An Investigation Into Four Characteristics of Services

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ABSTRACT

This study replicates US-based research by Hartman and Lindgren on the extent to which consumers differentiate between products and services. In addition, Hartman and Lindgren investigated the importance of four characteristics of services to consumers; intangibility, inseparability, heterogeneity and perishability. Hartman and Lindgren did not find that these four service characteristics were used by consumers when distinguishing between goods and services. We find that 1) consumers in the UK classify services and products in a consistent way to that found by Hartman and Lindgren; and 2) UK consumers employ a similar set of underlying factors to the four characteristics proposed in the services marketing literature. Our results challenge those of Hartman and Lindgren and our findings support the continued use of intangibility, inseparability, heterogeneity and perishability as frameworks for the study of services buyer behaviour and for the development of services marketing strategies.

INTRODUCTION

The services literature highlights differences in the nature of services versus products which are believed to create special challenges for services marketers and for consumers buying services. To help understand these differences a number of characteristics that describe the unique nature of services have been proposed. These characteristics were first discussed in the early services marketing literature and are generally summarised as intangibility, inseparability, heterogeneity and perishability (Regan, 1963; Rathmell, 1966; Shostack, 1977; and Zeithaml *et al* 1985).

Although there has been debate on the effectiveness of the four characteristics in distinguishing between products and services (e.g. Regan, 1963; Shostack, 1977; Onkvisit and Shaw, 1991) these are nevertheless widely accepted by scholars and marketers (e.g. Zeithaml, 1981, 1985; Levitt, 1981) and used both as the basis for examining services buyer behaviour and developing services marketing strategies. It is, therefore, important to establish the extent to which these characteristics reflect the perspective of the consumer. A US-based study by Hartman and Lindgren (1993) found that consumers did not use the four characteristics in distinguishing between products and services. However, the narrow geographic focus and coverage of Hartman and Lindgren's study (one mid-Western town) is believed to limit scope for generalisation and to provide justification for a replication conducted in a European context.

Structure of the paper

The literature on the characteristics of services is reviewed briefly to examine the extent to which the conceptual characteristics have been used by services marketing scholars to differentiate between products and services. The methodology for the research is then described, and compared to that followed by Hartman and Lindgren. This is followed by findings and discussion of the main results. Finally, we make suggestions for the direction of future research.

CHARACTERISTICS OF SERVICES

Bitner, Fisk and Brown (1993) suggest that the major output from the services marketing literature up to 1980 was the delineation of four services characteristics: intangibility, inseparability, heterogeneity and perishability. These characteristics underpinned the case for services marketing and made services a field of marketing that was distinct from the marketing of products.

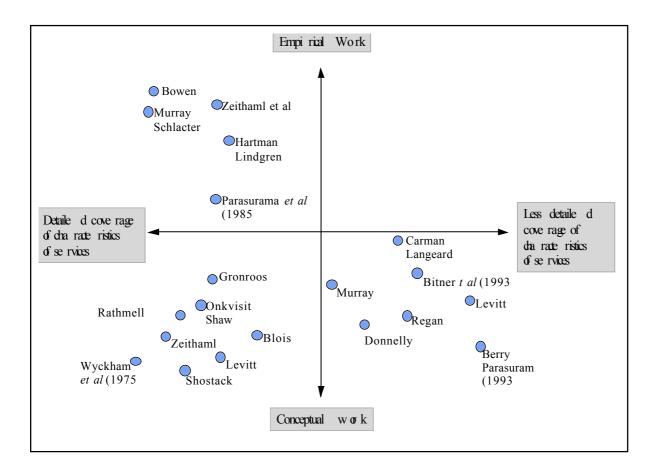


Figure 1 - Positioning of Literature on Service Characteristics

Following a review of the extant literature, we have synthesised our judgments of the approaches taken in these studies in order to construct the positioning diagram illustrated in Figure 1. The review

identified two dominant dimensions of the body of work: whether the study was empirical or conceptual, and whether the characteristics of services constituted the main element or a secondary element of the study. The most extreme studies on each dimension were used as end-points and provided a reference for the other studies. Studies in the left hand quadrants provided a thorough review of two or more characteristics, whereas studies positioned in the right hand quadrant provided a more superficial coverage of product/service characteristics and then concentrated on another aspect of services marketing. Figure 1 demonstrates that the approach taken to research in this area so far has been mainly conceptual rather than empirical. We have identified only one study (Hartman and Lindgren, 1993) which investigated empirically how consumers distinguish between products and services. Hartman and Lindgren's study built on the work of Bowen (1990) and of Murray and Schlacter (1990). Bowen sought to develop a typology of services based on essential characteristics but did not include products in his investigation, while Murray and Schlacter test whether consumers differentiate between products and services, but not how this differentiation is made.

