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SERVICE RECOVERY STRATEGIES IN WESTERN BASED FAST FOOD RESTAURANTS: A STRUCTURAL EQUATION MODEL TEST

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ABSTRACT

This paper sets out to confirm a model that depicts the probability that service recovery activities will be carried out by front liners in Western based fast food restaurants. The study used a Juster scale based questionnaire survey format the restaurants customers. Data was then analyzed using exploratory and confirmatory factor analysis utilizing Structural Equation Model. Factor analysis indicated three views of customers termed as Spoken, Minor Action, and Major Action service recovery strategies. The confirmatory factor analysis indicated that the model was of a good fit (.749). The study was limited to respondents in Kuching. Nevertheless the finding has important implications to management and academia. For academics, the findings provide insight into service recovery modeling. A practical application from this study would be the use of Minor or Major Action service recovery strategies to improve customer's perception of a company after service failure.

Keywords: Service recovery, Fast food restaurant, Structural Equation Model

I. INTRODUCTION

The fast food industry is a high growth industry that is mainly a service and people oriented business (Lam and Zhang, 2003). Nevertheless, mistakes are an unavoidable feature of all human endeavors (Boshoff, 1997). The unique characteristic of the service industry, especially in the restaurant industry, makes mistakes more distinct and zero defects not attainable (Hart, *et al.*, 1990; Hoffman, *et al.*, 1995; Wirtz and Mattila, 2004). In the restaurant sector, a majority of service failure relates to slow service (long wait for seating, food and bill), staff error (orders mixed), and cook / kitchen error (Mack, *et al.*, 2000). Because of these errors, customers may switch and thus cause losses to the restaurant (Keaveney, 1995).

As such, service recovery strategies are advocated to deal with such failures (Johnston, 1994). Service recovery is a thought out plan of all the possible actions taken by a service provider in order to resolve the problem that caused the service failure and return the customer to a state of satisfaction (Gronroos, 1990; Lewis and Spyrakopoulos, 2001; Zemke and Bell, 1990). It is not complaint handling, as not all customers that experience service failure will complain but they may engage in private actions (Agbonifoh and Edoreh, 1986; Day, 1977; Day and Landon, 1976; Day and Landon, 1977; Grønhaug, 1977).

Numerous studies have been done in the West that identifies the service recovery strategies that are used in restaurant (Hoffman, *et al.*, 1995; Mack, *et al.*, 2000). Most studies in Malaysia however only look at the normative and legal aspects of Western based fast food restaurants (WFFR) (Azudin and Karaim, 1988; Ismail, *et al.*, 2002; Noor, 2006). As such, this research explores the issue of service recovery done at WFFRs through the perception of its customers. It utilizes past literature on service recovery methods that are translated into a questionnaire format and further analyzed by exploratory and confirmatory factor analysis.

The aim of this research is determine the various service recovery responses perceived by consumers that would be used by WFFR when there is a service failure. This is obtained by exploratory and confirmatory factor analysis of various service recovery methods. The rest of the paper is organized as follows: first, discussion of the relevant literature is presented; second, followed by a discussion of the methodology used, thirdly, the findings are

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presented and then discussed, followed by the conclusions that look at academic and managerial implications, limitations, and areas for future research.

II. LITERATURE REVIEW

WFFRs provide a location where meals are served to the public quickly and with minimal services. Other characteristics include: 1) low relative monetary price, 2) the end-product is served quickly, 3) the food is cooked in bulk in advance and kept hot, or reheated to order, and 4) the food offered by fast food restaurant is suitable for eating with fingers and has disposable packaging (Price and Arnould, 1999). It is also seen as a potential place for service failure to occur due to high service encounters and a possibility that it may result in a dissatisfied customer (Hays and Hill, 1999; Palmer, *et al.*, 2000). From a customer's perspective, a service failure is any situation where something has gone wrong, irrespective of responsibility such as unavailable service, unreasonably slow service, and other core service problems (Bitner, *et al.*, 1990; Palmer, *et al.*, 2000).

As such, there is a need to seek out and deal with such failures (Johnston, 1994). Service recovery is a thought out plan of all the possible actions taken by a service provider in order to resolve the problem that caused the service failure and return the customer to a state of satisfaction (Gronroos, 1990; Lewis and Spyrakopoulos, 2001; Zemke and Bell, 1990). It is not complaint handling, as not all customers that experience service failure will complain but they may engage in private actions (Agbonifoh and Edoreh, 1986; Day, 1977; Day and Landon, 1976; Day and Landon, 1977; Grønhaug, 1977).

