Service quality in the hotel sector and the influence of personality traits
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Abstract

Introduction
Superior service quality enables a hotel to differentiate itself from its competition and gain a competitive advantage and enhance efficiency (Mei et al., 1999; Kandampully and Suhartanto, 2000; Gounaris et al., 2003). The benefits of service quality are demonstrated in several studies: increased customer satisfaction, improved customer retention, positive word of mouth, reduced staff turnover, decreased operating costs, enlarged market share, increased profitability and improved financial performance (Rust and Zahorik, 1993; Cronin et al., 2000; Kandampully and Suhartanto, 2000; Duncan and Elliott, 2002; Sureshchandar et al., 2002; Gounaris et al., 2003; Kang and James, 2004; Yoon and Suh, 2004).

The influence of personality traits on the experienced service quality has been subject of research in other hospitality sectors. A few studies are performed in the health care sector (Hendriks et al. 2006 and Mavidis, 2001). Both studies showed a small or marginal influence of agreeableness on the experienced service. One study showed also a small influence of conscientiousness. The influence of personality traits is also demonstrated in the studies of Vázquez-Carrasco et al. (2006) & John (2003) amongst hairdressers.

The influence of personality traits on the experienced service quality in the hotel sector has not been subject of research before. On basis of above mentioned studies, we expected a small influence of the personality traits on the experienced service quality.

This study investigates the influence of personal traits on the experienced service quality of customers in the hotel sector. This will be important information for the hotel management. If this is the case they can develop specialized programs for customers with specific personal traits. Hotels can differentiate themselves from the competitors and gain a competitive advantage.

Methodology and results
A three-section self-administered questionnaire was developed to collect the data of visitors who visit a hotel. The questionnaire was posted online, a webpage linkage allowed the target population to access the online survey. The data is obtained via convenient sampling.

Request to 222 people were send to complete the questionnaire. In total 127 questionnaires were completed. This means a response rate of approx. 57.2%. The influence of snow baling is limited. From the 127 questionnaires, 124 were usable due to missing data in 3 respondents.

The statistical analysis results in a revised model. The influence of personality traits on two dimensions of experienced service quality is demonstrated. The results of this study are shown in figure 1.
Conclusions and recommendations
On basis of this study we can conclude that there is a significant influence of the personality traits agreeableness & conscientiousness on the dimension tangibles of experienced service quality. There is also a significant influence of the personality traits agreeableness & extraversion on the dimension responsiveness of experienced service quality.
The significant relation of the personality traits agreeableness & conscientiousness on tangibles and the significant influence of agreeableness on responsiveness are in line with other studies in the hospitality industry (Hendriks et al. 2006 and Mavidis, 2001).

The correlation between tangibles and the personality traits agreeableness & conscientiousness is weak. This is also the case for responsiveness and the personality traits agreeableness & extraversion: 10.9% of the variance of tangibles and 13.2% of the variances of responsiveness are predicted by the mentioned personality traits.

We could not find a study which describes the influence of extraversion on the dimension responsiveness of service quality. Taking the asked questions to measure responsiveness into considering (see appendix 3), we can imagine that extravert people which are more focused on other people and hence more likely to have contact with employees of the hotel, answer these questions other than introverts.

For measuring the experienced service quality, we used the survey instrument of Olorunniwo (2006). The reliability and the validity of the constructs Olorunniwo found during his research, are better than the values we found. There are no apparent reasons for this difference. For future research we recommend to develop a reliable survey instrument to measure service quality in the hotel sector. This model should also take the findings of Dabholkar et al. (2000) into consideration who demonstrates that the antecedent model is superior to the component model.

This study has an explorative character and was based on convenient sampling. For future research we recommend to limit the scope to a specific or some specific hotels. It is important to obtain sufficient number of respondents in line with the sampling procedures of P.E. Green et al. (1988).

A remarkable finding is the significant correlations between some of the personality traits. According to the literature there should be no significant influence between the personality traits. A possible cause is that the respondents have wrongly interpreted some questions.

Concluding, service quality is very important for a hotel, because superior service quality enables a hotel to differentiate itself from its competition and gain a competitive advantage and enhance efficiency (Mei et al., 1999; Kandampully and Suhartanto, 2000; Gounaris et al., 2003). The benefits of service quality are demonstrated in several studies. Therefore we recommend that the branch organization of the hotel sector puts effort in the development of a reliable and widely supported model for measuring the service quality and study the antecedents.
Chapter 1 Research Scope

1.1 Motive and relevance of the research

Most people spend a night in a hotel or had a lunch or dinner in a hotel. The hotel sector is an area where nearly everyone has experience with or has a picture of. A lot of scientific research is already performed in this sector (Ling-Feng Hsieh, 2008; Senga Briggs, 2007; Rooma Roshnee Ramsaran-Fowdar, 2006; Riadh Ladhari, 2009; María Elisa Alén González, 2007). Although the influence of personality traits on satisfaction and service quality has been reported in the health care sector, hairdressers and airline industry (Rosario Vázquez-Carrascoa, Gordon R. Foxall, 2006; John Gountas, Sandra Gountas, 2006; Anastasia Mavidis, 2001; Jeannie Denise John, 2003), there is scant attention for the influence of personality traits in satisfaction and service quality in the hotel sector.

The hotel sector is part of the service industry (tertiary sector of the economy). Especially in the developed countries a service-dominated industry is characteristic. Within the service industry, the hotel sector is part of the hospitality sector. In 2007, the hotel sector in The Netherlands provided employment for 519,500 employees (290,300 full time jobs) and had a turnover of 16.6 billion Euros (CBS, 2007).

Good service quality is very important for a hotel. Superior service quality enables a hotel to differentiate itself from its competition and gain a competitive advantage and enhance efficiency (Mei et al., 1999; Kandampully and Suhartanto, 2000; Gounaris et al., 2003). The benefits of service quality are demonstrated in several studies: increased customer satisfaction, improved customer retention, positive word of mouth, reduced staff turnover, decreased operating costs, enlarged market share, increased profitability and improved financial performance (Rust and Zahorik, 1993; Cronin et al., 2000; Kandampully and Suhartanto, 2000; Duncan and Elliott, 2002; Sureshchandar et al., 2002; Gounaris et al., 2003; Kang and James, 2004; Yoon and Suh, 2004).

The influence of personality traits on satisfaction, service quality and repurchase intention has been investigated in several service contexts: hairdressers, (Rosario Vázquez-Carrascoa, Gordon R. Foxall, 2006; Jeannie Denise John, 2003), airline industry (John Gountas, Sandra Gountas, 2006) and the health care industry (Anastasia Mavidis, 2001). The research findings support the influence of personality traits on satisfaction, service quality and repurchase intention. This study aims to analyze the same relationship, this time as a replication study for the hotel sector. Understanding the customer personality can also help to specialize and individualize attention to the different needs of the customers and to segment customers in order to improve satisfaction, service quality and repurchase intention. This can also be of importance for the hotel sector.

This study investigates the influence of personal traits on the experienced service quality by visitors in the hotel sector. This is a new point of view and not object of research before. If personal traits have an influence on the experienced service of clients, it will be important information for the hotel management. In order to serve their customers optimally, they can develop specialized programs for customers with specific personal traits. Hotels can differentiate themselves from the competitors and gain a competitive advantage.

1.2 Research questions

The main research question of this study is: what is the influence of personality traits on the experienced service quality of clients in the hotel sector?
Out of this main research question, the following questions are derived:
What is service quality (§2.1)?
Which factors influence the service quality (§2.2)?
Which models are used for measuring service quality (§2.3)?
What are the personality traits (§2.4)?

1.3 Overview
In chapter 2, a literature research has been performed to obtain preliminary answers on the research questions. Hypotheses are developed. In chapter 3, the methodology of data collection is discussed and the used questionnaires are explained. Chapter 4 displays the results, chapter 5 deals with the discussion, implications, the limitations and recommendations for further research.
Chapter 2 Literature study

2.0 Introduction
The hospitality industry or the service sector is a people industry (Kim et. al., 2007, p. 421). Every human is unique and has his own personality traits. Personality traits can influence the experienced service. If a service provider take these personality traits into consideration, it can have a positive influence on the experienced service. If this is the case, a service provider can differentiate himself from competitors by segmenting customers on basis of personality traits.
2.1 What is service quality?