We now briefly discuss research on each of the four service characteristics in turn; given the thorough treatment of this literature in Bitner *et al* (1993) a summary of the key issues will suffice here.

Intangibility in Services

The literature highlights intangibility as one of the key characteristics of services. Regan (1963) introduced the idea of services being "activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods".

The degree of intangibility has been proposed as a means of distinguishing between products and services (Levitt, 1981). Darby and Karni (1973) and Zeithaml (1981) highlight the fact that the

degree of tangibility has implications for the ease with which consumers can evaluate services and products. Other studies suggest that intangibility cannot be used to distinguish clearly between all products and services. Bowen (1990) and Wyckham, Fitzroy and Mandry (1975) suggest that the intangible-tangible concept is difficult for people to grasp. Bowen (1990) provides empirical evidence to support this view.

Onkvisit and Shaw (1991) feel that the importance of intangibility is over-emphasised. They believe that the service provider's offer is their "productive capacity" and not the (in)tangible nature of the offer.

Inseparability of Services

Inseparability is taken to reflect the simultaneous delivery and consumption of services (Regan 1963; Wyckham *et al* 1975; Donnelly 1976; Grönroos 1978; Zeithaml 1981; Carman and Langeard 1980; Zeithaml *et al* 1985; Bowen 1990 and Onkvisit and Shaw 1991) and it is believed to enable consumers to affect or shape the performance and quality of the service (Grönroos, 1978; Zeithaml, 1981).

Heterogeneity of Services

Heterogeneity reflects the potential for high variability in service delivery (Zeithaml *et al* 1985). This is a particular problem for services with a high labour content, as the service performance is delivered by different people and the performance of people can vary from day to day (Rathmell, 1966; Carman and Langeard, 1980; Zeithaml, 1985; Onkvisit and Shaw, 1991).

Onkvisit and Shaw (1991) consider heterogeneity to offer the opportunity to provide a degree of flexibility and customisation of the service. Wyckham *et al* (1975) suggest that heterogeneity can be introduced as a benefit and point of differentiation.

Perishability of Services

The fourth characteristic of services highlighted in the literature is perishability. In general, services cannot be stored and carried forward to a future time period (Rathmell, 1966; Donnelly, 1976; and Zeithaml *et al*, 1985). Onkvisit and Shaw (1991) suggest that services are "time dependent" and "time important" which make them very perishable. Hartman and Lindgren claim that the "issue of perishability is primarily the concern of the service producer" and that the consumer only becomes aware of the issue when there is insufficient supply and they have to wait for the service.

THE NEED FOR FURTHER RESEARCH

The above indicate that despite the considerable debate regarding the effectiveness of the four characteristics in distinguishing between products and services, these have been widely accepted by both scholars and practitioners as constituting the essential characteristics of services (Zeithaml and Bitner, 1996; Zeithaml, Parasuraman and Berry, 1985). These characteristics and their supposed marketing implications constitute the dominant theme of services marketing textbooks (Hoffman and Bateson, 1997) and underpin both research and practice in services marketing. Consequently the question arises as to whether or not consumers recognise and use these characteristics, and whether marketers could be basing decisions on constructs which are not reflected in consumers' buying behaviour.

Hartman and Lindgren concluded from the results of their study that the four characteristics of services were not used by consumers when differentiating between products and services and proposed that three characteristics were used instead, namely "*Evaluation*", "*Customisation*" and

"*Delay*". Their call to use these three characteristics instead of intangibility, inseparability, heterogeneity and perishability does not appear to have been heeded by services marketing scholars. Consequently, we feel that further research is required to provide a greater understanding of how consumers distinguish between products and services. More specifically, we wish to examine the scope for generalising from the findings of Hartman and Lindgren by replicating their study in a European context.

In this study, two main areas are investigated :

- Whether UK consumers order product and service items in the same way as consumers in the US-based study by Hartman and Lindgren.
- 2) Whether UK consumers use similar underlying factors when distinguishing between products and services to consumers in the US-based study.