Studies have indicated that when service failure occurs, the best recovery is by front liners (Hart, *et al.*, 1990). The recovery should match what customers want, usually dissatisfied customers expect reasonable compensation for their misfortune and this also shows that the service providers demonstrate some understanding (Zemke and Bell, 1990). A speedy response to keep customers loyal is required as the service firm's opportunity to demonstrate its commitment to quality is fleeting (Conlon and Murray, 1996; Hart, *et al.*, 1990).

The literature has shown that action that service providers may take in response to failure may comprise of a combination of psychological and tangible activity (Lewis and McCann, 2004). The most common and frequently used recovery strategies are apology, assistance, or compensation, or some combination of these three (Bitner, *et al.*, 1990; Hart, *et al.*, 1990; Hoffman, *et al.*, 1995; Kelley, *et al.*, 1993; Smith, *et al.*, 1999). There are also a variety of suggestions. Some have suggested 1) Apology, 2) Urgent reinstatement, 3) Empathy, 4) Symbolic atonement and 5) Follow-up (Zemke and Bell, 1990). Others have suggested that service recovery should include: 1) Acknowledgement, 2) Explanation, 3) Apology, and 4) Compensation (Bitner, *et al.*, 1990). Others suggest 1) Discount, 2) Correction, 3) Management/employee intervention, 4) Correction plus, 5) Replacement, 6) Apology, and 7) Refund (Kelley, *et al.*, 1993). In another study done in the restaurant industry, seven strategies have been identified, which are 1) Free food, 2) Discount, 3) Coupon, 4) Managerial intervention, 5) Replacement, 6) Correction, and 7) Apology (Hoffman, *et al.*, 1995).

It is interesting that this study found that compensation (e.g. free food, discounts, coupons, replacement) was rated most effectively in restaurant service failures especially during the waiting time of service (Hoffman, *et al.*, 1995). This is supported by others who indicate compensation is more important than correction (Bitner, *et al.*, 1990; Boshoff, 1997; Kelley, *et al.*, 1993). In a separate study, the results show that any form of financial compensation is not necessary for service recovery (Johnston, 1994). Nevertheless, all studies noted that apology is needed in recovery as it is seen as the minimum recovery that would be offered by a service provider (Lewis and McCann, 2004; McDougall and Levesque, 1999). Yet Johnston (1994) found no evidence for this.

A different perspective has been offered in recent studies on service recovery, empowerment of employees (Boshoff and Leong, 1998; Hart, *et al.*, 1990). Thus, employees must have the authority to do anything, on the spot, to take care their customer to their satisfaction. Unfortunately, front-line service staffs are often not permitted to participate in problem solving because they have been trained as production-line workers (Bowen and Lawler III, 1992; Bowen and Lawler III, 1995). Therefore, by noting the various service recovery actions, this study will test the following hypothesis; H_1: there will be more than one dimension of constructs of service recovery in WFFR.

III. METHODOLOGY

The population of this study consisted of Kuching citizens aged between 15 to 44 years old, a total of 239,000 persons (Department of Statistics Sarawak, 2004). This age range was selected because they are perceived as the common customers of fast food restaurants with sufficient purchasing power. Respondents were obtained at the various outlets in Kuching by stratified sampling (Refer Table 1).

Table 1: Basis for Stratified Sampling

No.	Name of Restaurant	No. of Outlets	%	Questionnaire Distributed
1	Kentucky Fried Chicken (KFC)	12	40.0	106
2	Sugar Bun	7	23.3	61
3	Pizza Hut	5	16.7	44
4	McDonald	2	6.7	18
5	Hart Chicken	3	10.0	26
6	Kenny Rogers Roaster	1	3.3	9

Source: Malaysian Franchise Association (2003).

264 questionnaires were distributed to customers at the above named fast food outlets. 249 questionnaires (94.3%) were usable as 9 questionnaires were incomplete and 6 unreturned. The questionnaire was part of a larger study and consisted of three parts; Section A consisted of respondents' demographic data. Section B consists of the service recovery strategies perceived to be carried out by fast food restaurants. It had 18 items. These 18 items were a listing of various service recovery strategies that were mentioned to be used by various services (Bitner, 1990; Hart, *et al.*, 1990; Hoffman, *et al.*, 1995; Kelley, *et al.*, 1993; Zemke and Bell, 1990). Section C looked at the extent of those strategies effect in customers' loyalty (Lu and Tang, 2001). Section A was based on checkboxes while Section B and C utilized Juster's eleven-point probability scale. The Juster scale is a probability-based scale using odds out of ten (Foxall, 1982). It can be used to gain estimates of the probability that a population will do something (Garland, 2002; Patterson, 2004). Data from Section A was analyzed using frequency, while data from Section B was analyzed using means, exploratory and confirmatory factor analysis.

Exploratory factor analysis, using the *SPSS v.14* statistical program, was used to assess the latent structure and variance of the perceived service recovery act construct in the Malaysian context. Confirmatory factor analysis (CFA), using the *AMOS 6* statistical program, was used to determine the measurement model (Bollen, 1989), configural invariance model, metric invariance model and scalar invariance model (Byrne, 2001; Steenkamp and Baumgartner, 1998).

The questionnaires were written in English, Malays and Mandarin. Back translation was employed for the translation of the language in the questionnaire (Brislin, 1970; Green and White, 1976). The questionnaire was pre-tested on a convenience sample of five persons before the process of collecting data to test whether respondents understood the questions, clarity and ambiguity, and the duration taken by respondents to answer all the questions (Chen, 2001; Sinha, 2000). Pretest respondents commented that the questions were easily understood with an average completion time of five minutes.

IV. RESULTS

Alpha values for section B is 0.7748, and 0.9763 for section C, which is acceptable (Schumacher and McMillan, 1993). The majority of the respondents were female (57.8 percent) in the age group of 15 to 24 years old (69.5 percent). Most of the respondents are Chinese (59.4 percent) followed by Malay and Iban with 22.9 percent and 6.0 percent respectively. Majority of the respondents have a degree (33.3 percent). A profile of the respondents is provided in Table 2.

Table 3 depicts the findings for the factor analysis. A principle components extraction through SPSS on 18 items for a sample of 249 fast food restaurant customers was used to estimate the number of factors with forced eigenvalues that exceed one. The KMO was 0.915, indicating that the sampling adequacy which should be greater than 0.5 for a satisfactory factor analysis to proceed was acceptable (Anonymous, 2006a, 2006b). Total variance explained was 59.16% out of 3 components where no components had a variance value of more than 10%.

Table 2: Respondents' Profile

Variables		Frequency	Percent (%)
Gender	Male	105	42.2
	Female	144	57.8
Age	15-24	173	69.5
	25-34	63	25.3
	35-44	13	5.2
Race	Malay	57	22.9
	Chinese	148	59.4
	Iban	15	6.0
	Others	29	11.6
Educational level	SPM	60	24.1
	STPM	33	13.3
	Matriculation	6	2.4
	Diploma	29	11.6
	Undergraduate	34	13.7
	Degree	83	33.3
	Master	4	1.6

Exploratory factor analysis suggests that the probability of service recovery strategies being carried out could be conceptualized as a three-factor model. Refer Figure 1. In the confirmatory factor analysis (see Table 4), the initial test for equality of covariances and means yielded a Chi-square value of 412.75 with 131 degrees of freedom ($p < .000$), and RMSEA of 0.093. Test of fit statistics were CMIN/df = 3.151, GFI = 0.838, AGFI = 0.788, and CFI = 0.871. It was apparent that the items in the initial model were acceptable based on modification indices and standardized residual covariance indexes (Byrne, 2001; Kaplan, 1989; Steenkamp and Baumgartner, 1998). The corrected model was then fixed with a loading of one to the factor Reinstate for F1, Empathy for F2 and Free food for F3 and its intercept to zero. Evidence of configural invariance for service recovery was shown.

Table 3: Varimax Factor Analysis for Service Recovery Strategies

Variables	Component		
	Spoken	Minor Action	Major Action
Correction	.785		
Apology	.719		
Reinstatement	.707		
Assistance	.677		
Replacement	.614		
Management/ employee intervention	.605		
Explanation of the reason for the failure	.538		
Correction plus	.528		
Acknowledgement of the problem	.527	.502	
Empathy		.783	
Symbolic Atonement		.701	
Follow-up		.692	
Compensation		.673	
Empowerment			.702
Coupon			.696
Free food			.660
Discount			.635
Refund			.517
Eigenvalue	*7.78*	*1.57*	*1.29*
% of Variance	*43.24*	*8.74*	*7.18*
Cumulative % of Variance	*43.2*	*51.99*	*59.16*
Alpha	*.896*	*.839*	*.774*

Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 10 iterations.

Table 4: Model Comparisons for Probability of Service Recovery

Test*	Marker	Chi Sq	Df	P	CMIN/df	GFI	AGFI	CFI	RMSEA
MM1	-	412.75	131	.000	3.151	.838	.788	.871	.093
MM2	Omit acknowledgement - F2	424.18	132	.000	3.213	.833	.783	.866	.094
CIM	Reinstate - F1; Empathy - F2; Free food - F3	424.18	132	.000	3.213	.833	.783	.866	.094
MIM	Reinstate - F1; Empathy - F2; Free food - F3	424.18	132	.000	3.213	.833	.783	.866	.094
SIM	Reinstate - F1; Empathy - F2; Free food - F3	424.18	132	.000	3.213	.833 (RFI)	.783 (IFI)	.866	.094
SIM 2nd order	Reinstate - F1; Empathy - F2; Free food - F3	427.41	134	.000	3.190	.832 (RFI)	.786 (IFI)	.865	.094

Notes: MM – Measurement Model, CM – Configural Invariance Model, MM – Metric Invariance Model, SM – Scalar Invariance Model.

In order to test for metric invariance, the matrix of all factor loadings was constrained. Chi-sq changed to 424.18 with 132 degrees of freedom ($p < .0000$), and RMSEA of 0.094. As for the test of fit, the data shows minimal change (CMIN/df = 3.213, GFI = 0.833, AGFI = 0.783, and CFI = 0.866). Therefore metric invariance is supported. The next step was to impose scalar invariance where intercepts of the invariant factor loadings were constrained to be equal. The findings in Table 4 indicate that there were no major changes as compared to the metric invariance test. A second order test was also conducted with similar findings. The final model retains all of the original service recovery variables. Refer Figure 2.

V. DISCUSSION AND IMPLICATIONS

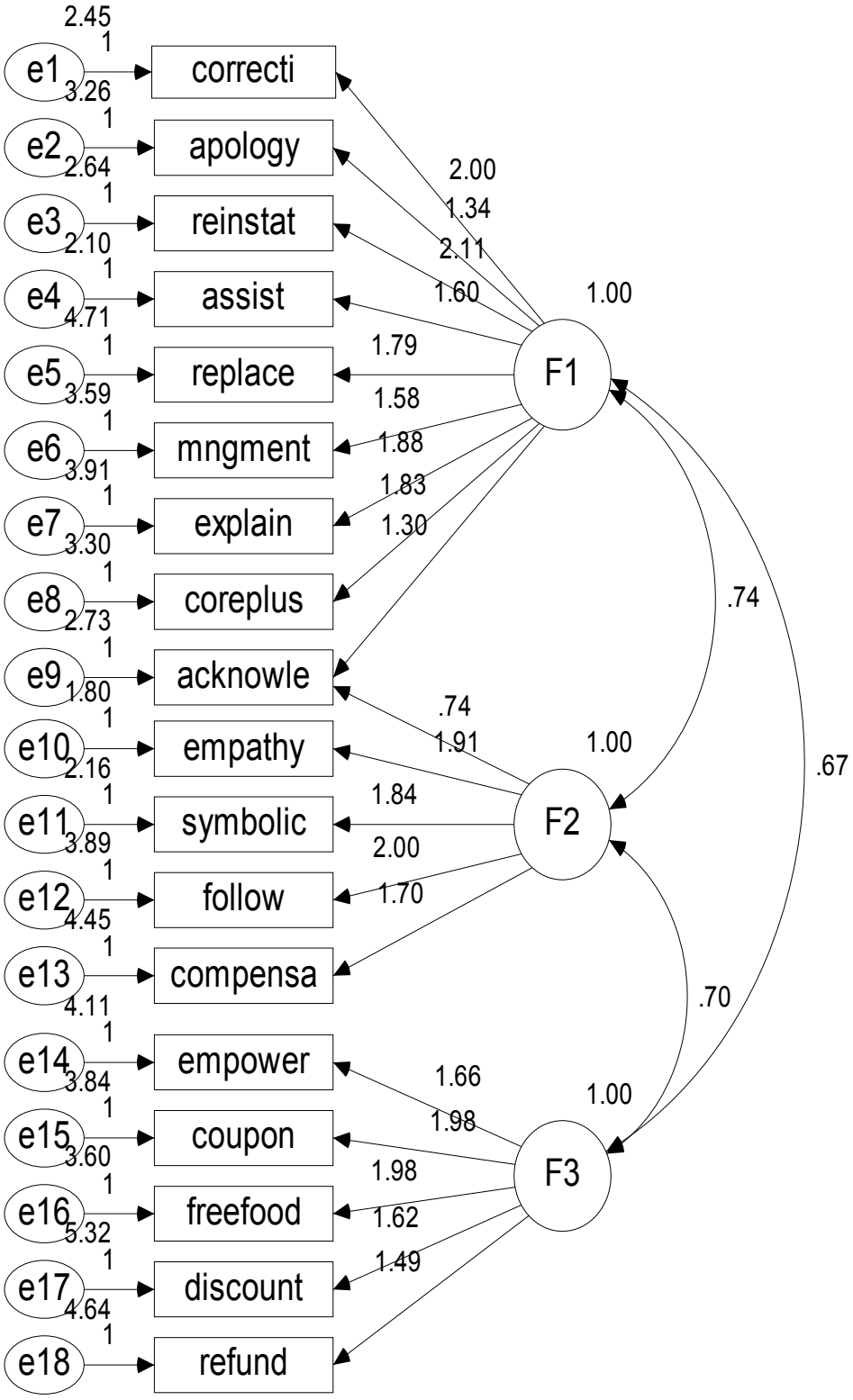
The final 2nd order Scalar Invariance Model holds that the probability that WFFRs use Service Recovery is a three-factor model. It is clear from the exploratory and confirmatory factor analysis that WFFR customers do not expect much to be done on the aspect of service recovery. The most they expect to be done by WFFR front liners are Spoken actions. Even for this, only Apology is probable (7.2) and a good possibility for Assistance (6.4), based on the definition of the Juster scale. This is in line with the literature that states that the most common and frequently used recovery strategies are apology or assistance (Bitner, *et al.*, 1990; Hart, *et al.*, 1990; Hoffman, *et al.*, 1995; Kelley, *et al.*, 1993; Smith, *et al.*, 1999). It may also be that respondents do not expect much from service providers (de Run, 2002).

For most of the other service recovery strategies, customers believe that there is less than a 50/50 chance that it will be employed (Refer Figure 2). This contradicts most of the Western based literature findings that indicate compensation and empowerment is important (Bitner, *et al.*, 1990; Boshoff, 1997; Hoffman, *et al.*, 1995; Kelley, *et al.*, 1993). Unfortunately, front-line service staffs are often not permitted to participate in problem solving because in most WFFRs in Malaysia, they are trained as production-line workers (Bowen and Lawler III, 1992; Bowen and Lawler III, 1995).

It is evident that from a customer perspective, the probability of a service recovery activity done by WFFR is limited, perhaps to an apology. Interestingly, past studies have indicated that this spoken word, an apology, is enough (Bitner, *et al.*, 1990; Hart, *et al.*, 1990; Hoffman, *et al.*, 1995; Kelley, *et al.*, 1993; Smith, *et al.*, 1999). Management must realize that this is the minimum requirement in order to keep customers happy. In order to delight them, further action (either Minor or Major) is required, as customers do not expect these strategies to be carried out. Past studies have shown customers wanted more than just an apology (Hoffman, *et al.*, 1995).

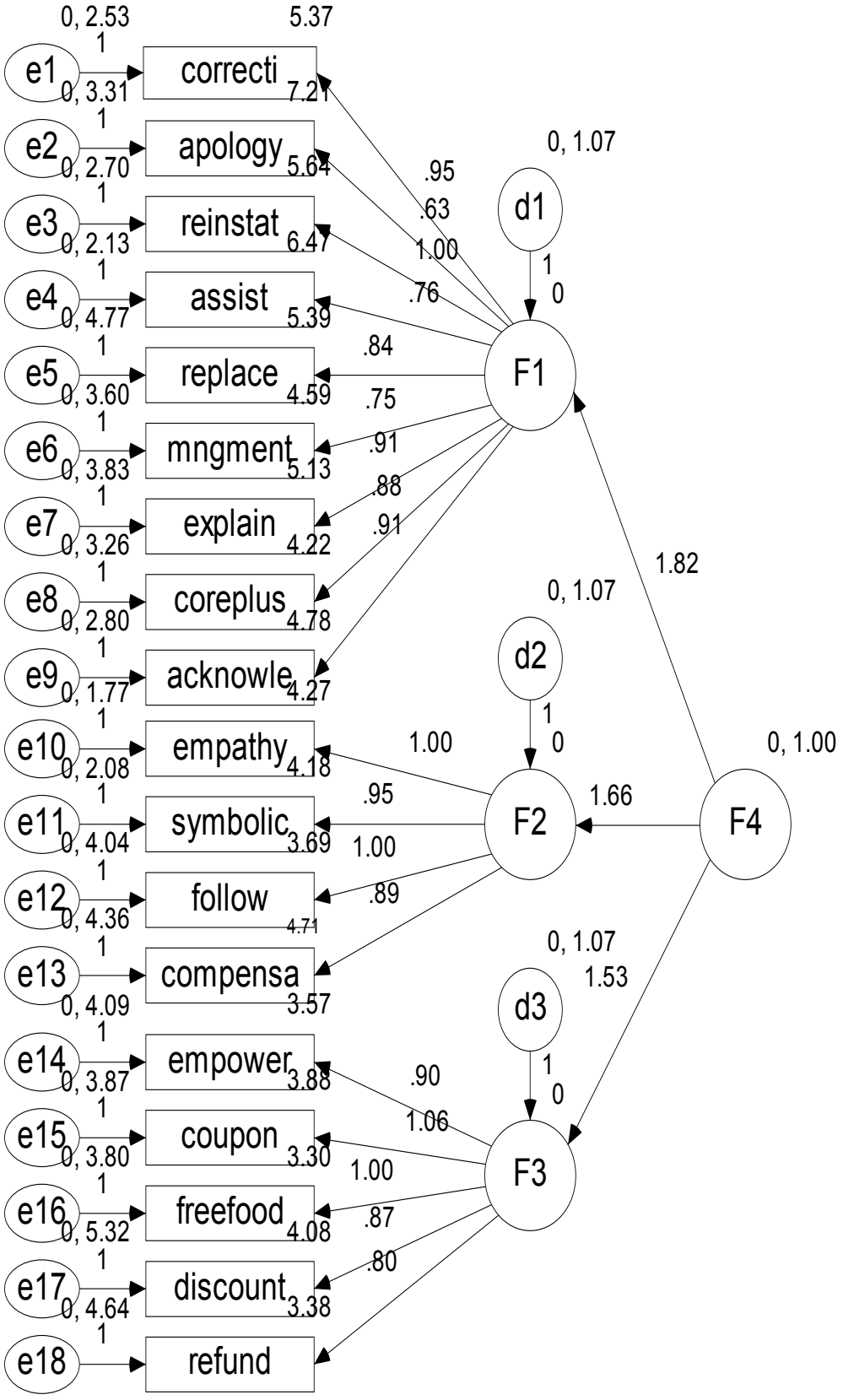
Studies have indicated that when service failure occurs, the best recovery is by front liners (Hart, *et al.*, 1990). However the responses by customers indicate that empowerment is minimal. Management in WFFR must seriously look into empowering their front liners to act if they wish to continue to keep their customers happy.

Figure 1: Initial Model for Probability of Service Recovery



Note: F1 – Spoken, F2 – Minor Action, F3 – Major Action.

Figure 2: Final Scalar Invariance Model for Probability of Service Recovery



Note: F1 – Spoken, F2 – Minor Action, F3 – Major Action, F4 – Probability of WFFRs using Service Recovery.

VI. CONCLUSIONS

This paper sets out to confirm a model that depicts the probability that service recovery activities will be carried out by front liners in Western based fast food restaurants. Exploratory factor analysis indicated three views of customers termed as Spoken, Minor Action, and Major Action service recovery strategies. This three-factor model was tested using Structural Equation Modeling and found to be acceptable.

Limitation

Although the sample of this research did not exceed the minimum level, a higher response rate would have further strengthened the research and allowed for a better KMO. Nevertheless, based on the limitations of scale and time, the response rate was good. Biases from experience of respondents could have affected the reliability of the findings. All of the respondents in this research are WFFR customers who may not have sufficient experience in a wider variety of situations relating to service recovery and this could lead to biases in providing feedback. Another limitation is that some respondents had doubts about the confidentiality of the research even after assurance. They felt uncomfortable to respond honestly about their perceptions. This posed difficulties in getting their full co-operation and involvement.

Future Research

Future research may study perceptions of customers at large of similar or different restaurants on what they believe are the service recovery strategies of front liners. At the same time, a similar study can be done from the perspective of front liners. Other studies may look at different sectors and employ a larger set of respondents. Perceptions of customers from a variety of sectors can be studied separately and then compared. This would allow researchers to note if the perceptions are similar or different. Other studies can be done to note if this difference in perception translates towards a significant difference in behavior by front liners and the moderating impact of management rules and regulations.

REFERENCES

Agbonifoh, B.A., and Edoreh, P.E. (1986). Consumer awareness and complaining behaviour. *European Journal of Marketing, 20*(7), 43-49.

Anonymous. (2006a). *How to perform and interpret factor analysis using SPSS*. [On-line]. Available: http://www.ncl.ac.uk/iss/statistics/docs/factoranalysis.html

Anonymous. (2006b). Lectures for advanced biostats BIO 680. Dunedin: University of Otago.

Azudin, M.N., and Karaim, M.N. (1988). *Nutritional aspects of franchised fast food in Malaysia*. Proceedings of the Food Conference, 88, 863-866.

Bitner, M.J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing, 52*(2), 69-82.

Bitner, M.J., Booms, B.H., and Tetreault, M.S. (1990). The service encounter: Diagnosing favorable and unfavorable incidents. *Journal of Marketing, 54*(1), 71-84.

Bollen, K.A. (1989). *Structural equations with latent variables*. New York: Wiley.

Boshoff, C. (1997). An experimental study of service recovery options. *International Journal of Service Industry Management, 8*(2), 110-130.

Boshoff, C., and Leong, J. (1998). Empowerment, attribution and apologising as dimensions of service recovery: An experimental study. *International Journal of Service Industry Management, 9*(1), 24-47.

Bowen, D.E., and Lawler III, E.E. (1992). The empowerment of service workers: What, why, how, and when. *Sloan Management Review, 33*(3), 31-39.

Bowen, D.E., and Lawler III, E.E. (1995). Empowering service employees. *Sloan Management Review, 36*(4), 73-84.

Brislin, R.W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185 - 216.

Byrne, B.M. (2001). *Structural equation modeling with AMOS. Basic concepts, applications, and programming*. New Jersey: Lawrence Erlbaum Associates, Publishers.

Chen, G. (2001). Validation of a new general self-efficient scale. *Organizational Research Methods, 4*, 62-83.

Conlon, D.E., and Murray, N.M. (1996). Customer perceptions of corporate responses to product complaints: The role of expectations. *Academy of Management Journal, 39*(4), 1040-1056.

Day, R.L. (1977). Extending the concept of consumer satisfaction. *Advances in Consumer Research, 4*(1), 149-154.

Day, R.L., and Landon, E.L. (1976). Collecting comprehensive consumer complaining data by survey research. *Advances in Consumer Research, 3*(1), 263-268.

Day, R.L., and Landon, E.L. (1977). Toward a theory of consumer complaining behaviour. In A. Woodside, J. Seth and P. Bennet (Eds.), *Consumer and industrial buying behaviour*. New York, NY: North Holland. 425 – 437

de Run, E.C. (2002). Customer service in Sarawak: An exploratory study of its antecedents. *Sarawak Development Journal, 5*(2), 45-60.

Department of Statistics Sarawak. (2004). *Yearbook of statistics*. Kuching: Department of Statistics Sarawak.

Foxall, G. (1982). *Consumer choice*. Hong Kong: Macmillan.

Garland, R. (2002). Estimating customer defection in personal retail banking. *The International Journal of Bank Marketing, 20*(7), 317-324.

Green, R.T., and White, P.D. (1976). Methodological considerations in cross-national research. *Journal of International Business Studies, 7*(Fall/Winter), 81-88.

Grønhaug, K. (1977). Exploring consumer complaining behavior: A model and some empirical results. *Advances in Consumer Research, 4*(1), 159-165.

Gronroos, C. (1990). Relationship marketing approach to the marketing function in service contexts: The marketing and organizational behavior influence. *Journal of Business Research, 20*(1), 3-20.

Hart, C.W.L., Heskett, J.L., and Sasser, W.E. (1990). The profitable art of service recovery. *Harvard Business Review, 68*(2), 148-156.

Hays, J.M., and Hill, A.V. (1999). The market share impact of service failures. *Production and Operations Management, 8*(3), 208-220.

Hoffman, K.D., Kelley, S.W., and Rotasky, H.M. (1995). Tracking service failures and employee recovery efforts. *Journal of Services Marketing, 9*(2), 49-61.

Ismail, M.N., Chee, S.S., Nawawi, H., Yusoff, K., Lim, T.O., and James, W.P.T. (2002). Obesity in Malaysia. *Obesity Reviews, 3*(3), 203-208.

Johnston, R. (1994). *Service recovery: An empirical study*. Coventry: Warwick University Business School.

Kaplan, D. (1989). Model modification in covariance structure analysis: Application of the expected parameter change statistic. *Multivariate Behavioral Research, 24*(July), 285-305.

Keaveney, S.M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of Marketing, 59*(4), 71-82.

Kelley, S.W., Hoffman, K.D., and Davis, M.A. (1993). A typology of retail failures and recoveries. *Journal of Retailing, 69*(4), 429-452.

Lam, T., and Zhang, H.Q. (2003). Job satisfaction and organizational commitment in the Hong Kong fast food industry. *International Journal of Contemporary Hospitality Mananement, 15*(4), 214-220.

Lewis, B.R., and McCann, P. (2004). Service failure and recovery: Evidence from the hotel industry. *International Journal of Contemporary Hospitality Management, 16*(1), 6-17.

Lewis, B.R., and Spyrakopoulos, S. (2001). Service failures and recovery in retail banking: The customers' perspective. *The International Journal of Bank Marketing, 19*(1), 37-48.

Lu, T.P., and Tang, P.Y. (2001). *An integrated model of service loyalty.* Paper presented at the Academy of Business and Administrative Sciences 2001 International Conference, Brussels, Belgium.

Mack, R., Mueller, R., Crotts, J., and Broderick, A. (2000). Perceptions, corrections and defections: Implications for service recovery in the restaurant industry. *Managing Service Quality, 10*(6), 339-346.

Malaysian Franchise Association. (2003). *Malaysia franchise directory* (4th Ed.). Kuala Lumpur: Malaysian Franchise Association.

McDougall, G.H.G., and Levesque, T.J. (1999). Waiting for service: The effectiveness of recovery strategies. *International Journal of Contemporary Hospitality Management, 11*(1), 6-15.

Noor, M.I. (2006). The nutrition and health transition in Malaysia. *Public Health Nutrition, 5*(1a), 191-195.

Palmer, A., Beggs, R., and Keown-McMullan, C. (2000). Equity and repurchase intention following service failure. *Journal of Services Marketing, 14*(6), 513-528.

Patterson, P.G. (2004). A contingency model of behavioral intentions in a service context. *European Journal of Marketing, 38*(9/10), 1304-1315.

Price, L.L., and Arnould, E.J. (1999). Commercial friendships: Service provider-client relationships in context. *Journal of Marketing, 63*(4), 38-65.

Schumacher, S., and McMillan, H. (1993). *Research in education: A conceptual instruction*. New York: Harper Collins College Publishers.

Sinha, P. (2000). Determination of reliability of estimations obtained with survey research: Method of simulation. *International Journal of Market Research, 42*, 311-317.

Smith, A.K., Bolton, R.N., and Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research, 36*(3), 356-389.

Steenkamp, J.E.M., and Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research, 25*(June), 78-90.

Wirtz, J., and Mattila, A.S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. *International Journal of Service Industry Management, 15*(2), 150-166.

Zemke, R., and Bell, C. (1990). Service recovery: Doing it right the second time. *Training, 27*(6), 42-48.