Service Quality in Nursing Homes

A construct, measurement and performance model
to increase client focus in nursing homes

Dr. Freek A.L. Lapré
Movinex BV/University of Tilburg TiasNimbas Business School

Prof. Gillian Wright
Manchester Metropolitan University Business School

28th May 2013

Summary

This study is concerned with the quality of care for the elderly in nursing homes, responding to a critical social and demographic imperative. The aim of this study is to identify a service quality construct for nursing homes to increase client focus and satisfaction. The research is underpinned by the service quality literature. It utilises the SERVQUAL construct to explore the nature of service quality in nursing homes through semi-structured interviews with nursing home residents and resident's families. From these, a service quality scale was constructed comprising six dimensions and 27 scale items capturing service delivery in nursing homes. This scale was purified through a survey of residents and family members (n=263). Through exploratory factor analysis, six importance and four experience factors were identified. Regression analysis was used to identify relationships between the factors, service quality and satisfaction. The results indicate that importance does not predict perceived quality, though experience of responsiveness and hospitality along with courtesy and personal approach are indicators of service quality. Furthermore, quality emerges as a predictor of satisfaction. From these outcomes, a service quality construct was developed which comprises of service marketing and service quality dimensions. This study contributes to the construction of the concept of service quality in nursing homes, its dimensionality and thus the precursors of satisfaction. These have extensive implications and opportunities for the management of nursing home services.

Keywords: nursing home, service quality, care, resident focus, indicators

Contents

1 Introduction 4
2 Aims and objectives of this study 5
3 Literature review 6
4 Design and methods 8
5 Analysis and results 10
5.1 Phase 1: thematic analysis 10
5.2 Phase 2: factor analysis 10
5.3 Phase 2: correlation and regression analysis 14
6 Discussion and conclusions 15
7 Implications 17
About the authors 19
References 20

1 INTRODUCTION

The motivation for this study is the major concerns about the quality of care in residential care homes for the elderly throughout the Western world. Many programmes have been initiated in several countries to increase the quality of care and satisfaction of residents and their families.

Following press publicity about abuse in nursing homes in 2005, the government in the Netherlands intensified inspections in nursing homes by the Health Care Inspection (IGZ). During 2005 and 2006, 640 nursing homes were visited, of which 600 required an improvement plan, which was executed by most of them in 2008 (IGZ, 2008).

In 2012, in the United States, the US Centres for Medicare and Medicaid Services (CMS)began the Nursing Home Action Plan to ”improve the individual experience of care, improving the health of populations and reducing the per capita cost of care for population” (CMS, 2012).

In the United Kingdom the Royal College of Nursing (RCN) has published a research report that reflects the experiences of frontline nursing staff in care homes between 2004 and 2010. The findings were worrying: inappropriate admissions, lack of equipment, inadequate staffing levels and an inappropriate mix of skills to meet increasing nursing and care needs of residents.

This is an important subject in a world that is confronted with ageing societies that leads to an increase in the need of nursing home care.

We live in an ageing world. Worldwide, societies are ageing and the proportion of people over 60 in the world population will increase from 10.8% in 2009 to 21.9% in 2050 (United Nations, 2009). The increase in developed countries is less but the proportion of people over 60 in these countries is much higher: 21.4% in 2009 to 32.6% in 2050. These ageing societies will be accompanied by an increase of needs in long term care. The United Nations have calculated that the world’s dependency ratio (a commonly used measure of potential support needs) will double between 1950 and 2050. In developed countries it will even rise by 63% due to ageing societies which means that the share of old persons vs. children in the dependency ratio becomes equal (United Nations, 2009, p.18-19).

These developments also have their impact in the Netherlands where this study is carried out. The expectation in the Netherlands is that between 2005 and 2030, the need for long term care will increase by 1.2% each year and that the number of residents in long term care for the elderly will grow by 1.4% (Woittiez, et al., 2009, p.10).

2 AIMS AND OBJECTIVES OF THIS STUDY

Aim of this study

The aim of this study is to provide a validated service quality construct for nursing home managers to improve resident focus and to increase resident and family satisfaction with the delivery of services in nursing homes.

Objectives of this study

Three objectives were formulated for this study:

- To establish the dimensionality and develop scale items for service quality in nursing homes.
- To explore disconfirmation as the foundation for perceived service quality.
- To understand the role of perceived service quality as a predictor for resident satisfaction.

The overall aim will lead to a model to help managers improve resident focus and to increase resident and family satisfaction with the delivery of services in nursing homes.

The first objective concerns the development of a 'service quality construct' that captures all aspects of nursing home service delivery, based on established service quality constructs. Nursing homes provide an array of services to their residents. It is important that the service quality construct that forms the foundation for an instrument to increase resident focus, is based on customer needs. Scholars have developed several well established service quality constructs. This study applies a current model which is adjusted to the nursing home context. That means that service quality constructs are understood in the context of a nursing home.

The second objective explores customer expectations and service delivery as the foundation for perceived service quality. To increase resident focus it is necessary to investigate nursing home residents' quality reference base by describing residents and family expectations about and experiences with the service delivery.

The third objective explores the relationship of perceived service quality as a predictor for resident satisfaction, and considers if well-perceived service quality leads to higher customer satisfaction.

3 LITERATURE REVIEW

The literature review explores the field of quality, service quality constructs, service quality research and the application of service quality constructs in health care and the nursing home sector.

In the Netherlands the nursing home sector is embedded in the health care sector and thus a review of applications of service quality constructs in health care is pertinent to this study.

The purposes of this literature review are: the identification of an established service quality construct as a reference model for this study; knowledge about the relationship between customer expectations, perceived service quality and service delivery; insight into the relationship between perceived service quality and customer satisfaction.

Consideration of quality management began with the quest for consistency of manufactured products. The development of marketing laid the foundation for service quality that connects service quality research very closely to marketing research.

In the conceptualisation of service quality there is a distinction between the American and the Nordic/European school of thought. The American school is dominated by the SERVQUAL model which focuses on the service delivery process while the Nordic/European school represented by Grönroos and Gummesson also includes the outcome of the service. Furthermore, conceptualisations of service quality can either be based on the disconfirmation construct or an attitude based approach.

The measurement of service quality is closely connected to the conceptualisation and the context of service quality. From the current debates, the conceptualisations and associated critiques it is clear that measurement of service quality is a highly complex and sensitive matter.

This implies that every conceptualisation of service quality and its measurement scale in research should be validated in each service business sector (Brady and Cronin, 2001, p.45). From the literature, this is not always properly done, and though research in different sectors has led to modifications in measurement tools, this should be more in-depth. The debates about disconfirmation versus attitude-based models, relevance of quality dimensions and qualitative vs. quantitative research methods should be considered for each service sector. For example, to validate measurement of service quality by a gap-analysis, the concepts of customer expectations and perceived service quality should be related to the context of a particular service business sector. In this discussion a more dynamic approach has emerged: the relationship quality that connects the service delivery to a specific time episode and sequence. The relationship or interaction approach will lead to a new path in service quality research.

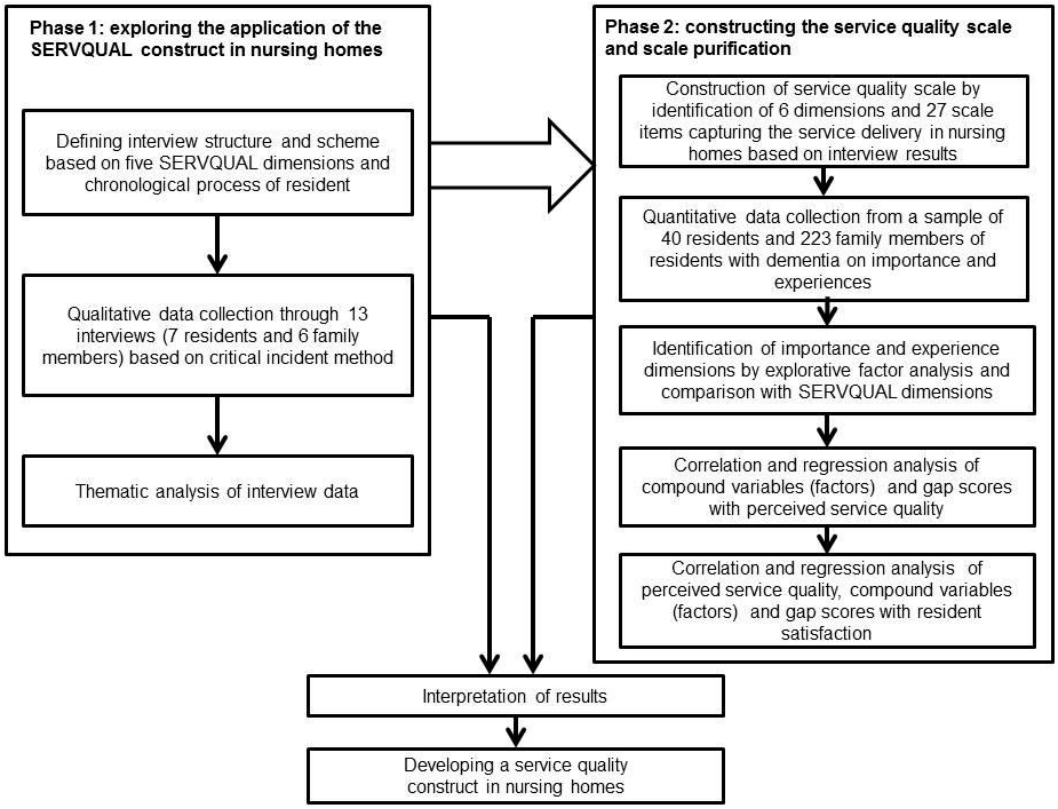
The rise of new businesses including web based ones, will lead to new approaches and conceptualisations because some foundations of established service quality constructs such as face to face contact are not present in some new business models.

Despite all the debates and developments, the SERVQUAL construct is still the most influential and recognised service quality conceptualisation.

4 DESIGN AND METHODS

The steps taken to develop this a service quality construct in nursing homes and the sequence of research methods is summarised in figure 1. This section describes the activities undertaken taken to implement this research..

Figure 1: Summary of steps employed in developing the service quality construct in nursing homes



Phase 1

In phase 1 the application of the SERVQUAL construct was explored. The data for phase 1 were collected through 13 face-to-face semi-structured in-depth interviews with nursing home residents with physical limitations and family members of residents with dementia.

The interview focused on the following subjects:

- aspects of nursing home services delivery
- expectations, performance about service delivery in the nursing home from the residents viewpoint
- the perception of quality and the satisfaction of the resident with service delivery.

The focus in these interviews was on life events and critical incidents, and interviewees were asked about particular types of events. In this study these are the events that led to the move to a nursing

home, events in service delivery related to expectations and experiences and events that illustrate (dis-)satisfaction about service delivery in the nursing home.

The results from the interviews were used to construct a service quality scale, consisting of dimensions and scale items, for the quantitative data collection in this study. The interview transcripts together with the field notes and context descriptions were analysed through a thematic analysis.

Phase 2

The aim of this phase is to construct a service quality scale based on the results of the thematic analysis of the interview data and purification of this scale based on the statistical analysis of collected quantitative data through a questionnaire. In this phase, a structured questionnaire was constructed based on the original 5 SERVQUAL dimensions and the 22 scale items of the SERVQUAL questionnaire (Zeithaml, et al., 1990, pp.181-186) and modified by using the results from phase 1.

By using a cross sectional design, the questionnaire was completed by residents and family members of residents with dementia. The residents were assisted in completing the questionnaire on their request. The quantitative data were analysed through descriptive, factor and multiple regression analysis.

Based on the outcome of the interview results, the questionnaire consists of 6 dimensions instead of the 5 dimensions in the original scale (tangibles, reliability, responsiveness, assurance, empathy). One dimensions, system orientation, was added. System orientation is about how much service delivery is oriented on the organisation rather than the resident in other words: how much choice does a resident have in service delivery? The 22 original SERVQUAL scale items were modified and contextualised to be relevant to a nursing home. Scale items were replaced, removed or added, Resulting in 27 scale items.

The design of the questionnaire required simplicity of layout with easy to answer questions. A five point multiple choice scale was designed. For every value on that scale a “smiley” was used so that the respondent also had a non-verbal symbol on the multiple choice scale.

Resident satisfaction was measured through two variables:

- if the nursing home meets the needs of the resident and family
- how they feel about the nursing home.

The questionnaire was anonymously completed by 40 nursing home residents with physical limitations and 223 family members of nursing home residents with dementia in seven different nursing homes.

5 ANALYSIS AND RESULTS

5.1 Phase 1: thematic analysis

Through the interviews, the application of the SERVQUAL concept was explored and the outcomes were the input to constructing the service quality scale in the survey phase.

The first important outcome is that expectations are a difficult concept in the context of a nursing home. The negative nature of going to a nursing home, the different paths that lead to a nursing home (from home or elsewhere), not knowing what a nursing home is and sometimes the speed of moving from home into a nursing home, makes it difficult to develop expectations. The expectations stay vague and instead of expectations, the interview results indicate a notion that residents and family members focus instead on what is important to them in their daily life. Therefore importance is a better input than expectations in the nursing home context.

The second important outcome is that the five dimensions of the SERVQUAL construct emerged from the analysis though interviewees do not experience a clear distinction between these dimensions. Thethematic analysis also highlighted two important aspects of service missing from the SERVQUAL conceptualisation that are of relevance in the nursing home. These are the process of the decision to move to the nursing home and the way the operations of the nursing home are organised. These aspects influence the choice of residents and are named “system orientation”. These aspects are added in the scale.

The third important outcome is that satisfaction is a multi-complex concept that is very difficult to measure. To understand the background of the satisfaction rate by a resident or a family member, the relationship with the items on the service quality scale has to be analysed and so it is important that in the survey, respondents must have the chance to give a balanced judgement about satisfaction.

5.2 Phase 2: factor analysis

The scale items were measured twice: as an importance variable (how important the respondents see the items in the service delivery in the nursing home) and as an experience variable (how the experience of the service delivery was on this item according the respondent). The data on importance and experience were subject to separate factor analyses. The factors were extracted with Principal Component Analysis (PCA) followed by a Varimax rotation with Kaiser Normalization.

Importance factors

The 27 importance variables were analysed through the PCA to identify factors. A Kaiser-Meyer-Olkin Measure (KMO) was used to test the sampling adequacy. The KMO was .836, above the acceptable minimum of .5 (Field, 2009, p.660). A Bartlett test was used to check the spherity. The significance was Sig < .001 with a df = 325. These results confirmed that the conditions for running a factor analysis were present. Therefore a factor analysis was carried out. Factors with eigenvalues < 1 were removed. The six factor structure, reliability of the factors and variance explained by this structure are presented in table 1.

Table 1: Importance factors in nursing homes

N=263							
Factors and variables	**(communalities)**	**Factor Loadings**					
		1	2	3	4	5	6
Factor 1: Respect and empathy	**(α = .768)**						
Respectful staff	(.596)	.695					
Sincere interest in solving my problem	(.607)	.649					
Comforting when sad or lonely	(.443)	.597					
Keeping the quality of my life as high as possible	(.423)	.534					
Every staff member deal with my questions	(.570)	.532					
Reckon with personal habits (lifestyle)	(.370)	.497					
Time to talk about what bothers me	(.511)	.497					
Factor 2: System orientation	**(α =.758)**						
That I can decide when I eat	(.595)		.740				
That I can decide which clothes I want to wear	(.606)		.740				
That I can decide when I want to go out	(.617)		.709				
That I can decide when I go to bed and get up	(.561)		.684				
Factor 3: Responsiveness and attention	**(α =.623)**						
Never too busy to respond to my requests	(.595)			.675			
Immediate response when I am calling	(.576)			.672			
Not have to ask things twice before something is done for me	(.477)			.541			
Contact with the physician	(.512)			.522			
Factor 4: Professionalism and safety	**(α =.622)**						
A neat staff appearance	(.577)				.702		
A professional attitude of the staff	(.561)				.654		
No theft in the nursing home	(.361)				.585		
Polite staff	(.577)				.543		
Factor 5: Inclusion	**(α =.647)**						
Participation in activities during the whole day	(.588)					.719	
Connecting with other residents	(.589)					.718	
Information about which activities are organised during the day	(.420)					.555	
Involvement in making decisions about me	(.428)					.447	
Factor 6: Tangibles	**(α =.500)**						
Choice of food and drinks	(.531)						.594
Privacy	(.447)						.559
When the staff promises to come within a certain time frame they do so	(.499)						.504
Eigenvalues		6.053	2.272	1.581	1.325	1.295	1.109
% of variance explained		12.0	9.9	8.2	8.1	8.1	6.2
Cumulative % variance explained		12.0	21.9	30.1	38.2	46.2	52.4

This analysis indicates the presence of six distinct themes in the importance of nursing home services and were named: respect and empathy; system orientation; responsiveness and attention; professionalism and safety; inclusion and tangibles. These factors partly cover the dimensions were defined after the qualitative study (see section 4) but in case of system orientation the factor matches the four variables that were added to the SERVQUAL items.

The factors explain 52.4% of the variance with individual factor variances ranging from 12.0 to 6.2. The loading of the individual variables on the factors range from 0.740 to 0.447. The internal consistency of the factors range from 0.768, which is considered as acceptable to 0.500 which is at the limits of acceptability. The communalities of the variables, which are the portions of the variance of that variable that is accounted for by the common factors (MacCallum et al., 1999, p.85), range from 0.617 to 0.361.

Experience factors

The 27 experience variables have measured the experience of residents and family in the day to day life in the nursing home. The KMO was .937 and the Bartlett test for spherity had a significance Sig. < .001 with a df = 351. Again, these parameters indicate that factor analysis is appropriate. A first factor analysis (Principal Component Analysis) to extract six factors was used to check for the 6 dimensions that were constructed after the qualitative study. The six factor structure was not satisfactory because the sixth factor had an eigenvalue < 1 and was not usable. A five factor analysis was extracted and this seems to be usable, with all factors having an eigenvalue > 1. To explore the factor structure fully, a four factor analysis was extracted and this was not usable robust with communalities lower than in the 5 factor structure (0.58 vs. 0.62) and one variable had a factor loading < 0.4. The five factor structure of experiences is detailed in table 2.

Table 2: Experience factors in nursing homes						
N=262						
Factors and variables	**(communalities)**					
		1	2	3	4	5
Factor 1 : Responsiveness and hospitality	**(α = .898)**					
When the staff promises to come within a certain time frame they do so	(.713)	.756				
Immediate response when I am calling	(.682)	.730				
Not have to ask things twice before something is done for me	(.686)	.703				
Never too busy to respond to my requests	(.595)	.589				
Choice of food and drinks	(.536)	.546				
Sincere interest in solving my problems	(.665)	.546				
Professional attitude of the staff	(.690)	.518				
Information about which activities are organised during the day	(.616)	.514				
Keeping the quality of my life as high as possible	(.656)	.420				
Factor 2: Courtesy and personal approach	**(α =.863)**					
Polite staff	(.774)		.786			
Respectful staff	(.758)		.784			
Comforting when sad or lonely	(.647)		.585			
A neat staff appearance	(.444)		.549			
Reckon with personal habits (lifestyle)	(.634)		.477			
Time to talk about what bothers me	(.530)		.436			
Involvement in making decisions about me	(.416)		.415			
Factor 3: Inclusion and care access	**(α =.722)**					
Participation in activities during the whole day	(.668)			.738		
Connecting with other residents	(.558)			.682		
Contact with the physician	(.428)			.560		
Every staff member can deal with my questions	(.649)			.523		
Factor 4: System orientation	**(α =.814)**					
That I can decide when I eat	(.690)				.748	
That I can decide when I want to go out	(.697)				.734	
That I can decide which clothes I want to wear	(.721)				.699	
That I can decide when I go to bed and get up	(.540)				.519	
Privacy	(.542)				.509	
Factor 5: Safety	**(α =.287)**	*Removed from the factor structure*				
Avoids with dying or deceased persons	(.634)					.697
No theft in the nursing home	(.644)					.691
Eigenvalues		11.642	1.620	1.236	1.178	1.036
% of variance explained		16.2	15.6	12.8	11.4	5.9
Cumulative % variance explained		16.2	31.8	44.6	56.0	61.9

This table indicates that the experience factors are stronger than the importance factors. The factors explain more variance and have higher reliability scores, except for the fifth factor, safety. The first four factors have a reliability score > 0.7 which is acceptable. However, the reliability score on the fifth dimension lies far beneath the acceptable level with a score of 0.287. Given this poor reliability score, the fact that the factor consists out of only 2 variables and the low contribution to the variance explained, this factor was removed from the factor structure.

The four factors relating to the nursing home service experience were labelled: responsiveness and hospitality; courtesy and personal approach; inclusion and care access; system orientation. These factors differ partly from the dimensions as were defined after the qualitative study (see section 4) but also differ from the importance themes as described in the previous section. Thus t the experience themes differ from the importance themes, implying that the issues residents and family consider important in nursing home service differs from the criteria on which they find themselves evaluation their experience of it.

5.3 Phase 2: correlation and regression analysis

To explore if disconfirmation is the foundation for perceived service quality an analysis was undertaken between gap scores and perceived service quality. By analysing the relationship between importance and experience factors, the nature of the disconfirmation can be identified. The second step was to explore the presence of a significant relationship between importance and perceived service quality and then experience with perceived service quality.

The result from the first step is that there is no significant correlation between the importance factors and the experience factors ($0.012 < r < 0.155$) ($p > 0.01$). This means that a downward or upward tendency in respondent scores on importance does not relate to a tendency pattern in respondent scores on experience.

The result from the second step, the analysis of the relationship between importance factors and perceived service quality, is that there is no significant correlation between the importance factors and perceived service quality.

This means that the scores on the constructed factors in what residents and family find important in nursing home services have no relationship with or are not affecting the experience, nor to the perceived quality of nursing home services.

The experience factors show a different picture, having a significant correlation with perceived quality. Now it is clear that there is a significant correlation between the experience factors and perceived service quality, the question arises if the experience factors are a predictor to perceived service quality. A multiple regression analysis was carried out to test this. Multicollinearity between the predictors was checked and the Variance Inflation Factor (VIF) varies from 1.68 to 3.325 which is under the critical value of 10. So the correlation between the predictors (experience factors) are not disturbing the predictor values to perceived quality. The multiple regression analysis gives a significant indication ($p < 0.01$) that the model is able to predict perceived service quality on the basis of the experience factors (table 25). The F-ratio is 68.47 with a df = 4. The model explains 53% of the variance ($R^2 = 0,53$). The Durbin-Watson value is 1.72 which is between 1 and 3. This means that errors in the regression are independent and not violating the model. Now the question arises how

each factor contributes to the prediction of perceived service quality. The regression analysis shows that two experience factors, “responsiveness and hospitality” and “courtesy and personal approach” have the ability to predict perceived service quality.

Finally, the relationship between perceived service quality and resident satisfaction was analysed. The results of regression analysis are that the variable “nursing home meets needs” has a partial mediation effect on the relationship between “perceived service quality” and “feelings about the nursing home”. This suggests that the variables “perceived service quality” and “nursing home meets needs” have a significant ability to predict “feelings about the nursing home” and that “nursing home meets needs” has a partial mediation effect.

6 DISCUSSION AND CONCLUSIONS

Three objectives were formulated for this study:

- To establish the dimensionality and develop scale items for service quality in nursing homes
- To explore disconfirmation as the foundation for perceived service quality.
- To understand the role of perceived service quality as a predictor for resident satisfaction.

Dimensionality and scale items for service quality in nursing homes

The findings in this study show that the SERVQUAL dimensions were suitable as a starting point but need modification in dimensionality, scale items and in the definition of expectations. The SERVQUAL dimensions are suitable to structure the service quality scale. The dimensional structure was used to categorise qualitative interview data and to structure the questionnaire. The dimensionality of service quality needed an additional dimension to the original five SERVQUAL dimensions tangibles, responsiveness, assurance, reliability and empathy. The additional dimension was called “system orientation” and concerns the level of choice in everyday aspects of life in a nursing home. Interviewees and respondents feel that they experience a system in which service delivery is planned for the benefit of the organisation and not primarily for the clients’ preferences. This system can be seen as a product of “framing thinking” (Moor, 2012, p.236) by nursing home managers and needs to be reframed. The reframing should thus reflect the resident’s perspective instead of the planning and logistics of the processes in the nursing home.

The purification of the constructed service quality scale for nursing homes by a factor analysis has resulted in six factors representing “importance” and four factors representing “experience”.

The importance factors differ strongly from the original SERVQUAL factors, which means in the contextualisation in this study, that the original five dimensions are not identified. The added

dimension of “system orientation” abides well in the factor analysis which means that factors regarding choice in the service delivery play a role that residents and family members find important. The way the staff interact with the resident and provide choice for them are the strongest factors and regarded as most important. This leads to the conclusion from this study that interaction between resident and staff plays a more important role in the service delivery in a nursing home than tangible aspects such as privacy, a choice of food and drink and the neat appearance of staff.

The four experience factors have a stronger reliability score and explain more variance than the importance factors. This indicates that experiences in service delivery can be clearly differentiated and are more comprehensive than importance. Variables that represent interactional aspects of the service delivery are present again in the strongest factors although food and drink is included in the strongest experience factor “responsiveness and hospitality”. The second strongest factor is named “courtesy and personal approach”. The factor “system orientation” is the weakest factor of these four. This finding suggests that choice as an aspect of service delivery becomes less prominent in the experience of the service delivery although it was seen as important. This implies that residents adjust their judgement about choice in their service delivery experience to the reality of possibilities of the services in the nursing home, while interactional aspects become more clear as a reference framework for service delivery. The finding in this study that interactional aspects play a prominent role in both importance and experience confirm Svensson’s statement that the outcome of service quality depends on the interaction between service providers and service receivers (Svensson, 2006).

Disconfirmation and perceived service quality

The second objective was to explore if disconfirmation is a foundation for perceived service quality. The results in this study show that disconfirmation was not a foundation for perceived service quality in nursing homes. This finding indicates that what residents and family members find important is not the reference point for the judgement about the experienced service delivery in nursing homes.

Thus two key implications of this study are that, first, what residents and family members find important is important input for a marketing strategy and will mitigate to a positive choice of nursing home. Second, the management of key factors influencing experience will lead to a more positive perception of service quality strategy.

The findings on the criteria for choosing a nursing home suggest that, after the room specification, reputation and location were key criteria in the choice of nursing home. This confirms a previous study of what decision makers find important when choosing a nursing home (Hill, 2001). These findings imply that marketing of the nursing home’s reputation and location is an important task for managers in order to influence the choice of residents and family towards their offering.

Perceived service quality and resident satisfaction

The third objective of this study was to understand the role of perceived service quality as a predictor for resident satisfaction. From the findings of this study it is confirmed that perceived service quality has a predictive power to satisfaction as rated by residents and family members of residents with dementia. The way in which the nursing home meets their needs, as experienced by residents and family members, had a partial mediating effect on the relationship between perceived service quality and resident satisfaction, and is a predictor to resident satisfaction. These findings indicate that in the context of a nursing home, *outcomes* such as meeting the individual needs of the resident play a role in resident satisfaction next to the perception of *output*, the service delivery.

7 IMPLICATIONS

The aim of this study is to provide a validated service quality construct for nursing home managers to increase resident focus. So this study is important for the management of nursing homes with the ultimate goal to improve their service quality and satisfaction of their residents. The contribution to management knowledge is significant. First of all it became clear that reputation and location are key for the choice of a nursing home, rather than the room, while many nursing home managers think that the room is key in the choice of a nursing home. Another finding is that residents and family members have no expectations about the services in a nursing home. They know what they find important but cannot imagine how the service delivery will be in a nursing home.

These findings give an indication for a marketing strategy for nursing homes. The marketing strategy must not focus on the services that they deliver, but on the aspects that are important in enhancing the quality of life of their residents. It is important that the nursing home emphasizes in their contact with potential residents and family members, that they will find respect and empathy in the interaction with residents, and that individual choices directs the way services are delivered instead of how processes are organised..

The findings also give managers of nursing homes an insight into what elements of delivery determine the perception of the service quality. A proper response to resident's requests is crucial as is the case with hospitality aspects such as food and drink, a helpful attitude and activities during the day. These aspects gain importance in matters to be dealt with because this research has determined that the perception of the experience of service delivery also predicts the satisfaction of residents.

By acting on the findings of this study, nursing home managers are able to increase their client focus in two ways, first by creating a marketing strategy appropriate to issues that are important to

potential clients. Second by improving the perceived quality of their services and client satisfaction by focussing on the service delivery *experience,* instead of the service delivery *organisation* to improve the client satisfaction. A positive evaluation of experience can be increased by the vision that service delivery is a result of co-creation between the resident and the staff member.

With worldwide ageing societies and the current negative image of nursing homes, the findings of this study contribute towards a shift to a more client oriented situation and therefore a more positive image of the nursing home sector in the future.

ABOUT THE AUTHORS

Freek Lapré is a nurse by training, holds two Masters in Health Sciences and Change Management and a Doctorate in Business Administration. He works more than 20 years as a management consultant in health care and related industries. He is partner at Movinex BV, a Dutch consultancy firm, specialised in strategic, organisational and performance issues of businesses that are operating in ageing and long term care. He works as a strategic consultant for (international clients) in elder care services, investment banking, pension funds in the Netherlands, the United Kingdom, the United States and the Russian Federation. He is also the Academic Director of the Master in Health Administration programme of the TiasNimbas Business School of the University of Tilburg in the Netherlands. Finally, he is member of the Board of Directors of the European Association of Homes and Services for the Ageing (EAHSA) in Brussels.
E-mail: freek.lapre @movinex.nl

Gillian Wright is Director of Research and Chair of Strategic Marketing aan het Research Institute of Business and Management van de Business School van Manchester Metropolitan University. Professor Gillian Wright is Chair of Strategic Marketing and Director of Research of the Research Institute for Business and Management at Manchester Metropolitan University. Her research is concerned with service quality, effective strategic change and knowledge management in the public services. This focus builds on ten years research experience in service delivery in healthcare. She is a visiting Fellow at the Nuffield Institute for Health at the University of Leeds. Her professional background is as a Market Analyst in electronics and Market Research in pharmaceuticals.
E-mail: G.Wright@mmu.ac.uk

REFERENCES

ACTIZ. (2011) *Kerngegevens van de branche 2008.* Utrecht: ActiZ.

ANDERSON, R. E. (1973) Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance. *Journal of Marketing Research,* **10,** 38-44.

BABAKUS, E. and MANGOLD, W. G. (1992) Adapting the SERVQUAL scale to Hospital Services an empirical investigation. *Health Services Research,* **26** (6)**,** 767-786.

BARUCH, Y. (1999) Response Rate in Academic Studies- A Comparative Analysis. *Human Relations,* **52** (4)**,** 421-438.

BEBKO, C. (2000) Service intangibility and its impact on consumer expectations on quality. *Journal of Services Marketing,* **14** (1)**,** 9-26.

BELL, J. (2005) *Doing your Research Project.* Maidenhead: Open University Press.

BEST, M. and NEUHAUSER, D. (2006) Walter A Shewhart, 1924, and the Hawthorne factory. *Quality & Safety in Health Care,* **15** (2)**,** 142-143.

BITNER, M. J. (1990) Evaluating service encounters - the effects of physical surroundings and employee responses. *Journal of Marketing,* **54** (2)**,** 69-82.

BLAIKIE, N. (2007) *Approaches to Social Enquiry.* Cambridge: Polity Press.

BOLTON, R. N. and DREW, J. H. (1991) A multistage model of customers assessments of service quality and value. *Journal of Consumer Research,* **17** (4)**,** 375-384.

BOULDING, W., et al. (1993) A dynamic process model of service quality - from expectations to behavorial intentions. *Journal of Marketing Research,* **30** (1)**,** 7-27.

BOWERS, B. J. (1988) Family Perceptions of Care in a Nursing Home. *The Gerontologist,* **28** (3).

BOYATZIS, R. E. (1998) *Transforming Qualitative Information.* Thousand Oaks: Sage Publications Inc.

BRADY, M. K. and CRONIN, J. J. (2001) Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing,* **65** (3)**,** 34-49.

BRAUN, V. and CLARKE, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology,* **3,** 77-101.

BROWN, T. J., et al. (1993) Improving the Measurement of Service Quality. *Journal of Retailing,* **69** (1)**,** 127-139.

BRYMAN, A. and BELL, E. (2007) *Business Research Methods.* Oxford: Oxford University Press.

BUREAU HHM. (2010) *Zorgzwaartepakketten V&V, versie 2011.* Bureau HHM: Enschede.

BUTCHER, H. K., et al. (2001) Thematic analysis of the experience of making a decision to place a family member with Alzheimer's disease in a special care unit. *Research in Nursing & Health,* **24** (6)**,** 470-480.

BUTTLE, F. (1996) SERVQUAL: review, critique, research agenda. *European Journal of Marketing,* **30** (1)**,** 8-32.

CARDI., (2010) *A Picture of Ageing Research: Ageing Research in Ireland, North and South.* Dublin: Centre for Ageing Research and Development in Ireland (CARDI).

CARLZON, J. (1987) *Moments of Truth, New Strategies for today's Customer-Driven Economy.* Cambridge Mass.: Ballinger Publishing Company.

CARMAN, J. M. (1990) Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. *Journal of Retailing,* **66** (1)**,** 33-55.

CARRILLAT, F. A., et al. (2007) The validity of the SERVQUAL and SERVPERF scales - A meta-analytic view of 17 years of research across five continents. *International Journal of Service Industry Management,* **18,** 472-490.

CHANDRUPATLA, T. (2009) *Quality and Reliability in Engineering.* New York: Cambridge University Press.

CHANG, H., et al. (2008) Determinants Of Customer-Perceived Service Quality in Senior-Care Industry And Their Relationship To Customer Satisfaction And Behavioral Intentions: Research Findings From Taiwan *International Business & Economics Research Journal,* **7** (12)**,** 117-128.

CHURCHILL, G. A. and SURPRENANT, C. (1982) An investigation into the determinants of customer satisfaction. *Journal of Marketing Research,* **19** (4)**,** 491-504.

CONWAY, T. and WILLCOCKS, S. (1997) The role of expectations in the perception of health care quality: developing a conceptual model. *International Journal of Health Care Quality Assurance,* **10** (3)**,** 131-140.

CRONIN, J. J. and TAYLOR, S. A. (1992) Measuring service quality - a reexamination and extension. *Journal of Marketing,* **56** (3)**,** 55-68.

DABHOLKAR, P. A., et al. (2000) A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing,* **76** (2)**,** 139-173.

DE KLERK, M. 2011 *Zorg in de laatste jaren. Gezondheid en hulpgebruik in verzorgings- en verpleeghuizen 2000-2008.* Den Haag: Sociaal Cultureel Planbureau.

DEUNING, C. 2009 *Verpleeg en verzorginghuizen per gemeente.* Bilthoven: RIVM.

DOUGLAS, L. and CONNOR, R. (2003) Attitudes to Service Quality - the expectation gap. *Nutrition & Food Science,* **33** (4)**,** 165-172.

DU MOULIN, M., et al. (2010) Monitoring quality of care in nursing homes and making information available for the general public: State of the art. *Patient Education and Counseling,* **78** (3)**,** 288-296.

DUFFY, J. A., et al. (1997) Cross national study of perceived service quality in long-term care facilities. *Journal of Aging Studies,* **11** (4)**,** 327-336.

DUFFY, J. A., et al. (2001) A comparative study of resident, family, and administrator expectations for service quality in nursing homes. *Health Care Management Review,* **26** (3)**,** 75-85.

EGGINK, E., et al. (2012) *VeVeRa-IV, Actualisatie en aanpassing ramingsmodel verpleging en verzorging 2009-2030.* Den Haag: Sociaal Cultureel Planbureau.

ETGAR, M. and FUCHS, G. (2009) Why and how service quality perceptions impact consumer responses. *Managing Service Quality,* **19** (4)**,** 474-485.

FAY, B. (1996) *Contemporary Philosophy of Social Science.* Oxford: Blackwell.

FIELD, A. (2009) *Discovering Statistics using SPSS.* London: Sage Publications Ltd.

FISK, R. P., et al. (1993) Tracking the Evolution of the Services Marketing Literature. *Journal of Retailing,* **69** (1)**,** 61-103.

GARSSEN, J. 2011 *Demografie van de vergrijzing.* Den Haag: Centraal Bureau voor de Statistiek.

GARVIN, D. A. (1984) What Does "Product Quality" Really Mean ? *Sloan Management Review,* **26** (1)**,** 25-43.

GILBERT, F. W., et al. (1992) Adaptation and customer expectations of health care options. *J Health Care Mark,* **12** (3)**,** 46-55.

GILL, L. and WHITE, L. (2009) A critical review of patient satisfaction. *Leadership in Health Services,* **22** (9)**,** 8-19.

GOFFMAN, E. (1963) *Stigma Notes on the management of spoiled identity.* New York: Simon & Schuster Inc.

GREIF, A., et al. (1994) Coordination, Commitment, and Enforcement: The Case of the Merchant Guild. *Journal of Political Economy,* **102** (4)**,** 745-776.

GRÖNROOS, C. (1982) *Strategic Management and Marketing in the Service Sector.* London, UK: Chartwell-Bratt.

GRÖNROOS, C. (1984) A Service Quality Model and its Marketing Implications. *European Journal of Marketing,* **18** (4)**,** 36-44.

GRÖNROOS, C. (2001) The perceived service quality concept - a mistake ? . *Managing Service Quality,* **11** (3)**,** 150-152.

GRÖNROOS, C. (2007) *Service Management and Marketing Customer management in Service Competition.* Chichester: John Wiley and Sons Ltd.

GRÖNROOS, C. and RAVALD, A. (2011) Service as business logic: implications for value creation and marketing. *Journal of Service Management,* **22** (1)**,** 5-22.

GUMMESSON, E. (1978) Towards a Theory of Professional Service Marketing. *Industrial Marketing Management,* **7,** 89-95.

GUMMESSON, E. (2005) Qualitative research in marketing. *European Journal of Marketing,* **39** (3/4)**,** 309-327.

HAMER, L. (2006) A confirmation perspective on perceived service quality *Journal of Services Marketing,* **20** (4)**,** 219-232.

HARDING, N. and PALFREY, C. (1997) *The Social Construction of Dementia.* London and Philadelphia: Jessica Kingsley Publishers.

HERZOG, A. R., et al. (1983) Interviewing older adults: a comparison of telephone and face-to-face modalities. *Public Opinion Quarterly,* **47,** 405-418.

HILL, C. J. (2001) Determinant Attributes in Nursing Home Choice. *Health Marketing Quarterly,* **19** (2)**,** 73-88.

HOEK, J., et al. (2003) The role of the specialist physician in nursing homes:the Netherlands' experience. *International Journal of Geriatric Psychiatry,* **18,** 244-249.

HUBER, M., et al. (2009) *Facts and Figures on Long-term CareEurope and North America.* Vienna: European Cetntre for Social Welfare Policy and Research.

IACOBUCCI, D. and OSTROM, A. (1995) Distinguishing Service Quality and Customer Satisfaction: The Voice of the Consumer *Journal of Consumer Psychology,* **4** (3)**,** 277-303.

JOHNSON, R. B. and ONWUEGBUZIE, A. J. (2004) Mixed Methods Research: A Research Paradigm Whose time Has Come. *Educational Researcher,* **33** (7)**,** 14-26.

JOHNSTON, R. (1995) The zone of tolerance, Exploring the relationship between service transactions and satisfaction with the overall service. *International Journal of Service Industry Management,* **6** (2)**,** 46-61.

JUDD, R. (1964) The Case for Redefining Services. *Journal of Marketing,* **28,** 58-59.

KANG, G. and JAMES, J. (2004) Service quality dimensions: an examination of Grönroos service quality model. *Managing Service Quality,* **14** (4)**,** 266-277.

KENNEDIE, H. (2005) *Waarde, waardering, waardigheidHospitality Care en de toekomst van de Nederlandse Verpleeghuiszorg.* Golden Tulip Hotels, Inns and Resorts.

KILBOURNE, W., et al. (2004) The applicability of SERVQUAL in cross-national measurements of health-care quality. *The Journal of Services Marketing,* **18** (6/7)**,** 524-533.

KIM, H. M., et al. (1999) An ontology for quality management - enabling quality problem identification and tracing. *Bt Technology Journal,* **17** (4)**,** 131-140.

KOPALLE, P. K. and LEHMANN, D. R. (2001) Strategic management of expectations: The role of disconfirmation sensitivity and perfectionism. *Journal of Marketing Research,* **38** (3)**,** 386-394.

KRUGMAN, P. (1991) History and Industry Location: The Case of the Manufacturing Belt. *American Economic Review,* **81** (2)**,** 80-83.

KRÜGER, V. (2001) Main schools of TQM:"the big five". *The TQM Magazine,* **13** (3)**,** 146-155.

LAFORTUNE, G., et al. (2007) *Trends in Severe Disability Among elderly People: Assessing the Evidence in 12 OECD Countries and the Future Implications.* 26, Paris: Organisation for Economic en Co-operation and Development (OECD).

LEE, H., et al. (2000) The determinants of perceived service quality and its relation with satisfaction. *Journal of Services Marketing,* **14** (3)**,** 217-231.

LEHTINEN, J. and LEHTINEN, U. (1982). Service Quality: A Study of Quality Dimensions. Helsinki: Service Management Institute.

LEHTINEN, U. and LEHTINEN, J. (1991) Two Approaches to Service Quality Dimensions. *The Services Industries Journal,* **11** (3)**,** 287-303.

LEVENTHAL, L. (2008) The role of understanding customer expectations in aged care. *International Journal of Health Care Quality Assurance,* **21** (1)**,** 50-59.

LILJANDER, V. and STRANDVIK, T. (1993) Estimating Zones of Tolerance in Perceived Service Quality and Perceived Service Value. *International Journal of Service Industry Management,* **4** (2)**,** 6-28.

LOVELOCK, C. and GUMMESSON, E. (2004) Whither services marketing? In search of a new paradigm and fresh perspectives. *Journal of Service Research,* **7** (1)**,** 20-41.

LOVELOCK, C. H. (1983) Classifying Services to Gain Strategic Marketing Insights. *Journal of Marketing,* **47** (3)**,** 9-20.

MACCALLUM, R. C., et al. (1999) Sample Size in Factor Analysis. *Psychological Methods,* **4** (1)**,** 84-99.

MCALEXANDER, J. H., et al. (1994) Service Quality Measurement. *Journal of Health Care Marketing,* **14** (3)**,** 34-40.

MILES, M. and HUBERMAN, A., (1994) *Qualitative Data Analysis, An Expanded Sourcebook.* Sage Publications, Thousand Oaks.

MOOR, M. (2012) *Tussen de Regels: Een esthetische beschouwing over geweld van organisatie.* Utrecht: IJzer.

NALEPPA, M. (1996) Families and the institutionalised elderly: A review. *Journal of Gerontological Social Work,* **27** (1/2)**,** 87-111.

NATAN, M. B. (2009) Coordinating the Roles of Nursing Home Staff and Families of Elderly Nursing Home Residents. *Journal of Nursing Care Quality,* **24** (4)**,** 332-339.

OLIVER, R. L. (1977) Effect of Expectation and Disconfirmation on Postexposure Product Evaluations: An Alternative Interpretation. *Journal of Applied Psychology,* **62** (4)**,** 480-486.

PARASURAMAN, A., et al. (1993) More on Improving Service quality Measurement. *Journal of Retailing,* **69** (1)**,** 140-147.

PARASURAMAN, A., et al. (1985) A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing,* **49** (4)**,** 41-50.

PARASURAMAN, A., et al. (1988) SERVQUAL: A Multiple-Item Scale For Measuring Consumer Perceptions of Service Quality. *Journal of Retailing,* **64** (1)**,** 12-40.

PARASURAMAN, A. A., et al. (1991) Refinement and Reassessment of the SERVQUAL Scale. *Journal of Retailing,* **67** (4)**,** 420-450.

PORTER, M. E. and TEISMAN, E. O. (2006) *Redefining Health Care. Creating Value-Based Competition on Results.* Boston, Massachusetts: Harvard Business School Press.

PRAHALAD, C. K. and RAMASWAMY, V. (2004) Co-creation experiences: the next practice in value creation. *Journal of Interactive Marketing,* **18** (3)**,** 5-14.

PRAKASH, V. (1984) Validity and Reliability of the Confirmation of Expectations Paradigm As a Determinant of Consumer Satisfaction. *Journal of the Academy of Marketing Science,* **12** (4)**,** 63-76.

PROCTOR, S. and WRIGHT, G. (1998) Mission Impossible ? Making Sense of the Key Debates in the Service Quality Literature. *Journal of Nonprofit & Public Sector Marketing,* **6** (1)**,** 3-29.

RADEMAKERS, J., et al. (2008) De constructie van een CQI meetinstrument: ervaringen uit de praktijk. *Tijdschrift voor Gezondheidswetenschappen,* **86** (8)**,** 447-454.

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,* **27** (3)**,** 57-63.

ROBSON, C. (2002) *Real World Research.* Oxford: Blackwell Publishing.

ROES, T. (2008) De Babyboomgeneratie revisited. In: DEKKER, P., et al. (Eds.) *lls kn krtr.* Den Haag: Éditions Dix-sept Juillet.

ROEST, H. and PIETERS, R. (1997) The nomological net of perceived service quality. *International Journal of Service Industry Management,* **8** (3-4)**,** 336-351.

RUDESTAM, K. and NEWTON, R. (2007) *Surviving Your DissertationA Comprehensive Guide to Content and Process.* Thousand Oaks: Sage Publications, Inc.

RUSSELL, C. (1999) Interviewing vulnerable old people: Ethical and methodological implications of imagining our subjects. *Journal of Aging Studies,* **13** (4)**,** 403-417.

RUST, R. T. and OLIVER, R. L. (1994) *Service Quality; New Directions in Theory and Practice.* Thousand Oaks, California: SAGE Publications.

SANTOS, J. and BOOTE, J. (2003) A theoretical explanation and model of consumer expectations, post-purchase affective states and affective behavior. *Journal of Consumer Behaviour,* **3** (2)**,** 142-156.

SHOSTACK, G. L. (1977) Breaking Free from Product Marketing. *Journal of Marketing,* **41** (2)**,** 73-80.

SOCIAAL ECONOMISCHE RAAD (2008) *Langdurige zorg verzekerd: over de toekomst van de AWBZ.* Den Haag: Sociaal Economische Raad.

SPRENG, R. A. and MACKOY, R. D. (1996) An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing,* **72** (2)**,** 201-214.

STEFFEN, T. M. and NYSTROM, P. C. (1997) Organizational determinants of service quality in nursing homes. *Hospital & Health Services Administration,* **42** (2)**,** 179-191.

SVENSSON, G. (2006) New aspects of research into service encounters and service quality. *International Journal of Service Industry Management,* **17** (3-4)**,** 245-257.

TATE, M. and EVERMANN, J. (2010) The End of Servqual in Online Services Research: Where from here ? *e-Service Journal,* **7** (1)**,** 60-85.

TEAS, R. K. (1993) Expectations, Performance, Evaluation, and Consumers' Perception of Quality. *Journal of Marketing,* **57** (4)**,** 18-34.

VAN IWAARDEN, J., et al. (2003) Applying SERVQUAL to Web sites: an exploratory study. *International Journal of Quality & Reliability Management,* **20** (8)**,** 919-935.

VAN LEEUWEN, S. (2006) Sterk merk succesfactor voor zorgaanbieders! *ZM Magazine,* **4** (2)**,** 2-5.

VANDAMME, R. and LEUNIS, J. (1993) Development of a Multiple Item Scale for Measuring Hospital Service Quality. *International Journal of Service Industry Management* **4,** 30-49.

VARGO, S. and LUSCH, R. (2004) The Four Service Marketing Myths: Remnants of a Goods-Based Manufacturing Model. *Journal of Service Research,* **6** (4)**,** 324-335.

VARGO, S. L. and AKAKA, M. A. (2009) Service-Dominant Logic as a Foundation for Service Science: Clarifications. *Service Science,* **1** (1)**,** 32-41.

VARGO, S. L., et al. (2008) On value and value co-creation: A service systems and service logic perspective. *European Management Journal,* **26,** 145-152.

VENNIX, J. (1996) *Group Model Building.* Chichester: Wiley.

WAGNER, C., et al. (2001) The effectiveness of quality systems in nursing homes: a review. *Quality in Health Care,* **10** (4)**,** 211-217.

WANG, W.-L., et al. (2007) Research into care quality criteria for long-term care institutions. *J Nurs Res,* **15** (4)**,** 255-64.

WOITTIEZ, I., et al. (2009) *Vergrijzing, Verpleging en Verzorging Ramingen, profielen en scenario's 2005-2030.* Den Haag: Sociaal Cultureel Planbureau.

WÖLFL, A. (2005) *The Economy of the Services Sector in OECD Countries in Enhancing the Performance of the Services Sector.* Paris: Organisation for Economic en Co-operation and Development (OECD).

WOODBURY, R. S. (1960) The Legend of Eli Whitney and Interchangeable Parts. *Technology and Culture,* **1** (3)**,** 235-253.

WORLD HEALTH ORGANIZATION (2001) *World Population Ageing 1950-2050.* New York: United Nations Publications.

YORK, J. L. and CASLYN, R. J. (1977) Family Involvement in Nursing Homes. *The Gerontologist,* **17** (6)**,** 500-505.

ZEITHAML, V., et al. (1993) The Nature and Determinants of Customer Expectations of Service. *Journal of the Academy of Marketing Sciences,* **21** (1)**,** 1-12.

ZEITHAML, V. A., et al. (1985) Problems and Strategies in Services Marketing. *Journal of Marketing,* **49** (2)**,** 33-46.

ZEITHAML, V. A., et al. (1990) *Delivering Service Quality Balancing Customer Perceptions and Expectations.* New York: The Free Press.