These are investigated in order and are related; proceeding to area 2. above is contingent on being able to replicate the findings of Hartman and Lindgren in area 1.

METHODOLOGY

Overview

While our intention was to replicate the research methodology followed by Hartman and Lindgren as closely as possible, it was considered necessary to make a number of changes, which are documented below.

The original study used a self-administered questionnaire among 369 adults from a small town in the US. All respondents were parents of children at a school in the town. Respondents rated 41

items on the ten *a priori* criteria set out in Table 1. A five point Likert scale was used to measure the items' rating on each criterion. The large number of consumer items included in the study and the use of a five point scale combined to create considerable bunching in the resultant items' scores.

In order to improve the scope for generalisation, our study was based on a national sample of adults rather than a local or regional sample. We conducted our research on a reduced item set because of perceived redundancies in the original set of 41 items. This is discussed further below. We utilised a seven point Likert scale to increase the sensitivity of the measurement instrument and because we believed that this represented a more appropriate measurement instrument for the assumptions of factor analysis, which was to be used in the analysis of research findings. In addition, the use of a seven point scale was believed to be more appropriate as it is the most common scale in UK research.

The criteria upon which the items were rated were identical to those used by Hartman and Lindgren and are set out in Table 1.

Characteristic	Criteria Used in Study	Name Used in Factor	
		Analysis	
Tangibility	Item is highly tangible (touchable)	TANGIBLE	
	Item is easy to evaluate prior to purchase	EVALUATE	
Inseparability	Item requires high quality customer contact personnel	CONTACT	
	Item is easily customised to meet the customers' needs	CUSTOMISED	
Heterogeneity	Item has a great deal of variability from purchase to	VARIABLE	
	purchase		
	Item is highly standardised	STANDARDISED	
Perishability	Item is readily available when needed	AVAILABLE	
	There are times when a customer must wait in line to		
	purchase this item	WAIT	
Overall Product-	I consider this item to be a consumer product		
Service Rating	I consider this item to be a consumer service		

Table 1 Criteria Used by Hartman and Lindgren

Definition of Target Population and Sampling

The Hartman and Lindgren sample construction was not replicated, as we wished to obtain the opinions of a cross section of consumers from within the UK on how they distinguish between products and services. The target population was defined as males or females of between 20 and 65 years of age who are familiar with a wide range of consumer products and service items.

Sampling Frame

A mailing list of UK households was purchased from the British Research Group Ltd. The list comprised names and addresses of householders aged between 20 and 65 and with average or above average incomes. Although households of below average incomes are under-represented in the mailing list, it is believed that the list is representative of consumers of the type of goods and services under examination. The list provided national coverage of the UK population.

Determining the Sample Size

It was estimated that a 15% response rate would be achieved and in order to achieve a sufficient sample, a list of 1,500 contacts was randomly selected. This estimate was determined by reviewing the literature on response rates (Kanuk and Berenson, 1975; Wunder and Wynn, 1988; Yu and Cooper, 1983; McDaniel and Rao, 1980).

Selection of Consumer Items

The items used form a sub-set of those used by Hartman and Lindgren. It was not considered necessary to include all 41 of the original items, as many of them obtained very similar scores in the original study. A systematic sub-sample was taken by arranging the 41 items sequentially by score, removing items which were considered to be too US-specific or too ambiguous and then selecting items at equal intervals to provide coverage of the full spectrum from product-dominant to service dominant items. The resultant sample of items is believed to be representative of the different types of qualities under examination.

The following 10 items were selected for inclusion in the survey :

- o Items high in service qualities Eye Test, Teeth Cleaning, Advice on House Redecorating and Car Wheel Alignment. Subsequent examination of replies indicated that the 'Teeth Cleaning' item was misunderstood by a number of consumers and as a consequence it was excluded from the rest of the study.
- o Items high in product qualities Tennis Racket, Pocket Camera and Electric Vacuum Cleaner.
- Items with an even mix of product/service qualities Restaurant Meal, Household Furniture
 Rental and Car Silencer.

Response Rates

Following the Total Design Method (Dillman, 1978) a total of 219 usable replies were obtained resulting in an effective response rate of 15%. Several tests of non-response error (i.e. limited follow-ups and comparison of early and late responses) were carried out and we were satisfied as to the representativeness of our sample.

Factor Analysis

A factor analysis was performed on a data set of 9 items rated by eight statements across 219 respondents. For reasons of continuity and for ease of comparison, we adopted the same factor analysis procedures as Hartman and Lindgren in the original study. These are documented in detail in that paper.

FINDINGS

The findings are presented in two parts. First, a product-service continuum chart is used to show how consumers rated the items according to their product and service qualities. Following this, the underlying factors that were used by consumers to make the distinction between product and service items are presented.

Consumer Classification of Products and Services

Figure 2 shows the mean product and service ratings for each of the 9 consumer items under study with the product/service items on the x-axis and the mean product/service ratings on the y-axis.

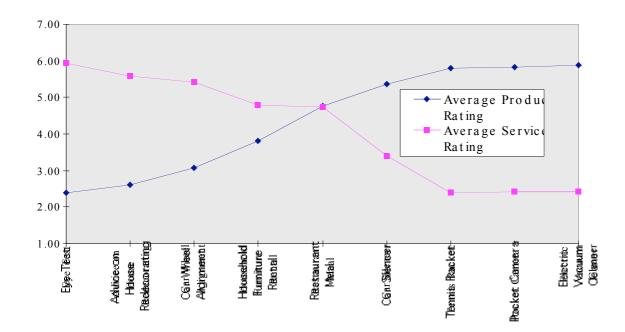


Figure 2 Mean Product and Service Ratings

This highlights a number of key points :

- o Service items are shown on the left hand side and have a low product rating and a high service rating.
- o Product items are shown on the right hand side and have a low service rating and a high product rating.
- o The product and service ratings are almost linear.
- o The Restaurant Meal item is positioned in the middle with an almost equal amount of product and service rating.
- The last three products on the right hand side of Figure 2 appear to be identical to each other in terms of their product and service ratings.

The relative order of the products and services common to our study and that of Hartman and Lindgren is presented in Figure 3. The results show a high degree of consistency in the way US and UK consumers ordered products and services.



Hartman and Lindgren (1993)		This study (1996)
Eye Test		Eye Test
Advice on House Redecorating		Advice on House Redecorating
Car Wheel Alignment		Car Wheel Alignment
Restaurant Meal		Household Furniture Rental
Household Furniture Rental		Restaurant Meal
Car Silencer		Car Silencer
Tennis Racket		Tennis Racket
Pocket Camera	│	Pocket Camera
Electric Vacuum Cleaner	│ 	Electric Vacuum Cleaner

The general order shown in Figure 3 was also confirmed by Murray and Schlacter (1990) when investigating the differences in perceived risk and variability between products and services.

Since we have established that UK consumers can differentiate between products and services and that their ordering of items in terms of product or service qualities is similar to that found by Hartman and Lindgren, then we can proceed to the second part of our study.

Underlying Factors Used by Consumers to Distinguish between Products and Services

Table 2 summarises the three factor solutions derived by Hartman and Lindgren and by this study. The factor loadings are presented together with the cumulative variance explained by the two solutions.

Table 2 Three Factor Solutions	Table 2	Three Fact	tor Solutions
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Hartman and Lindgren (1993)		This study (1996)					
	Factor 1	Factor 2	Factor 3		Factor 1	Factor 2	Factor 3
"Customisation"				"Tangibility"			
CUSTOMISED	0.89			TANGIBLE	0.80		
VARIABLE	0.80			AVAILABLE	0.76		
STANDARDISED	-0.75	0.46		EASY TO EVALUATE	0.71		
CONTACT	0.71						
"Evaluation"				"Inseparability"			
TANGIBLE		0.91		CONTACT		0.82	
EASY TO EVALUATE		0.87		CUSTOMISED		0.74	
AVAILABLE		0.77	0.46				
"Delay"				"Heterogeneity"			
WAIT			0.94	STANDARDISED			-0.83
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0.51	VARIABLE			0.75
Cumulative % Variance	49.8	67.4	80.6	Cumulative % Variance	25.0	44.0	58.1
Explained				Explained			

The differences between the two studies in cumulative variance explained can be accounted for, at least in part, by the nature of the two populations under investigation, i.e. the UK sample was more diverse that the corresponding US sample.