Service quality differs from quality of goods. Knowledge of quality in the goods sector is not sufficient to understand quality in the service sector. Following differences can be distinguished:

1) Service quality is intangible (Zeithaml, 1981).
2) Services are heterogeneous (Booms and Bitner, 1981).
3) Production and consumption of many services are inseparable (Carmen and Langeard, 1980).

In the hotel sector, service quality is partial intangible and therefore more difficult to judge than goods quality. The tangible aspects are limited to physical facilities, equipment and personnel.

Some authors defined service quality as consisting of other quality levels. Lehtinen et al. (1994), distinguish physical, interactive and corporate quality. Grönroos (1994) classifies service quality into technical and functional quality.

Ramsaran-Fowdar (2006) defines service quality as the quality possessed by both products and service activities that are provided by a service organization to its customers.

In this study we use the definition of Parasuraman (1988) as guide: service quality as the degree and direction of discrepancy between customer’s perceptions and expectations. This definition is widely accepted in the literature (Grönroos, 1984; Lewis and Booms, 1983) and based on the disconfirmation model of Oliver’s (1980).

Service quality can be measured as the gap between expectations and perceptions. The smaller the gap, the better the quality of the service and the greater the customer satisfaction.
2.2 Which factors influence the service quality?

2.2.1 General remarks
Service quality is influenced by several factors. For evaluating these factors following points of interest play a role:

1) Grouping variables
2) Social background
3) Level of attention & degree of importance
4) Prospect theory
5) Facilities of hotels
6) Ranking of variables
7) Are the factors of service quality components or antecedents

1) Grouping variables
A customer perceives individual elements of a service in the broader context in which the service is consumed. The perception of the quality of a meal in a restaurant is influenced by the quality of the waiters and the ambiance of the restaurant. Assael (1992) suggested that customers are more likely to receive a variety of information as a whole rather than as separate units. They do not see service quality as the sum of lots of pieces of a pie. They see the pie as a whole. This process allows comparisons to be made on, for example, similar products.

2) Social background
How a customer experience a service encounter is dependent on their sociological background and psychological make-up. No two people will see the same event in the same way. This is called schemata and is culture bound. Wikipedia: “A schemata, in psychology and cognitive science, is a mental structure that represents some aspect of the world. This learning theory views organized knowledge as an elaborate network of abstract mental structures which represent one's understanding of the world. People use schemata to organize current knowledge and provide a framework for future understanding”. Past experience predisposes an individual to behave in certain ways rather than others (Woodworth and Schlosberg, 1960).

3) Level of attention & degree of importance
Individuals are declined to pay most attention to stimuli that appeal to relative strong motives (Beresford Dew and Gee, 1973). A hungry person will give greater importance to the stimulus of a meal than somebody who has recently eaten.

When motivation towards a goal is low, involvement or degree of importance is low. It is the view or importance of the consumer; it is not the property of the product or service. Involvement or degree of importance is a reflection of consumer’s commitment to a particular products or service (Assael, 1992).

4) Prospect theory
The prospect theory or choice theory is developed by Kahneman and Tversky (1979). This theory described how individuals form decisions and how they react the losses and gains. The prospect theory argues that:

a) Individuals’ judgments show reference dependence: changes relative to a reference point.
b) Individuals have a loss aversion: negative changes are more heavily weighted than positive changes.
c) Diminishing sensitivity: marginal values of both gains and losses decrease with their size.
Above mentioned points, results in an asymmetric S-shaped value function: see figure 2. In this context, receiving a good has a much smaller valuation than losing the same good. This can also be applied to customer satisfaction or service quality: negative performance on an attribute should have a greater impact on overall satisfaction that the same magnitude of positive performance on that attribute (Mittal et al., 1998). Later studies defined three categories of service of product attributes (Anderson & Mittal, 2000; Matzler & Sauerwein, 2002; Oliver, 1997): basic, excitement and performance factors. Basic factors (dissatisfiers) are minimum requirements; basic factors causes dissatisfaction if not fulfilled; they do not lead to customer satisfaction if fulfilled. Excitement factors (satisfiers) surprises the customer; they are not expected; they do not cause dissatisfaction if not delivered; they cause satisfaction if delivered. In this case positive perception is more heavily weighed than a negative perception. Performance factors leads to satisfaction if performance is high and to dissatisfaction if performance is low.

5) Facilities hotel
Hotels provide facilities for business transactions, conferences, meetings and for recreation and entertainment. According to Hall (1995), accommodation is one of the more critical components of the demand side. Accommodation has a major influence on the type of visitors who come to the destination.

6) Ranking of factors
Several studies shows that not all factors are evaluated by customers as equally important. In the study of Lewis (2004) for example, the respondents place following factors in degree of importance, which they expect in three- & four-star hotels:
   a) Clean, comfortable bedrooms with all items working in good order
   b) Good quality food and beverages.
   c) Friendly, helpful, polite and efficient staff.
   d) High level of room security.
   e) Speedy, efficient check-in and out.
The ranking is similar for business and leisure quest.
2.2 Which factors influence the service quality?

7) Are the factors of service quality components or antecedents?

Grönroos (1978) and Parasuraman et al. (1988) have treated the factors of service quality as components of service quality. A lot of studies are based on the models proposed by Grönroos (1978) and Parasuraman et al. (1988) and have also treated the factors of service quality as components of service quality. In this view, service quality is not a separate construct, but rather a sum of the components: “an overall measure of quality (can be obtained) in the form of an average score across all five dimensions” (p. 31, Parasuraman, Zeithaml and Berry, 1988). To measure service quality all items related to the factors must be measured.

In case the factors of service quality are considered as antecedents, customers evaluate the different factors, but form a separate overall evaluation of the service quality. It is not necessary to measure all factors in order to measure the overall service quality. For predictive purposes, it is also possible to measure the overall evaluation of the service quality and do so regularly. Dabholkar et al. (2000) performed a study to factors as components versus antecedents. Their results clearly show support for factors acting as antecedents of service quality. This is also in line with the study of Wilkins et al. (2007).

Customers do not see service quality as a sum of the components. Customers evaluate the components of service quality, but also form a separate overall evaluation of the service quality. An advantage of the antecedent’s model is that it is possible just to measure the overall satisfaction, without measuring all the components. This is helpful to get an overall impression of the service quality. According to Wilkins et al. (2007): customers do not see service quality as the sum of lots of pieces of a pie; they see the pie as a whole. This is also in line with the findings of Assael (1992).

2.2.2 Service quality dimensions / factors of SERVQUAL

The SERVQUAL instrument has attracted a lot of attention among researchers of service quality. The SERQUAL model is developed by Parasuraman et al. (1985). It is based on the gap model: the gap between customers’ expectations and their perceptions of actual performance drives the perception of service quality. The original SERVQUAL model (1985) contains 10 key categories / factors of service quality. See appendix 1 for a complete overview.

The revised SERVQUAL model (Parasuraman et al., 1991, 1994) contains five dimensions / factors of service quality. The five service dimensions / factors consist of 22 items for expectation and perception: see figure 3. The five dimensions are:

a) Tangibles: the physical surroundings represented by objects (for example interior design) and subjects (for example the appearance of employees).
b) Reliability: the service provider’s ability to provide accurate and dependable services.
c) Responsiveness: a firm’s willingness to assist its customers by providing fast and efficient service performances.
d) Assurance: several features that provide confidence to customers (such as the firm’s specific service knowledge and polite and trustworthy behavior from employees)
e) Empathy: the service firm’s readiness to provide each customer with personal service

For a detailed survey of the SERVQUAL dimensions / factors with the 22 items, see appendix 2

The SERVQUAL model is originally tested in the retail banking, credit card, securities brokerage, and product repair and maintenance (Parasuraman, 1985). The consideration was that this model could act as a framework for service quality, also applicable for other areas & industries.
2.2 Which factors influence the service quality?

2.2.3 Attributes / factors for the hotel sector

The SERVQUAL instrument is also tested in the sector. Akan (1995) tested the SERVQUAL instrument in the hotel sector in Istanbul. He used a questionnaire with open-ended questions and a revised list from the SERVQUAL instrument. His list contains 30 attributes of service quality. These attributes are divided in three groups:

1) The Hotel: exterior appearance; interior appearance; furniture; ease of access; name/image; products offered for use (soap, shampoo, sheets and towels).

2) The personnel: knowledge and training; experience; physical appearance; understanding; friendliness; respect; speaks well.

3) The service process: accuracy of reservations; accuracy of food orders; accuracy in billing; prompt service; information about hotel services; advance information about prices; anticipating customers’ needs; recognizing the customer; calling the customer by name; giving special attention to the customer; listening to and understanding the customer; giving information that is easy to understand; speed of transactions; ease of access to the personnel; listening to complaints; solving problems; offering the service the way customer wants.

Akbaba (2006), tested the SERVQUAL instrument in a business hotel in Turkey. In this study the 5 dimensions of the SERVQUAL model are adapted for the specific context. The five service quality dimensions identified in this study were tangibles, adequacy in service supply, understanding and caring, assurance, and convenience.

In the study of Hokey Min and Hyesung Min (1996) a different approach is used. They used competitive benchmarking as a service improvement tool. On basis of this approach, the determinants/factors for service quality are grouped in overall room values and front-office...
services. They performed their study in luxury hotels in Seoul (South Korea). The overall room values are divided into seven different categories: cleanliness, atmosphere, comfort, quality and sufficiency of room fixtures (e.g. towels, hangers, hair drier), size of a guest room, price. The front-office services are also divided into seven different categories: courtesy (involves politeness and friendliness of hotel staff and other contact personnel), recovery from service failures (e.g. handling of complaints), responsiveness such as convenience of reservation, promptness of check-in/check-out, and hotel/tour guide information, and tangibles such as variety/quality of sports/recreational facilities (e.g. swimming pools, and aerobic exercise rooms) and efficiency of a business centre (e.g. fax machines, personal computers, and copiers).

Mr. Brady and Mr. Cronin (2001) did also a study on the attributes/sub dimensions of service quality. They developed their own research model. In their model the following attributes/factors are used: attitude, behavior, expertise as attributes/sub dimension of interaction quality; ambient conditions, design and social factors as attributes/sub dimension of physical environment quality; waiting time, tangibles and valence as attributes/sub dimension of outcome quality.

On basis of these studies we can conclude that there is not a standard list of attributes / factors which are applicable for the hotel sector. The attributes / factors are tested and established in the specific context of the applicable study. In this study we use a revised version of the SERVQUAL instrument.
2.3 Which models are used for measuring service quality?

There is not a general accepted model for measuring service quality. The most accepted model is the Service Quality model or Gap Model.

Several models are used and developed for research in the hotel sector:
2) Two- and three-dimensional quality approach: Lehtinen et al. (1991); Rust and Oliver’s (1994); Grönroos (1984).
5) HOLSERV: Mei et al. (1999).

The revised gap model is the most used model for research in the hotel sector. Also for our research we will use a revised version of the gap model.

2.3.1 Expectation disconfirmation theory and the gap model

The Gap model is based on the expectation disconfirmation theory. This theory is developed by Oliver (1980) and is widely accepted. A lot of service quality models are based on this theory. According to this theory, customers purchase goods and services with pre-purchase expectations about expected performance. Once the product or service has been purchased and used, outcomes are compared against expectations. When outcome matches expectations, confirmation occurs. Disconfirmation occurs when there are differences between expectations and outcomes. Negative disconfirmation occurs when product/service performance is less than expected. Positive disconfirmation occurs when product/service performance is better than expected. Satisfaction is caused by confirmation or positive disconfirmation of consumer expectations and dissatisfaction is caused by negative disconfirmation of consumer expectation.

2.3.2 The gap model and the SERVQUAL instrument

The gap model is developed by Parasuraman et al. (1985, 1988, 1991) as a model for measuring service quality. The gap model has emerged as the most popular measurement approach of service quality. The service quality can be measured by identifying the gaps between customers’ expectations of the service and their perceptions of the actual performance of the service. In total 5 gaps can be considered. See figure 4 (by Parasuraman et al.,1985):

Gap 1 – The position gap
Difference between customer’s expectations and management perceptions of those expectations. Failure by management to interpret customers accurately can result in loss of business.

Gap 2 – The specification gap
Difference between what management believes customers want and the firm’s service quality specifications. Customer’s expectation should be converted into appropriate service standards.

Gap 3 – The delivery gap
Service delivered does not comply with not comply with the specifications set by the management. Due to the fact that the work is highly labour intensive, the hotel sector is particularly susceptible for this cap.

Gap 4 – The communication gap
Discrepancy between the externally communicated promises in advertising campaigns, public relations, marketing promotions and customers experiences.

**Gap 5**
Gap between the expected service quality and the perceived service quality; depends on the nature of gap 1, 2, 3 & 4. To manage gap 5, the other 4 gaps (1, 2, 3 & 4) should be minimized.

For measuring service quality, Parasuraman et al (1988, 1991), developed the SERVQUAL instrument. The original SERVQUAL instrument has 10 determinants of service quality. The revised instrument (1988, 1994) has 5 determinants and 22 items (appendix 1). SERVQUAL is a two-part instrument developed for measuring service quality: 22 questions about the expected service quality (expectations) and 22 questions about the perceived service quality (perceptions). The model is originally tested in the retail banking, credit card, securities brokerage, product repair and maintenance. These service categories represent a cross-
section of the service industry. Due to the fact that the commonalities prevailed, there was hope that a general model of service quality could be developed.

2.3.3 SERVPERF versus SERVQUAL

SERVPERF is based on measurement of the service quality via performance-only measurement. This in contrast to SERVQUAL which is based on measurement of the service quality via measurement of customer expectations and perceptions.

Despite its popularity, SERVQUAL has received criticism since its development. A main point of criticism is measuring of expectation. Expectation is dynamic in nature and may change according to customer’s experiences and consumption situations. SERVQUAL defines service quality as the gap between expectations and perceptions. This leads to the strategic implication that companies can try either to increase perceptions or lower expectations of consumers to increase overall service quality.

Teas (1994) points out that some validity problems arise when customer expectation is used as a comparison standard. Especially when the expectation is measured after or even simultaneously with the service experience, the measured expectation can be biased by the experience. Those biased results might be understated if the customer has a negative experience and might result in a smaller difference between expectations and perceptions than otherwise would be the case. The same can be happen in case of a positive experience. It is possible to perform the expectation measurements before the actual service is provided. But it is also possible that the expectations changes during the service encounter.

In general, when people are asked to indicate an expected level and an existing level they seldom rate the expected level lower than the existing level (Yüksel et al, 1998). Respondents may feel motivated to demonstrate have-high-expectations social norms and also indicate that they desire the maximum amount of quality on every attribute. The level of expectations, therefore, may exceed the experienced or existing level for no other reason than guests’ tendency to proclaim high expectations.

The negative empirical findings concerning the measurement of expectations led to some doubt about its value. Some scholars maintain that measurement of expectations does not provide unique information for estimating service quality; they argue that performance-only assessment has already taken into account much of this information (Cronin and Taylor, 1992; Babakus and Boller, 1992). In general, previous studies would recommend that performance-only measurement is sufficient. This is also supported by Cronin and Taylor (1994), Teas (1994), Dabholkar et al. (2000) and Boulding et al. (1993).

Dabholkar et al. (2000) performed also research in measuring service quality. They measured service quality via cross sectional design & longitudinal design. In the longitudinal design the expectations are measured before the service delivery is delivered and the perceptions are measured after service delivery. In the cross sectional design the expectations and perceptions are measured simultaneously after the service delivery. They found that measurements via cross sectional design (direct measurement) are superior to longitudinal design (computed measurement). Direct measures of disconfirmation are preferred over different scores computed from expectations and perceptions measured separately.

Based on above mentioned research, we will use in our study performance-only measurements (SERVPERF).
2.4 What are personality traits?
A definition of personality traits is given by Jude and Cable (1997): “Personality traits are individual’s stable, even innate mental structures which provide general direction for their choices and behavior”. This definition implies that personality traits influence choices and behavior.

Personality traits refer to stable individual differences in the way people act, react, how they feel and how they perceive the world. These differences are associated with how people function in a wide variety of life domains such as work, family, health and leisure (Soldz S, Vaillant GE, 1999).

In some areas research is performed between the relationships of personality differences and consumer behavior: health care (A. A. J. Hendriks, a.o., 2006), airline industry (Gountas, J., Gountas, S., 2007), hair dressers (Vázquez-Carrasco, R., Fox, G. R., 2006).

We found no study in the hotel sector concerning the relationships between personality differences and consumer behavior. This study investigates the influence of personal traits on the experienced service quality in the hotel sector.

2.4.1 Five-Factor Model
The five factor model describes personality on basis of five (5) basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience.

A lot of research had been performed to define the basic dimensions of personality. Instead of resolving the issue, the research created another layer of controversy. Tubes and Christal (1961) found five recurrent factors in analysis of personality ratings in eight different samples: “In many ways it seems remarkable that such stability should be found in an area which to date has granted anything but consistent results. Undoubtedly the consistency has always been there, but it has been hidden by inconsistency of factorial techniques and philosophies, the lack of replication using identical variables, and disagreement among analysts as to factor titles.”

The five basic dimensions and a list of factor definers are listed in table 1 (Robert R. McCrae, Oliver P. John, O. P., 1992).

Another name for the Five-Factor model is the term Big Five. The Five-Factor model have been more commonly associated with studies of traits using personality questionnaires. The Big Five was originally associated with studies of personality traits used in natural language. Nowadays the terms are often used interchangeably.

The Five-Factor model was derived from statistical analyses of which traits tend to co-occur in people’s descriptions of themselves or other people. Not all aspects of personality are included in the Five-Factor model. Motivations, emotions, attitudes, abilities, social roles and life stories are just a few other items that are not specifically included in the Five-Factor model. Some of these items may have theoretical or empirical relationships with the Five-Factor model, but they are conceptually distinct. The personality traits prescribed in the Five-Factor model can only be considered as a partial description of a personality.
2.4 What are personality traits?

Trait or factor theory defines personality as a set of specified traits of factors. A trait is a construct that relates to persistent qualities in human behavior. The concept of traits of factors can be quantitatively measured and has led to the development of hundreds of personality traits by psychologists (Villani & Wind, 1975).

On basis of these traits several instruments for measuring personality traits are developed:
1) The Myers-Briggs Type Indicator (MBTI; Myers & McCaulley, 1985).
2) 100-item IPIP (International Personality Item Pool; Goldberg, L. R., 1992)
3) 40 Big Five mini-markers (Saucier, G., 1994)
4) NEO PI-R, 240 item inventory (Paul Costa and Jeff McCrae)
5) NEO Five-Factor Inventory, 50 item inventory, truncated version of the NEO PI-R (NEO-FFI; McCrae & Costa, 2004).
6) Ten Item Personality Inventory (Gosling, S., a. o., 2003).
7) The 60 item inventory of Van der Heijden (2005).
Villani & Wind (1975) investigated several modified instruments used for measurement of personality traits. The results of the study indicated that modified instruments can be reliable instruments with regard to the original tests. Modified instruments, often shorter versions of the original instruments, offer a very useful practical device in consumer research. This is in line with the research of Saucier (1994).

2.4.3 Instrument used for this research
As stated in §2.4, there are several instruments for measuring personality. Some of them are very extensive and commercially controlled, as the NEO PI-R & NEO Five-Factor Inventory. For this study we need a brief instrument with a high reliability and validity. The 60 item inventory of Van der Heijden (2005) satisfies these requirements and is not commercially controlled. For this study we use this 60 item inventory.

2.4.4 Results other studies, hypothesis and research model
Hendriks et al. (2006) performed a study about health care in a hospital. They researched if personality is a determinant of patient satisfaction with hospital care. They held their survey at six hospital wards at the Academic Medical Center (AMC) in Amsterdam. For determination of the personality traits they use the Five-Factor Model. On basis of their research they concluded that agreeableness significantly predicted patient satisfaction in about half of the scales. After controlling for shared variance with age and educational level, the unique contribution of agreeableness shrank to a maximum of 3–5% explained variance. When one outlier was dropped from the analysis, the contribution of agreeableness was no longer statistically significant. Patient satisfaction seems only marginally associated with personality, at least at the level of the broad Big Five dimensions.

Mavidis (2001) performed also a study in the health care in hospital. She researched the advocacy intentions of the patients in relationship to service quality, satisfaction and personality with a surgical experience. She performed her research in the Shouldice hospital in Canada. This hospital is specialized in hernia repair. For determination of the personality traits, she used the 40 Big Five mini-markers. Based on this research, she concluded that patients who exhibited Conscientiousness and Agreeableness showed the highest intentions of talking about their service experience. Patients who exhibited Extraversion, Openness to Experience and Neuroticism showed no relationship.

Vázquez-Carrasco et al. (2006) performed a study amongst hairdressers. They researched the influence of personality traits on satisfaction, perception of relational benefits, and loyalty. As personality traits they used need for social affiliation, consumer relationship proneness and need for variety. The results indicate that the perception of relational benefits leads to a higher satisfaction and passive loyalty. Need for social affiliation is a strong determinant of relational benefits, active loyalty and consumer relationship proneness. This latter trait influences the perception of relational benefits along with passive loyalty. Need for variety has a direct negative influence on consumer relationship proneness.

John (2003) performed also a study amongst hairdressers. She researched the effects of employee service quality provision and customer personality traits on customer participation, satisfaction and repurchase intentions. She use two (2) personality trait scales: self monitoring (low/high) & locus of control (internal/external). This study suggests that repurchase intention could be influenced by a customer’s combined self-monitoring and locus of control traits. Future research is required to explore this more in detail.
Gountas et al. (2007) performed a study in the airline industry. They researched the personality orientations, emotional states, customer satisfaction, and intention to repurchase. In their study they used following personality traits: the thinking or logical, the feeling or emotional, the material or physical and the intuitive or imaginative. Their research findings suggest a direct relationship between the consumers' personality orientation, emotional characteristics and self-reported satisfaction of the service experience.

On basis of these studies we expect that personality traits will have following influence on the experienced service quality:

**Hypothesis 1a**
Agreeableness of the Five Factor model will have a significant influence on the experienced service quality (Hendriks et al., 2006, Mavidis, 2001).

**Hypothesis 1b**
Conscientiousness of the Five Factor model will have a significant influence on the experienced service quality (Mavidis, 2001).

**Hypothesis 2a**
Extraversion of the Five Factor model will not have a significant influence on the experienced service quality (Hendriks et al., 2006, Mavidis, 2001).

**Hypothesis 2b**
Neuroticism of the Five Factor model will not have a significant influence on the experienced service quality (Hendriks et al., 2006, Mavidis, 2001).

**Hypothesis 2c**
Openness of the Five Factor model will not have a significant influence on the experienced service quality (Hendriks et al., 2006, Mavidis, 2001).

See figure 5 for the research model used for this study.
Chapter 3 Methodology

3.0 Data collection method

The used methodology for data collection is an important aspect of research study. Inaccurate data collection can impact the results of a study and ultimately lead to invalid results.

Data collection methods can be divided in Quantitative methods and Qualitative methods. Examples of Quantitative methods are experiments, obtaining relevant data from management information systems, surveys with closed-ended questions (e.g. face-to face and telephone interviews, questionnaires etc). Examples of Qualitative methods are in-depth interviews, observation methods and case studies. Every method has his specific application area and advantages and disadvantages.

For testing our hypothesis, a quantitative method of data collection is most appropriate. In this study a survey based on questionnaires is used. Advantages of questionnaires are that they can be posted, e-mailed or faxed, can cover a large number of people, wide geographic coverage, relatively cheap, no prior arrangements are needed, avoids embarrassment on the part of the respondent, possible anonymity of respondent and no interviewer bias. Disadvantages are design problems, questions have to be relatively simple, possible low response rate, time delay whilst waiting for responses to be returned, not possible to give assistance if required and incomplete questionnaires.
3.1 The survey instrument

Data was obtained by conducting a cross-sectional survey. A three-section self-administered questionnaire was developed to collect the data of visitors of a hotel. The questionnaire was posted online, a webpage linkage allowed the target population to access the online survey. Data was obtained via convenient sampling. Per e-mail are acquaintances and business contacts invited to participate in this questionnaire.

The first section of the questionnaire is based on the personality traits of the 60 item inventory of Van der Heijden et al. (2005).

The second section of the questionnaire is designed to measure the service quality. Our questionnaire is based on the questionnaire developed by Olorunniwo (2006). This questionnaire is based on perceptions only measurements (SERVPERF), designed for the hotel sector and has taken the Schmenner’s (1986) classification of the service industry into consideration. This questionnaire is a revised version of the 22 questions of the SERVQUAL instrument.

The questionnaire developed by Olorunniwo (2006) covers most items which are considered as important items/aspects of the hotel by other researchers: cleanliness has often been placed as most important (Callanand Bowman, 2000; Knutson, 1988; Lockyer, 2002; Weaver and McCleary, 1991; Weaver and Oh, 1993). Weaver and McCleary (1991) reported that over 90% of business travellers ranked cleanliness as the most important aspect; comfortable beds and rooms and good quality towels (Knutson, 1988; Weaver and McCleary, 1991; Weaver and Oh, 1993); quality staff and service (Knutson, 1988; Lockyer, 2002; Weaver and McCleary, 1991; Weaver and Oh, 1993); safety and security (Knutson, 1988; Lockyer, 2002; Weaver and McCleary, 1991). With regard to the original questionnaire of Olorunniwo (2006), we added some additional questions to cover above mentioned items and also taken some questions of the questionnaires of Akbaba (2006), Ladhari (2009) and Ramsaran-Fowdar into consideration.

The third section of the questionnaire is designed to obtain personal information concerning the demographic characteristics of respondents such as gender, ethnic background, age, number of visits to hotels in the past year, education completed and marital status.

A detailed overview of the questionnaires is presented in appendix 3.
3.2 Data analysis methodology

The obtained data is analyzed with the statistical software program SPSS version 17.

First of all, the data should be examined for missing data. SPSS 17 has a utility to estimate the missing data provided that missing data is limited.

The questionnaire measuring the personality traits has questions where a high score corresponds with a high score on the applicable personality traits. But there are also questions where the opposite is the case: a high score corresponds with a low score on the applicable personality traits. In this case (negative questions) it is necessary to recode the variables (scores) into different variables (scores).

A linear relationship between personality traits and service quality is assumed. This is examined by a scatter plot and a graph to check the normal distribution. Outliers greater than three times the standard deviation are removed (Osborne, J. W., et al, 2004).

The normal distribution is also checked by calculating the skewness and kurtosis. Values for skewness and kurtosis larger than two times the standard error are not allowed.

Via descriptive statistics the correlation coefficients and Cronbach’s alpha are measured per dimension of personality traits and service quality. To ensure sufficient correlation, items with coefficient lower than 0.2 are removed. To ensure satisfactory internal consistency or reliability, the Cronbach's alpha should be minimal 0.7 (Dunn, et al., 1994).

The influence of personality traits on the experienced service quality is examined by a linear regression analysis. For this analysis the mean values of the personality traits are used. The independent variables are the personality traits. The dependent variable is the experienced service quality. The experienced service quality is determined by the mean values of the dimensions of experienced service quality. The influence of personality on the experienced service quality is significant if the significance is smaller of equal to 0.05. The square multi correlation ($R^2$) is a size for the strength of this influence. For a strong influence or dependence $R^2$ should be 0.64 or larger.
Chapter 4 Results

4.0. Sample and descriptive statistics

An empirical study was conducted to collect the data. The target population consists of people who visit a hotel. Request to 222 people were send to complete the questionnaire. In total 127 questionnaires were completed. This means a response rate of approx. 57.2%. Most people sent a confirmation per e-mail that that they filled in the questionnaire. The influence of snowballing is limited. From the 127 questionnaires, 124 were usable due to missing data in 3 respondents.

More than 68% of the respondents is a male. The majority has an age between 35-44 years (50%). Nearly all respondents are from Europe (96.8%). Most of the respondents are married (86.3%). Most respondents have completed a High School / Vocational Education (“MBO”, 37.1%) or have a Bachelor’s degree (“HBO”, 43.5%). The majority of the respondents work in the White collar sector (36.3%) or are executive or manager (23.4%). Most respondents stay in the hotel for holiday (58.9%). See table 2 for a more detailed overview of the profile of the respondents.

<table>
<thead>
<tr>
<th>Table 2. Profile of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Age (year)</td>
</tr>
<tr>
<td>18-24</td>
</tr>
<tr>
<td>25-34</td>
</tr>
<tr>
<td>35-44</td>
</tr>
<tr>
<td>45-54</td>
</tr>
<tr>
<td>55-64</td>
</tr>
<tr>
<td>65 and over</td>
</tr>
<tr>
<td>Ethnic background</td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>Asia</td>
</tr>
<tr>
<td>Europe</td>
</tr>
<tr>
<td>Americas</td>
</tr>
<tr>
<td>Marital status</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Single</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Most respondents stay one (20.2%) or twice a year (23.4%) in a hotel. Beside this group, there is a reasonable group of respondents who stay five times a year or more in a hotel (22.6%). This means that the majority of the respondents has experience in lodging in hotels. This is positive for the reliability of this research.

The majority of respondents stay in a hotel with three (38.7%) or four stars (40.3%). In most cases the hotel is located in Europe (84.7%). See table 3 for detailed information.

<table>
<thead>
<tr>
<th>Table 3. Information about the hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency stay at hotel</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Less than once a year</td>
</tr>
<tr>
<td>One a year</td>
</tr>
<tr>
<td>Twice a year</td>
</tr>
<tr>
<td>Three times a year</td>
</tr>
<tr>
<td>Four times a year</td>
</tr>
<tr>
<td>Five times a year or more</td>
</tr>
<tr>
<td>Number of stars of the last hotel you stayed</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>One</td>
</tr>
<tr>
<td>Two</td>
</tr>
<tr>
<td>Three</td>
</tr>
<tr>
<td>Four</td>
</tr>
<tr>
<td>Five</td>
</tr>
<tr>
<td>Region / location of this hotel</td>
</tr>
<tr>
<td>Africa</td>
</tr>
<tr>
<td>Asia</td>
</tr>
<tr>
<td>Europe</td>
</tr>
<tr>
<td>Americas</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>Oceania</td>
</tr>
</tbody>
</table>
4.1 Data analysis

Some of the items (observed variables) of the personality traits needs to be recoded. Based on negative questions, following items are recoded:

- Agreeableness: item agree2, agree3, agree5, agree6, agree8, agree9, agree11, agree12.
- Conscientiousness: item consc3, consc6, consc9, consc11.
- Extraversion: item extro3, extro6, extro9, extro12.
- Neuroticism: item neuro1, neuro4, neuro7, neuro10.
- Openness: item open1, open2, open4, open5, open7, open8, open10.

The items names are stated in appendix 3 between brackets.

Skewness, kurtosis and outliers

We assumed a linear relationship between the personality traits and the dimensions of service quality. In this case a normal distribution is required. We checked this by calculating the skewness and kurtosis. Values of two times or more of the standard error for skewness and kurtosis are not allowed. Based on this requirement, the skewness and or kurtosis values of neuroticism, knowledge and reliability are not acceptable. Also removal of outliers of three times or more of the standard deviation, does not give satisfactory results.

The results of skewness & kurtosis are shown in table 4. This table is based on removal of one respondent with an outlier of more than three times the standard deviation of responsiveness, hence 123 respondents were included in the analysis.

| Table 4. Skewness & kurtosis for personality traits and dimensions of service quality |
|---------------------------------|-----|-----|-----|-----|
| Dimension                        | Skewness | Std. Error | Kurtosis | Std. Error |
| Extraversion                     | -.042 | .218 | -.438 | .433 |
| Neuroticism                      | .723  |  .837 |       |       |
| Openness                         | .024  |  .206 |       |       |
| Agreeableness                    | -.224 |  .422 |       |       |
| Conscientiousness                | -.163 |  .246 |       |       |
| Tangibles                        | .156  |  .321 |       |       |
| Responsiveness                   | -.033 |  .132 |       |       |
| Knowledge                        | .323  |  1.536 |       |       |
| Reliability and trust            | -.689 |  2.987 |       |       |
| Number of respondents:          | 123  |       |       |       |

Remark: values for the dimensions accessibility and flexibility + recovery are not stated in this table due to low Cronbach's alpha values. See table 5.
Cronbach’s alpha and correlation coefficients
The reliability of the data is checked by calculating the Cronbach’s alpha coefficients. The results are shown in table 5.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.72</td>
<td>10</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.87</td>
<td>12</td>
</tr>
<tr>
<td>Openness</td>
<td>0.66</td>
<td>8</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.72</td>
<td>12</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.81</td>
<td>11</td>
</tr>
<tr>
<td>Tangibles</td>
<td>0.82</td>
<td>9</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.79</td>
<td>6</td>
</tr>
<tr>
<td>Knowledge</td>
<td>0.65</td>
<td>3</td>
</tr>
<tr>
<td>Reliability and trust</td>
<td>0.67</td>
<td>4</td>
</tr>
<tr>
<td>Accessibility and flexibility</td>
<td>0.50</td>
<td>3</td>
</tr>
<tr>
<td>Recovery</td>
<td>0.57</td>
<td>3</td>
</tr>
</tbody>
</table>

The calculated Cronbach’s alpha coefficients larger than 0.70 are acceptable. This means that the Cronbach’s alpha of openness, knowledge, reliability and trust, accessibility and flexibility and recovery are too low. These dimensions are therefore not used in the further analysis. The calculated correlation coefficients are satisfactory (larger than 0.20).

Correlations personality traits
We found significant correlations between some of the personality traits: extraversion & neuroticism, extraversion & agreeableness, extraversion & conscientiousness, neuroticism & agreeableness and neuroticism & conscientiousness. The results of the correlations are shown in figure 6.
Service quality in the hotel sector and the influence of personality traits

Chapter 4 Results

4.1 Data analysis

Regression analysis

The remaining reliable dimensions of service quality are tangibles and responsiveness. Based on these dimensions it is not possible to construct a valid latent variable of service quality. Therefore we performed a regression analysis on the two remaining dimensions tangibles and responsiveness. The results of the regression analysis showed multicollinearity. The stepwise regression method is used to exclude multicollinearity. Our study demonstrates a significant influence of agreeableness and conscientiousness on the dimension tangibles of service quality. The personality traits agreeableness & extraversion have a significant influence on the dimension responsiveness of service quality. The results are shown in figure 7.

The correlation between tangibles and the personality traits agreeableness & conscientiousness is weak. This is also the case for responsiveness and the personality traits agreeableness & extraversion: 10.9% of the variance of tangibles and 13.2% of the variances of responsiveness are predicted by the mentioned personality traits.
Chapter 4 Results

4.1 Data analysis

Figure 7. Results of the study. The influence of personality traits on the dimensions tangibles & responsiveness of service quality.
Chapter 5 Discussion, conclusions, limitations and recommendations

5.0 Discussion of the results and conclusions

This study investigated the influence of personality traits on the experienced service quality of clients in the hotel sector. Following underlying questions are derived from this main objective:

What is service quality?
Which factors influence the service quality?
Which models are used for measuring service quality?
What are the personality traits?

To our knowledge, it is the first study which investigates the influence of personality traits on the experienced service quality of clients in the hotel sector.

What is service quality?

There is not a uniform definition of service quality in the literature. Most authors emphasize the intangible aspects of service quality with regard to goods quality (e.g. Zeithaml, 1981). This makes service quality more difficult to judge than good quality.

In this study we use the definition of Parasuraman et al. (1988) as guide: service quality as the degree and direction of discrepancy between customer’s perceptions and expectations. This definition is widely accepted in the literature (Grönroos, 1984; Lewis and Booms, 1983) and based on the disconfirmation model of Oliver’s (1980).

Which factors influence the service quality?

On basis of literature research we can conclude that there is not a standard list of factors which are applicable for the hotel sector. The factors are tested and established in the specific context of the applicable study. Most authors used the factors of the SERVQUAL instrument as a guideline (Parasuraman et al., 1985). On basis of the factors of SERVQUAL, they developed their own context specific factors. In this study we use a revised version of the SERVQUAL instrument.

Which models are used for measuring service quality?

There are several models for measuring service quality. The best known model is the Service Quality model or Gap Model (Parasuraman et al., 1985, 1988, 1991). This model is based on the expectation disconfirmation theory (Oliver, 1980). The service quality in this model is measured by a two (2) part instrument called SERVQUAL: 22 questions about the expected service quality (expectations) and 22 questions about the perceived service quality (perceptions). SERVQUAL has received criticism since its development. Especially the measuring of expectation is criticized. This study is based on performance-only measurements (SERVPERF).

What are the personality traits?

In this study we use the definition of Jude and Cable (1997): “Personality traits are individual’s stable, even innate mental structures which provide general direction for their choices and behavior”. A well known model for describing personality traits is the Five-Factor Model. This model is based on five (5) basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience. For measuring the personality traits of the Five-Factor Model we used the 60 item inventory of Van der Heijden (2005).

What is the influence of personality traits on the experienced service quality of clients in the hotel sector?

The personality traits and the experienced service quality are measured on bases of earlier research. For measuring the personality traits, the 60 item inventory of Van der Heijden (2005)
is used. For measuring the experienced service quality, the survey instrument of Olorunniwo et al. (2006) is used.

Remarkable is that we found significant influence of some of the personality traits to each other (see figure 6). This is not covered by the literature. According to the literature there should be no significant influence between the personality traits. It should be different constructs. A possible cause is that the respondents have wrongly interpreted some questions.

In order to get reliable results, if was necessary to delete four of the six dimensions of experienced service quality. Only the two dimensions tangibles and responsiveness remained. Based on these two dimensions it was not possible to obtain reliable and homogeneous values for experienced service quality. Therefore a regression analysis is performed on the two remaining dimensions of service quality. Our study demonstrates a significant influence of agreeableness and conscientiousness on the dimension tangibles of service quality. The personality traits agreeableness & extraversion have a significant influence on the dimension responsiveness of service quality. The results are shown in figure 7. The correlation between tangibles and the personality traits agreeableness & conscientiousness is weak. This is also the case for responsiveness and the personality traits agreeableness & extraversion: 10.9% of the variance of tangibles and 13.2% of the variances of responsiveness are predicted by the mentioned personality traits.

The significant influence of the personality traits agreeableness & conscientiousness on tangibles and the significant influence of agreeableness on responsiveness is in line with other studies in the hospitality industry. Some studies are performed in the health care sector (Hendriks et al. 2006 and Mavidis, 2001). These studies showed a small or marginal influence of agreeableness on the experienced service. One study showed also a small influence of conscientiousness. The influence of personality traits is also demonstrated in the studies of Vázquez-Carrasco et al. (2006) & John (2003) amongst hairdressers.

We haven’t found a study which describes the influence of extraversion on experienced service quality. We could also not find a study which describes the influence of extraversion on responsiveness. The responsiveness is measured with following questions:

The employees are courteous.
The employees give us special attention.
Our requests are handled promptly.
The employees adapt services to our needs.
Room maintenance is adequate.
The employees adapt well to handle peak customer traffic.

Considering these questions, we can imagine that extravert people which are more focused on other people and hence more likely to have contact with employees of the hotel, answer these questions other than introverts.

On basis of this study we can conclude that there is a significant influence of the personality traits agreeableness & conscientiousness on the dimension tangibles of experienced service quality. There is also a significant influence of the personality traits agreeableness & extraversion on the dimension responsiveness of experienced service quality.

5.1 Limitations of this research
For measuring the experienced service quality, we used the survey instrument of Olorunniwo (2006). The reliability and the validity of the constructs Olorunniwo found during his research, are better than the values we found. In order to obtain sufficient reliability, we had to remove four of the six dimensions of service quality. It is not easy to give an explanation for these differences. Maybe the variety in the hotels were the respondent stayed is too large in this study.
This study is based on convenient sampling and the number of respondents is limited in this study.

5.2 Managerial implications

We found a significant influence of the personality traits agreeableness & conscientiousness on the dimension tangibles and a significant influence of the personality traits agreeableness & extraversion on the dimension responsiveness of experienced service quality (see figure 7). It is important for the management of the hotels to take this into account. During training of the employees, extra attention can be given to this finding. A respectful and courteous treatment of customers is very important, taking also into account the personality of the customers. Maybe it is useful for the management to develop specialized programs for customers with specific personal traits. Hotels can differentiate themselves from the competitors and gain a competitive advantage.

Service quality is very important for a hotel, because superior service quality enables a hotel to differentiate itself from its competition and gain a competitive advantage and enhance efficiency (Mei et al., 1999; Kandampully and Suhartanto, 2000; Gounaris et al., 2003). The benefits of service quality are demonstrated in several studies. Therefore we recommend that the branch organization of the hotel sector puts effort in the development of a reliable and widely supported model for measuring the service quality and study the antecedents.

5.3 Recommendations for future research

This study is not related to a specific hotel. Maybe this is a reason why it was hard to obtain satisfactory reliability and validity for some dimensions of service quality. We recommend to perform research in the future in a specific or some specific hotels.

The reliability and the validity of the constructs Olorunniwo (2006) found by using his survey instrument are better than the ones we found. These differences cannot easily explained. For future research we recommend to develop or use a more reliable survey instrument to measure service quality in the hotel sector and study the antecedents.

Due to too limited remaining dimensions of experienced Service Quality, it was not possible to obtain reliable and homogenous values for experienced Service Quality. Dabholkar et al. (2000) demonstrated that the antecedent model is superior to the component model. We recommend to include this finding in future research. By adding some questions to measure the experienced service quality directly, both models can be compared with each other.

The number of respondents was limited in this study. We recommend to follow the sampling procedures of P. E. Green et al. (1988) for future research.
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Appendix 1: the determinants/key categories of the SERVQUAL model developed by Parasuraman (1985)

RELIABILITY involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honors its promises. Specifically, it involves:
— accuracy in billing;
— keeping records correctly;
— performing the service at the designated time.

RESPONSIVENESS concerns the willingness or readiness of employees to provide service. It involves timeliness of service:
— mailing a transaction slip immediately;
— calling the customer back quickly;
— giving prompt service (e.g., setting up appointments quickly).

COMPETENCE means possession of the required skills and knowledge to perform the service. It involves:
— knowledge and skill of the contact personnel;
— knowledge and skill of operational support personnel;
— research capability of the organization, e.g., securities brokerage firm.

ACCESS involves approachability and ease of contact. It means:
— the service is easily accessible by telephone (lines are not busy and they don’t put you on hold);
— waiting time to receive service (e.g., at a bank) is not extensive;
— convenient hours of operation;
— convenient location of service facility.

COURTESY involves politeness, respect, consideration, and friendliness of contact personnel (including receptionists, telephone operators, etc.). It includes:
— consideration for the consumer’s property (e.g., no muddy shoes on the carpet);
— clean and neat appearance of public contact personnel.

COMMUNICATION means keeping customers informed in language they can understand and listening to them. It may mean that the company has to adjust its language for different consumers—increasing the level of sophistication with a well-educated customer and speaking simply and plainly with a novice. It involves:
— explaining the service itself;
— explaining how much the service will cost;
— explaining the trade-offs between service and cost;
— assuring the consumer that a problem will be handled.

CREDIBILITY involves trustworthiness, believability, honesty. It involves having the customer’s best interests at heart. Contributing to credibility are:
— company name;
— company reputation;
— personal characteristics of the contact personnel;
— the degree of hard sell involved in interactions with the customer.

SECURITY is the freedom from danger, risk, or doubt. It involves:
— physical safety (Will I get mugged at the automatic teller machine?);
— financial security (Does the company know where my stock certificate is?);
— confidentiality (Are my dealings with the company private?).

UNDERSTANDING/KNOWING THE CUSTOMER involves making the effort to understand the customer’s needs. It involves:
— learning the customer’s specific requirements;
— providing individualized attention;
— recognizing the regular customer.

TANGIBLES include the physical evidence of the service:
— physical facilities;
— appearance of personnel;
— tools or equipment used to provide the service;
— physical representations of the service, such as a plastic credit card or a bank statement;
— other customers in the service facility.
Appendix 2: example of a survey with dimensions and items of the SERVQUAL model

**Expectations**
This survey deals with your opinions of services. Please show the extent to which you think institutions offering telephone services should possess the features described in each statement. Do this by using the scale presented below. If you strongly agree that these institutions should possess a feature, place a seven on the line preceding the statement. If you strongly disagree that these institutions should possess a feature, place a one on the line. If your feelings are not strong, place one of the numbers between one and seven on the line to properly reflect the actual strength of your feelings. There are no right or wrong answers—all we are interested in is a number that best shows your Expectations about institutions offering banking services.

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7  
1 = STRONGLY DISAGREE, 7 = STRONGLY AGREE

- E1. They should have up-to-date equipment & technology.
- E2. Their physical facilities should be visually appealing.
- E3. Their employees should be well dressed and appear neat.
- E4. The appearance of the physical facilities of these institutions should be in keeping with the type of services provided.
- E5. When these institutions promise to do something by a certain time, they should do so.
- E6. When customers have problems, these institutions should be sympathetic and reassuring.
- E7. These institutions should be dependable.
- E8. They should provide their services at the time they promise to do so.
- E9. They should keep their records accurately.
- E10. They shouldn't be expected to tell their customers exactly when services will be performed.
- E11. It is not realistic for customers to expect prompt service from employees of these institutions.
- E12. Their employees don't always have to be willing to help customers.
- E13. It is okay if they are too busy to respond to customer requests promptly.
- E14. Customer should be able to trust employees of these institutions.
- E15. Customers should be able to feel safe in their transactions with these institutions' employees.
- E16. Their employees should be polite.
- E17. Their employees should get adequate support from these institutions to do their jobs well.
- E18. These institutions should not be expected to give customers individual attention.
- E19. Employees of these institutions cannot be expected to give customers personal attention.
- E20. It is unrealistic to expect employees to know what the needs of their customers are.
- E21. It is unrealistic to expect these institutions to have their customers' best interests at heart.
- E22. They shouldn't be expected to have operating hours convenient to all their customers.
Example of a survey with dimensions and items of the SERVQUAL model (continuation)

**Performance**
The following set of statements relate to your feelings about XYZ. For each statement, please show the extent to which you believe XYZ -has the feature described by the statement. Once again, placing a seven on the line means you strongly agree that XYZ has that feature, and a one means you strongly disagree. You may use any of the numbers in the middle as well to show how strong your feelings are. There are no right or wrong answers-all we are interested in is a number that best shows your perceptions about XYZ whether you use their service or not.

1---2---3---4---5---6---7
1 = STRONGLY DISAGREE, 7 = STRONGLY AGREE
- P1. X Y Z has up-to-date equipment.
- P2. X Y Z's physical facilities are visually appealing.
- P3. X Y Z's employees are well dressed and appear neat.
- P4. The appearance of the physical facilities of X Y Z is in keeping with the type of service provided.
- P5. When X Y Z promises to do something by a certain time, it does so.
- P6. When you have problems, X Y Z is sympathetic and reassuring.
- P7. X Y Z is dependable.
- P8. X Y Z provides its services at the time it promises to do so.
- P9. X Y Z keeps its records accurately.
- P10. X Y Z does not tell its customers exactly when services will be performed.
- P11. You do not receive prompt service from XYZ employees.
- P12. Employees of X Y Z are not always willing to help customers.
- P13. Employees of X Y Z are too busy to respond to customer requests promptly.
- P14. You can trust employees of X Y Z.
- P15. You can feel safe in your transactions with XYZ's employees.
- P16. Employees of X Y Z are polite.
- P17. Employees get adequate support from XYZ to do their jobs well.
- P18. X Y Z does not give you individual attention.
- P19. Employees of X Y Z do not give you personal attention.
- P20. Employees of X Y Z do not know what your needs are.
- P21. X Y Z does not have your best interests at heart.
- P22. X Y Z does not have operating hours convenient to all their customers.
Example of a survey with dimensions and items of the SERVQUAL model (continuation)

**Importance**
The following set of statements relate to your feelings about the importance of each feature described in your decision to purchase services. A seven means you consider the feature very important in deciding where to purchase banking services, a one means it is very unimportant. You may place any of the numbers shown on the scale below beside each feature to indicate its importance to you. There are no right or wrong answers—all we are interested in is your perception of how important each feature is to you in your decision where to purchase banking services.

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7
1 = VERY UNIMPORTANT, 7 = VERY IMPORTANT

- I1. Up-to-date equipment.
- I2. Physical facilities that are visually appealing.
- I3. Employees that are well dressed and appear neat.
- I4. Physical facilities that appear to be in keeping with the type of service provided.
- I5. When something is promised by a certain time, doing it.
- I6. When there is a problem, being sympathetic and reassuring.
- I7. Dependability.
- I8. Providing service by the time promised.
- I10. Telling the customer exactly when the service will be performed.
- I11. Receiving prompt service.
- I12. Employees who are always willing to help customers.
- I13. Employees who are not too busy to respond to customer request promptly.
Appendix 3: overview of the used questionnaires (English and Dutch)

First section of the questionnaire: personality traits.

1. I like to have a lot of people around me. NEOPER1 (EXTRO1)
   a. strongly disagree
   b. disagree
   c. neutral
   d. agree
   e. strongly agree

2. I am not a worrier. NEOPER2 (NEURO1)

3. I don’t like to waste my time daydreaming. NEOPER3 (OPEN1)

4. I try to be courteous to everyone I meet. NEOPER4 (CONSC1)

5. I keep my belongings clean and neat. NEOPER5 (AGREE1)

6. I often feel inferior to others. NEOPER6 (NEURO2)

7. I laugh easily. NEOPER7 (EXTRO2)

8. Once I find the right way to do something, I stick to it. NEOPER8 (OPEN2)

9. I often get into arguments with my family and co-workers. NEOPER9 (CONSC2)

10. I’m pretty good about pacing myself so as to get things done on time. NEOPER10 (AGREE2)

11. When I’m under a great deal of stress, sometimes I feel like I’m going to pieces. NEOPER11 (NEURO3)

12. I don’t consider myself especially “light-hearted.” NEOPER12 (EXTRO3)

13. I am intrigued by the patterns I find in art and nature. NEOPER13 (OPEN3)

14. Some people think I’m selfish and egotistical. NEOPER14 (CONSC3)

15. I am not a very methodological person. NEOPER15 (AGREE3)

16. I rarely feel lonely or blue. NEOPER16 (NEURO4)

17. I really enjoy talking to people. NEOPER17 (EXTRO4)

18. I believe letting students hear controversial speakers can only confuse and mislead them. NEOPER18 (OPEN4)

19. I would rather cooperate with others than compete with them. NEOPER19 (CONSC4)

20. I try to perform all the tasks assigned to me conscientiously. NEOPER20 (AGREE4)

21. I often feel tense and jittery. NEOPER21 (NEURO5)

22. I like to be where the action is. NEOPER22 (EXTRO5)

23. Poetry has little or no effect on me. NEOPER23 (OPEN5)

24. I tend to be cynical and skeptical of others’ intentions. NEOPER24 (CONSC5)

25. I have a clear set of goals and work toward them in an orderly fashion. NEOPER25 (AGREE5)

26. Sometimes I feel completely worthless. NEOPER26 (NEURO6)

27. I usually prefer to do things alone. NEOPER27 (EXTRO6)

28. I often try new and foreign foods. NEOPER28 (OPEN6)

29. I believe that most people will take advantage of you if you let them. NEOPER29 (CONSC6)

30. I waste a lot of time before settling down to work. NEOPER30 (AGREE6)

31. I rarely feel fearful or anxious. NEOPER31 (NEURO7)

32. I often feel as if I’m bursting with energy. NEOPER32 (EXTRO7)
33. I seldom notice the moods or feelings that different environments produce. NEOPER33 (OPEN7)
34. Most people I know like me. NEOPER34 (CONSC7)
35. I work hard to accomplish my goals. NEOPER35 (AGREE7)

36. I often get angry at the way people treat me. NEOPER36 (NEURO8)
37. I am a cheerful, high-spirited person. NEOPER37 (EXTRO8)
38. I believe we should look to our religious authorities for decisions on moral issues. NEOPER38 (OPEN8)
39. Some people think of me as cold and calculating. NEOPER39 (CONSC8)
40. When I make a commitment, I can always be counted on to follow through. NEOPER40 (AGREE8)

41. Too often, when things go wrong, I get discouraged and feel like giving up. NEOPER41 (NEURO9)
42. I am not a cheerful optimist. NEOPER42 (EXTRO9)
43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement. NEOPER43 (OPEN9)
44. I’m hard-headed and tough-minded in my attitudes. NEOPER44 (CONSC9)
45. Sometimes I’m not as dependable or reliable as I should be. NEOPER45 (AGREE9)

46. I am seldom sad or depressed. NEOPER46 (NEURO10)
47. My life is fast-paced. NEOPER47 (EXTRO10)
48. I have little interest in speculating on the nature of the universe or the human condition. NEOPER48 (OPEN10)
49. I generally try to be thoughtful and considerate. NEOPER49 (CONSC10)
50. I am a productive person who always gets the job done. NEOPER50 (AGREE10)

51. I often feel helpless and want someone else to solve my problems. NEOPER51 (NEURO11)
52. I am a very active person. NEOPER52 (EXTRO11)
53. I have a lot of intellectual curiosity. NEOPER53 (OPEN11)
54. If I don’t like people, I let them know it. NEOPER54 (CONSC11)
55. I never seem to be able to get organized. NEOPER55 (AGREE11)

56. At times I have been so ashamed I just wanted to hide. NEOPER56 (NEURO12)
57. I would rather go my own way than be a leader of others. NEOPER57 (EXTRO12)
58. I often enjoy playing with theories or abstract ideas. NEOPER58 (OPEN12)
59. If necessary, I am willing to manipulate people to get what I want. NEOPER59 (CONSC12)
60. I strive for excellence in everything I do. NEOPER60 (AGREE12)

Above mentioned personality traits are based on the 60 item inventory of Van der Heijden (2005).
Deel 1 van 3: persoonlijkheidskenmerken

Graag zo eerlijk mogelijk invullen wat voor u het meest van toepassing is.

volledig mee oneens
mee oneens
geen mening
mee eens
volledig mee eens

1. Ik wil graag veel mensen om me heen hebben (EXTRO1).
2. Ik ben geen piekeraar (NEURO1).
3. Ik wil mijn tijd niet verspillen met dagdromen (OPEN1).
4. Ik probeer hoffelijk te zijn voor iedereen die ik ontmoet (AGREE1).
5. Ik houd mijn eigendommen schoon en netjes (CONSC1).
6. Ik voel me vaak minderwaardig aan anderen (NEURO2).
7. Ik lach snel (EXTRO2).
8. Als ik eenmaal de juiste manier gevonden heb om iets te doen, dan hou ik daaraan vast (OPEN2).
9. Ik heb vaak onenigheid met mijn familie en collega’s (AGREE2).
10. Ik ben redelijk goed in het indelen van mijn tijd, zodat ik dingen op tijd afkrijg (CONSC2).
11. Als ik onder veel druk sta, voelt het soms alsof ik er aan kapot ga (NEURO3).
12. Ik beschouw mezelf niet als bijzonder zorgeloos (EXTRO3).
13. Ik word geïntrigeerd door de patronen die ik in de kunst en in de natuur tegenkom (OPEN3).
14. Sommige mensen denken dat ik zelfzuchtig en egoïstisch ben (AGREE3).
15. Ik ben niet bepaald een zeer gestructureerd persoon (CONSC3).
16. Ik voel me zelden eenzaam of melancholiek (NEURO4).
17. Ik geniet er echt van om met mensen te praten (EXTRO4).
18. Ik denk dat als je studenten naar controversiële sprekers laat luisteren, dit slechts verwarrend en misleidend voor hen kan zijn (OPEN4).
19. Ik zou liever met anderen samenwerken dan met hen te wedijveren (AGREE4).
20. Ik probeer alle aan mij toegewezen taken nauwgezet uit te voeren (CONSC4).
21. Ik voel me vaak gespannen en nerveus (NEURO5).
22. Ik ben graag waar iets te beleven valt (EXTRO5).
23. Gedichten hebben weinig of geen invloed op mij (OPEN5).
24. Ik heb de neiging om cynisch en sceptisch tegenover andermans bedoelingen te staan (AGREE5).
25. Ik heb heldere doelen en werk hier op een gestructureerde manier naar toe (CONSC5).
26. Soms voel ik me volkomen waardeloos (NEURO6).
27. Meestal geef ik er de voorkeur aan om dingen alleen te doen (EXTRO6).
28. Ik probeer vaak andersoortig en buitenlands voedsel uit (OPEN6).
29. Ik denk dat de meeste mensen van je zullen profiteren als je dat toelaat (AGREE6).
30. Ik verkwist een hoop tijd voordat ik aan het werk ga (CONSC6).
31. