measures of interactional justice: opening with 'dear', using the

addressee's name, thanking for the complaint email, closing politely (e.g., sincerely, yours truly or best regards), and providing the sender's name. Table 1 lists these independent variables and the other variables related to distributive and procedural justice.

The complaints ranged from reporting a grumpy bus driver who missed a bus stop to substandard repairs on an expensive diamond engagement ring. The latter drew a 2,500-word complaint from the aggrieved bride-to-be. The students sent their emails between 9am and noon on a Wednesday in mid-September. The exercise ran thrice, with 55 complaints emailed in 2001, 52 complaints in 2002, and 77 in 2003.

5. Results

Although the samples stemmed from three separate student groups, chi-square test results showed no significant differences (p < 0.05) in the company characteristics across the three samples. The typical company was private, had over 50 employees, and a website with a feedback form (see Table 2).

5.1   Email Responses

The study ignored computer-generated automatic replies, which typically stated that the reply was computer-generated and a personal reply would follow. The analysis included only replies from a person. Complaints averaged 312 words, ranging from 20 to 2,500 words. Organisational responses averaged 153 words and ranged from a terse six-word reply to 523 words. There was a positive and significant correlation between the word count of the complaint and reply (Pearson=0.316, p=0.001, n=110). There was no relationship between the word count of the complaint and whether or not the company replied to that complaint.

Table 3 lists the results for this study and a comparable US study in 1999 (Strauss and Hill, 2001). Companies answered the email complaints significantly less often in 2003 ($\chi2$=6.6, df=2, p=0.037), but there were no significant differences from 2001-2003 on the other response variables. The lower response rate in 2003 may stem from an increasing volume of spam that makes sorting spam from customer emails increasingly tedious (Hinde, 2003; Wales, 2003).

Table 2. Comparison of sample characteristics

	% 2001 n=55	% 2002 n=52	% 2003 n=77	% Total n=184
Company Characteristics				
Greater than 51 employees	71	69	74	73
Governmental organisation	18	17	10	15
Website available	91	92	94	92
Website feedback available	78	85	71	77

Table 3. Email Replies and Perceived Justice

	Strauss & Hill	**Current Study**			
Year	1999	2001	2002	2003	Total
Sample size	70	55	52	77	184
Distributive Justice					
% Responded	47	62	73	51	60
% Offered compensation	n/a	6	16	10	11
% Addressed the call to action	61	71	78	79	76
Procedural Justice					
% Responded within a day	28	30	50	53	45
% Answered completely	n/a	76	53	64	64
Interactional Justice					
% Thanked customer for the email	76	80	82	87	83
% Used a polite opening	n/a	79	82	80	80
% Used a polite closing	n/a	88	87	82	86
% Addressed customer by name	55	82	95	92	90
% Closed with sender's name	57	91	92	97	94

Based on the combined three-year sample (see Table 3), three out of five companies (60%) responded and the response time was positively skewed. Over two out of five (45%) companies responded within a day, with the fastest response in five minutes while the slowest took over three weeks. Similar to other email studies with positively skewed response times (Strauss and Hill, 2001; Murphy and Gomes, 2003; Murphy and Tan, 2003), this study treated response time as a binomial variable, responded or did not respond within a day.

As for response quality, about nine out of ten companies addressed the customer by name and politely closed with the employee's name. Fewer companies, about eight out of ten, opened the email politely, thanked the customer and addressed the call to action.

Even less companies, over six out of ten answered all questions and just over one in ten companies offered compensation.

5.2 Hypotheses Testing

Testing for the hypotheses relied upon a series of four bivariate correlations, one for each year and one for the combined years. The analysis treated the dependent variables as ordinal and used Spearman's Rho as the correlation measure. Testing with the first independent variable, whether the company responded, used the entire sample and testing for the other dependent variables included only those organisations that responded. Tables 4-6, respectively, show the correlations of the independent variables with satisfaction, intent to give positive word-of-mouth, and intent to repurchase given the choice.