A graphical representation of the two solutions is presented in Figure 4 which illustrates the following findings. The criteria "Tangible", "Easy to Evaluate" and "Available" load onto the first factor in both studies. The "Wait" criterion did not load onto any of the factors in our study. In the Hartman and Lindgren study "Customised", "Variable", "Standardised" and "Contact" load onto a factor that they termed "*Customisation*". In our study these four criteria load onto two separate factors, which we believe reflect "*Inseparability*" and "*Heterogeneity*".

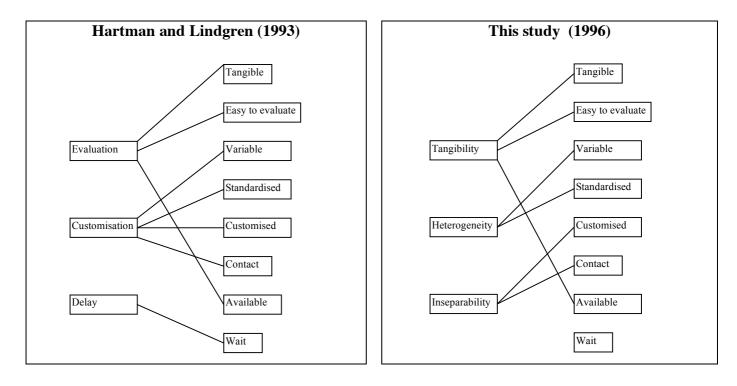


Figure 4 Comparison of Three Factor Solutions¹

Although the basic structures of the two studies appear to be similar, we believe that the factor loadings obtained in our study are more consistent with those postulated in the services marketing literature. Furthermore, it is suggested that at least one of the terms adopted by Hartman and Lindgren, i.e. "*Evaluation*", represents an artificial departure from marketing literature and conceptually it is difficult to justify their adopted terminology.

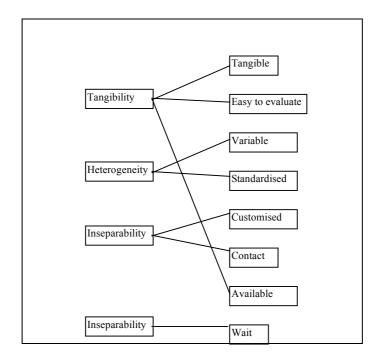
Because the literature suggests that there are four characteristics of services, it was decided to force our data into a four factor solution. The results are shown in Table 3 and illustrated in Figure 5 where it can be seen that the "Wait" criterion now loads onto a separate factor. Consequently we can conclude that the four factor solution presented here appears to mirror very closely the four service characteristics of tangibility, inseparability, heterogeneity and perishability.

¹ The order of criteria used by Hartman and Lindgren has been maintained in Figure 4 for consistency.

	Factor 1	Factor 2	Factor 3	Factor 4
((T) ·1 ·1·, •				
"Tangibility"				
TANGIBLE	0.82			
EASY TO EVALUATE	0.79			
AVAILABLE	0.69			
"Inseparability"				
CONTACT		0.82		
CUSTOMISED		0.78		
"Heterogeneity"				
STANDARDISED			-0.85	
VARIABLE			0.74	
VARIABLE			0.74	
"Perishability"				
WAIT				0.95
W ATT				0.95
Cumulative % Variance Explained	25.0	44.0	58.1	70.3
Cumulative 70 valiance Explained	25.0	44.0	50.1	70.5

Table 3 This study (1996) Four Factor Solution

Figure 5 This study (1996) Four Factor Solution



DISCUSSION

The two main research objectives of this study are reviewed in the light of our findings before we proceed to our conclusions.

Consumer Classification of Products and Services

We believe that the findings presented here clearly indicate that consumers can not only classify consumer items according to whether they are a product or a service, but can classify items with subtly different mixes of product and service qualities. For example, consumers were able to classify items such as an "Eye Test", "Car Wheel Alignment" and "Household Furniture Rental" as being strongly associated with service qualities, while items such as "Tennis Racket", "Pocket Camera" and Electric Vacuum Cleaner" were associated with product qualities. Items that contained a mix of product and service qualities such as a "Car Silencer" and "Car Wheel Alignment" were classified in the same way by UK consumers in our study as by US consumers in the study by Hartman and Lindgren. The "Restaurant Meal" item was considered by consumers to contain a relatively even mix of "product" and "service" qualities, and was not classified as either a pure product or a pure service. This is consistent with the findings of Hartman and Lindgren and also supports Shostack's (1977) claim that in cases where an item contains a mix of tangible and intangible qualities, it is difficult to classify as a product or a service.

Overall, our findings in this part of the study exhibit a high degree of consistency with those of Hartman and Lindgren and indicate that UK and US consumers are very similar in terms of what they consider to be a product and what they consider to be a service.

Underlying Factors Used by Consumers to Distinguish between Products and Services

From the factor analysis (three factor solution) it can be seen that the criteria used by consumers to evaluate the consumer items represent latent variables which resemble "*Tangibility*", "*Inseparability*" and "*Heterogeneity*". This three factor solution differs noticeably from that presented by Hartman and Lindgren in terms of both the factor loadings and the variance explained by the solution. We believe that the difference in variance explained may be accounted for by differences in the sample structures between the two studies. We do not feel that the minor modifications which we have made to the study in terms of the rating scale and the number of items used are sufficient to explain the differences in factor loadings between the two solutions. We conclude, therefore, that the differences in factor loadings must also be attributable to the different sample structures of the two studies.

In our study the criterion "Available" loads onto the "*Tangibility*" factor together with "Tangible" and "Easy to Evaluate". Hartman and Lindgren derived a factor from the same three criteria, but labelled it "*Evaluation*". Our finding that "Availability" load onto "*Tangibility*" fails to support the suggestions of Rathmell (1966), Donnelly (1976) and Zeithaml *et al* (1985) that item availability is a manifestation of perishability. We believe that consumers may have confused this criterion with the physical presence of items. This is because consumers may perceive a readily available item to be a tangible one. In other words, the criterion "Available" tested for the tangibility of products, rather than the lack of tangibility in services.

Our three factor solution did not, in fact, identify perishability as a factor. This supports claims by Wyckham *et al* (1975) and by Hartman and Lindgren that perishability is not able to distinguish clearly between products and services. Hartman and Lindgren also suggest that perishability is not the concern of the consumer, but the supplier, and that service consumers do not always have to wait in queues. The absence of a perishability factor in our results supports this. A possible

explanation for this could be that consumers have to wait to purchase products, as much as they do for services e.g. by queuing in superstores, hi-fi shops. Also, service providers routinely use booking systems to manage demand where there is limited supply e.g. for eye tests and dentistry you make an appointment and rarely have to wait very long, if at all.

Although "Tangible", "Available" and "Easy to Evaluate" load onto a single factor in both studies, thereafter the three factor solutions differ. The "Wait" criterion did not load onto any factor in our three factor solution while in Hartman and Lindgren's study it constitutes their "*Delay*" factor.

When the data are used to derive a four factor solution the resultant factors resemble the four service characteristics identified in the literature. The only criterion which does not follow the pattern predicted by the literature is "Available". Even when a four factor solution is derived, this criterion does not produce a perishability factor, but instead loads onto "*Tangibility*", as in our three factor solution. The perishability factor is, however, derived from the "Wait" criterion. Since Hartman and Lindgren do not report a four factor solution, it is not possible to comment on the relationship between their findings and ours in this part of the study. Given the widespread use of four characteristics to define the essential nature of services, the lack of a four factor solution in their study is unfortunate.

While at this point we can provide no definitive explanation for the difference between our three factor results and those of Hartman and Lindgren, we believe that differences in the sample structures used in the two studies are the most likely cause of the discrepancy in findings. The convenience sample used by Hartman and Lindgren was highly concentrated geographically and the authors raised a concern about the scope for generalisation from their findings (Hartman and Lindgren, p6). We discuss this further in the next section.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study provides useful insights into the four characteristics of services. In conducting this research we have identified a number of areas that could be considered for future research.

Our hypothesis, that the difference between our three factor results and those of Hartman and Lindgren is caused by differences in the samples, should be tested. Further replications in the US and the UK should use matched sample frames and further US-based replications should incorporate a four factor solution.

Following on from this, the stability of our findings across different market segments could be examined. It is possible that the criteria used to differentiate between goods and services may not be stable across demographic and socio-economic market segments and the use of larger samples in future studies would allow this to be examined. Work in this area would further enhance our understanding of consumer behaviour in services markets and would provide scope to refine services marketing strategies.

REFERENCES

- Berry L.L. and Parasuraman, A.A. (1993). "Building a New Academic Field The Case of Services Marketing", *Journal of Retailing*, **69**, 1, 13 60.
- Bitner M.J., Fisk R.P. and Brown S.W. (1993). "Tracking the Evolution of the Services Marketing Literature", *Journal of Retailing*, **69**, 1, 61 103.
- Blois K.J. (1974). "The Marketing of Services: An Approach", European Journal of Marketing, 8, 137 - 145.

- Bowen, J. (1990). 'Development of a Taxonomy of Services to Gain Strategic Marketing Insights', Journal of the Academy of Marketing Science, 18, 1, 43-49
- Carmen J.M. and Langeard E. (1980). "Growth Strategies of Service Firms", *Strategic Management Journal*, 1, 7 22.
- Darby, M.R. and Karni, E. (1973). "Free competition and the optimal amount of fraud", *Journal of Law and Economics*, **16**, 67-86
- Dillman, D.A. (1978). *Mail and Telephone Surveys: The Total Design Method*, New York, New York: John Wiley.
- Donnelly J.H. Jr (1976). "Marketing Intermediaries in Channels of Distribution for Services", Journal of Marketing, 40, 55 - 70.
- Grönroos C. (1978). "A Service Oriented Approach to Marketing of Services", *European Journal* of Marketing, **12**, 8, 588 601.
- Hartman D.E. and Lindgren J.H. Jr (1993). "Consumer Evaluations of Goods and Services -Implications for Services Marketing", *Journal of Services Marketing*, 7, 2, 4 - 15.
- Hoffman, K.D. and Bateson, J.E.G. (1997). *Essentials of Services Marketing*, Orlando, Florida: The Dryden Press
- Kanuk L. and Berenson C. (1975). "Mail Survey Response Rates: A Literature Review", Journal of Marketing Research, 12, 440 - 453.
- Levitt T. (1972). "Production Line Approach to Service", Harvard Business Review, 50, 41 52.
- Levitt T. (1981). "Marketing Intangible Products and Product Intangibles", *Harvard Business Review*, **81**, 94 - 102.
- McDaniel S.W. and Rao C.P. (1980). "The Effect of Monetary Inducement on Mailed Questionnaire Response Rate and Quality", *Journal of Marketing Research*, **17**, 265 268.
- Murray, K. B. (1991). 'A Test of Services Marketing Theory: Consumer Information Acquisition Activities', *Journal of Marketing*, **55**, 10-25
- Murray, K. B. and Schlacter, J.L. (1990). "The impact of services versus goods on consumers' assessments of risk and variability", *Journal of the Academy of Marketing Science*, 18, 1, 51-65
- Onkvisit S. and Shaw J.J. (1991). "Is Services Marketing "Really" Different?", Journal of Professional Services Marketing, 7, 2, 3 17.

Parasuraman A., Zeithaml V.A. and Berry L.L. (1985). "A Conceptual Model of Service Quality and Its Implications for Future Research", *Journal of Marketing*, **49**, 41 - 50.

Rathmell J.M. (1966). "What is Meant by Services?", Journal of Marketing, 30, 32-36.

Regan W.J. (1963). "The Service Revolution", Journal of Marketing, 47, 57 - 62.

- Shostack G. (1977). "Breaking Free from Product Marketing", Journal of Marketing, 41, 73 80.
- Wunder G.C. and Wynn G. W. (1988). "The Effects of Address Personalisation on Mailed Questionnaires Response Rate, Time and Quality", *Journal of the Market Research Society*, **30**, 91 - 101.
- Wyckham R.G., Fitzroy P.T. and Mandry G.D. (1975). "Marketing of Services An Evaluation of the Theory", *European Journal of Marketing*, **9**, 1, 59 67.
- Yu J. and Cooper H. (1983). "A Quantitative Review of Research Design Effects on Response Rates to Questionnaires", *Journal of Marketing Research*, **20**, 36 - 44.
- Zeithaml V.A.(1981). "How Consumer Evaluation Processes Differ between Goods and Services", reprinted in Lovelock, C. (1991), Services Marketing, 2nd Edition, Upper Saddle River, New Jersey: Prentice Hall.
- Zeithaml, V.A. and Bitner, M.J. (1996). Services Marketing, New York, New York: McGraw Hill.
- Zeithaml V.A., Parasuraman A. and Berry L.L. (1985). "Problems and Strategies in Services Marketing", *Journal of Marketing*, **49**, 33 46.