Table 4. Hypothesis 1, Satisfaction

	2001		2002		2003		Total	
	Rho	p	Rho	p	Rho	p	Rho	p
Distributive Justice								
Responded	**.621**	**<.001**	**.613**	**<.001**	**.757**	**<.001**	**.666**	**<.001**
Offered compensation	**1.000**	**<.001**	.503	.084	.207	.297	**.629**	**.001**
Addressed the call to action	.190	.141	**.409**	**.006**	.099	.276	**.256**	**.004**
Procedural Justice								
Responded within a day	.032	.430	.107	.261	.068	.018	.083	.198
Answered completely	.047	.395	**.349**	**.016**	.107	.261	**.177**	**.032**
Interactional Justice								
Thanked customer for the email	**.423**	**.006**	.261	.057	**.283**	**.042**	**.322**	**<.001**
Used a polite opening	*-.011*	.474	**.427**	**.004**	.057	.366	.133	.084
Used a polite closing	*-.191*	.139	**.303**	**.032**	**.273**	**.049**	.136	.079
Addressed customer by name	*-.061*	.367	.082	.313	.191	.125	.059	.272
Closed with sender's name	*-.043*	.404	**.361**	**.013**	.215	.098	**.188**	**.025**

Table 5. Hypothesis 2, Word of Mouth

	2001		2002		2003		Total	
	Rho	p	Rho	p	Rho	p	Rho	p
Distributive Justice								
Responded	**.445**	**<.001**	**.367**	**.004**	**.477**	**<.001**	**.452**	**<.001**
Offered compensation	**.889**	**.022**	.234	.272	.318	.202	**.554**	**.003**
Addressed the call to action	.093	.300	**.368**	**.012**	**.339**	**.019**	**.254**	**.004**
Procedural Justice								
Responded within a day	*-.112*	.267	.154	.179	.018	.458	.018	.425
Answered completely	.104	.280	**.339**	**.019**	.023	.446	**.173**	**.035**
Interactional Justice								
Thanked customer for the email	**.360**	**.018**	.233	.080	**.289**	**.039**	**.289**	**.001**
Used a polite opening	.169	.170	**.311**	**.029**	.147	.190	**.198**	**.019**
Used a polite closing	*-.066*	.355	.249	.066	.214	.098	.141	.072
Addressed customer by name	*-.147*	.203	.000	.500	**.285**	**.041**	.030	.376
Closed with sender's name	.048	.393	**.375**	**.010**	.160	.168	**.189**	**.024**

Table 6. Hypothesis 3, Intent to Repurchase

	2001		2002		2003		Total	
	Rho	p	Rho	p	Rho	p	Rho	p
Distributive Justice								
Distributive Justice								
Responded	**.292**	**.016**	**.237**	**.045**	**.464**	**<.001**	**.374**	**<.001**
Offered compensation	**.889**	**.022**	.146	.354	**.622**	**.037**	**.559**	**.003**
Addressed the call to action	.087	.311	.059	.364	.057	.367	.080	.204
Procedural Justice								
Responded within a day	*-.124*	.246	.107	.261	.054	.375	.027	.391
Answered completely	.090	.306	.204	.109	.223	.089	**.161**	**.046**
Interactional Justice								
Thanked customer for the email	**.474**	**.002**	**.273**	**.049**	.250	.065	**.317**	**<.001**
Used a polite opening	.231	.094	.100	.275	.105	.265	.146	.064
Used a polite closing	*-.147*	.203	**.284**	**.042**	.259	.058	.140	.072
Addressed customer by name	*-.149*	.201	*-.136*	.208	.249	.065	.005	.480
Closed with sender's name	*-.065*	.358	.135	.209	*.023*	.446	.031	.374

5.3 Satisfaction and Perceived Justice

For the combined sample, the results supported the first hypothesis related to distributive justice. There was a significant and positive relationship between the dependent variable, satisfaction with the outcome, and the three independent variables, receiving a response, offering compensation, and addressing the call to action. While receiving a response was significant for the combined sample and for all three years, there was a significant positive relationship with offering compensation and customer satisfaction in 2001, and addressing the call to action and customer satisfaction for the 2002 sample.

The results also tended to support procedural justice, showing a consistent positive relationship with satisfaction for both response time and answering the email completely. The relationships, however, were only significant with answering completely for 2002 and the combined sample.

With regard to interactional justice, the only consistent relationship was with thanking the complainant, significantly so except for 2002. The results for the other interactional variables were in the non-hypothesised direction in 2001, but in the hypothesised direction for the other years. Three variables ─ a polite opening, polite closing, and closing with the sender's name ─ were significant in 2002. Closing with the sender's name was also significant for the combined sample.

5.4 Positive Word-of-Mouth and Perceived Justice

Similar to satisfaction and distributive justice, the results showed strong support for intent to give positive word-of-mouth and the distributive justice elements of replying, offering compensation and addressing the call to action.

There was strong support for the procedural element of complete answers and positive word-of-mouth, but inconsistent results for response time. With the interactional elements, there were consistent and mostly significant results with thanking the customer, using a polite opening and closing with the sender's name. The results were inconsistent for using a polite closing and addressing the customer by name.

5.5 Intent to Repurchase Given the Choice and Perceived Justice

Except for responding to the complaint, offering compensation and thanking the customer, which showed consistent positive and mostly significant relationships with intent to repurchase, there was the least support for the third hypothesis. Three characteristics ─ addressing the call to action, answering completely and using a polite opening ─ showed consistent positive results. The other variables showed correlations in the opposing direction in at least one year. Using a polite closing, however, did show a significant positive relationship with repurchase intent in 2002.

5.6 Relative Importance of Email Reply Characteristics

The hypotheses testing revealed that elements of distributive, procedural and interactional justice ─ responding, offering compensation, answering completely and thanking the customer ─ showed consistent relationships with the dependent variables. The results help extend perceived justice to email service recovery, particularly the importance of replying, but they fail to show the relative importance of the proposed email reply characteristics.

To investigate the relative importance of these characteristics, three stepwise regressions examined their predictive ability with the dependent variables of customer satisfaction, intent to give positive word-of-mouth and intent to repurchase given the choice. Stepwise regression has the advantages of testing the predictive ability of multiple independent variables simultaneously and showing the relative strength of each variable (Hair et al., 2006). Tables 7-9 show the results of the three regressions.

The regression models were significant across all three dependent variables, particularly with satisfaction. This outcome corresponds with the hypotheses testing results; there were more significant correlations with satisfaction than with intent to give positive word-of-mouth or repurchase. Across all three models, thanking the customer for their email was the most important characteristic. Offering compensation also appeared in all three models. Addressing the call to action and

answering completely were significant predictors with two models and closing with the sender's name appeared only in the satisfaction model.

The year of data collection was included as a dummy variable in the regression analyses, but the stepwise method excluded it from all models. This result suggests no significant differences among the 2001 - 2003 samples and the predictive strengths of email reply characteristics.

6. Conclusions

The combined sample with similar results over three years support perceived justice as a theoretical approach to guide email service recovery. Similar to US-based research, this Australian study confirms practitioner and academic beliefs on the importance of service recovery in an online environment.

6.1 Academic Implications

In addition to a theoretical perspective, this study adds to the small body of research on customer complaints via email in several ways. It replicates and resembles research by Strauss and Hill (2001) in a similar culture and over different time-periods. The results question the importance of timeliness, an issue that Mattila and Mount (2003a) raised. Finally, the study addresses calls for measures of electronic customer service (Cox and Dale, 2001; Lennon and Harris, 2002; Rust and Lemon, 2001; Zeithaml, Parasuraman and Malhotra, 2002) with ten measures of perceived justice (see Table 1).

The first step in handling email complaints is responding to the complainant. Effective complaint handling in traditional media increases customer satisfaction, intention to repurchase, and give positive word of mouth. As in other media and past research, the results of this email study showed a positive relationship between responding and customer satisfaction, intention to repurchase, and likelihood to give positive word of mouth.

The study found similar results for the other distributive measures, addressing the call to action and offering compensation. These two email characteristics showed positive and significant relationships with all three dependent variables, except for addressing the call to action with intent to repurchase, which was positive but insignificant.

The procedural measure of answering completely was significant in both the correlation tests and stepwise regressions. Timely replies however, showed little relationship with customer outcomes. Response time may not be as critical as previously thought (Conlon and Murray, 1996; Swanson and Kelly, 2001a) or may reflect differences in how people use technology. Those with a 'wired lifestyle' may expect a faster response than those without (Mattila and Mount, 2003a). As a wired lifestyle may relate to online purchasing (Bellman, Lohse and Johnson, 1999), timely responses may be a competitive edge for these wired consumers but less important for other consumers.

Of the nine email characteristics, the interactional measure of thanking the customer showed a strong relationship will all three dependent variables. The correlation tests revealed that compared to the other dependent measures, the interactional characteristics showed their best relationships with the intention to give positive word-of-mouth. This finding suggests the importance of perceived justice elements may depend upon the dependent measure of service recovery. Similarly, solely thanking the customer significantly related to repurchase intent; this dependent measure may require a higher standard than satisfaction or giving positive word-of-mouth.

One explanation for the counter-intuitive correlations in 2001 is that complainants have evolved in their email expectations, particularly with the interactional elements and the procedural measure of response time. Individuals and organisations evolve in their use of a technology (Rogers, 2003), which in this study may suggest that as organisations have a harder time responding to customer emails, customers are raising their zone of tolerance for proper email replies. Comparisons (see Table 3) with the US-based study by Strauss and Hill (2001), however, suggest an improvement in email response quality over time. These suggestions require more longitudinal data to confirm, and are one of several future research avenues.

6.2 Managerial Implications

Most importantly, firms providing an email address for customer service should answer incoming mail vigilantly and politely. Customers who did not receive a reply to their complaint were less likely to be satisfied; had lower intentions to repurchase; and had lower intentions to give the company positive word of mouth.

Table 7: Stepwise Regression of Email Response Characteristics on Satisfaction

	Multiple R	R²	Adjusted R²	F	sig.
model	.580	.336	.304	10.526	<.001
	B	**std error B**	**Beta**	**T**	**sig.**
(constant)	5.670	.378		15.003	<.001
Thanked customer for the email	1.525	.381	.325	4.001	<.001
Offered compensation	2.358	.623	.304	3.783	<.001
Answered completely	.787	.299	.214	2.630	.010
Closed with sender's name	1.429	.635	.197	2.251	.027
Addressed the call to action	.752	.364	.180	2.068	.041

Table 8: Stepwise Regression of Email Response Characteristics on Positive Word of Mouth

	Multiple R	R²	Adjusted R²	F	sig.
model	.477	.228	.198	7.736	<.001
	B	**std error B**	**Beta**	**T**	**sig.**
(constant)	4.780	.419		11.417	<.001
Addressed the call to action	1.106	.373	.257	2.967	.004
Thanked customer for the email	1.169	.419	.242	2.792	.006
Offered compensation	1.899	.691	.237	2.750	.007
Answered completely	.734	.331	.193	2.218	.029

Table 9: Stepwise Regression of Email Response Characteristics on Intent to Repurchase

	Multiple R	R²	Adjusted R²	F	sig.
model	.446	.199	.184	13.281	<.001
	B	**std error B**	**Beta**	**T**	**sig.**
(constant)	5.797	.386		15.011	<.001
Thanked customer for the email	1.607	.437	.319	3.677	<.001
Offered compensation	2.436	.723	.292	3.368	.001

Even if organisations cannot completely resolve the complaint, at a minimum they should acknowledge the criticism and thank the customer for their complaint. Alternatively, if organisations foresee problems answering email, they should not make email addresses readily available to customers.

Of all the interactional elements, thanking the customer was the best predictor of successful email service recovery. Thank-you conveys understanding the customer's problem, a positive attitude to remedy the situation, and an attempt to learn and change from the complaint. This simple phrase related positively and significantly to customer satisfaction, positive word-of-mouth and repurchase intentions.

In the same way that customer service departments establish pro-forma replies for telephone and postal complaints, management should craft standard reply templates for email complaints that guide customer service officers to:

- address the customer by name

- thank the customer for their email

- use polite openings in the email

- address all specific concerns and questions of the customer

- use polite closings in the email

- include the name of the responding company employee

Previous research shows mixed results with larger organisations versus smaller organisations in email customer service (Murphy and Gomes, 2003; Murphy

et al., 2003; Nguyen, Murphy and Olaru, 2003). These mixed results illustrate that customer service via email is an area where small businesses can compete with their larger counterparts without a corresponding increase in resources. Large organisations that use email for customer service or complaints should forward email promptly to the appropriate person or department. Smaller businesses do not need this extra step and can provide more timely and appropriate email responses.

The quality of the response, based on this study, seemed more important than timely replies. The authors do not suggest that fast replies are unimportant, rather that service providers should not overlook basic business communication in their rush to reply. Managers should consider a short and personal reply thanking the customer for their complaint and promising a follow-up to give the organisation time to provide a detailed quality response.

Customer complaints give organisations diagnostic and prescriptive information for improving customer service. Periodic tests of online customer service are another diagnostic tool. Similar to hotels and restaurants using mystery shoppers, organisations could send "mock" complaints to themselves via Web-based forms and emails. Monitoring the replies over time would measure changes in the quality of an organisation's electronic customer service.

7. Future Research

Future research should examine and account for more independent variables related to the firm and the individual. For example, the firms could vary in the types and monetary values of their services. Customers could vary in their level of involvement – such as the aggrieved bride-to-be – and expectations of service recovery. Also, customers may have a higher expectation from reputed firms or from those where they purchase frequently. Collecting data on firm and industry characteristics, along with transaction values as a proxy of customer involvement, would allow for a more thorough investigation.

As this study used small convenience samples, replicating this study with greater complaint numbers, non-students, respondents in different countries, and additional perceived justice variables would provide richer results. A larger sample size may also enable researchers to examine interaction effects among the email characteristics similar to Wirtz and Matilla (2004). For example, future research should investigate fully resolving the customer's request as suggested by Strauss and Hill (2001). Given the results on the importance of timeliness, are complainers more willing to wait for a complete and thoughtful resolution? Would resolving the complaint fully by an anonymous employee who is impolite and responds slowly lead to better outcomes than a sympathetic, polite, and timely employee who fails to resolve the complaint?

Future research should incorporate experimental methods to move beyond descriptions and towards causal explanations. For example, would organisations provide a better response to a complaint stemming from a corporate email address than from a free Yahoo or Hotmail email address? Similarly, would the sender's name, subject heading, copy or format of the email influence responses?

Although not causal, there may be relationships between an organisation's website features and its email responses. Integrating the email results with structural website metrics (Scharl, 2000) and content analyses (Krippendorf, 1980; McMillan, 2000) would paint a better picture of an organisation's approach towards online communication (Murphy et al., 2003), and integration with other marketing channels.

Does customer service vary across communication channels? Previous research found "that companies deal better with customers over the phone than via email" (Meador, 2002 p. 11), and that email was less effective than face-to-face communication for resolving conflicting views (Wilson, 2002). Future projects should compare customer service across traditional channels, email, and emerging technologies such as mobile communication (Barwise and Strong, 2002) and interactive television (Lekakos and Giaglis, 2004).

In this study, complainers used email as the sole communication channel. Measuring the degree to which respondents use email for complaints when other channels are available would extend this research.

Finally, this Australian research supported and extended the results that Strauss and Hill (2001) found in the United States, both countries with a Western culture. Most consumer behaviour research draws upon Western theories and frameworks (Mattila and Patterson, 2004), but Eastern consumers tend to obey authority and accept discord and friction from organisations more than Western consumers do (Liu and McClure, 2001). Research has shown cultural differences with regard to website content (Zhao et al., 2003), how consumers use and perceive websites (Chua et al., 2002), and explanations of service failures (Mattila and Patterson, 2004). Drawing upon cultural values (Hofstede, 1991), would these results differ in an Eastern society?

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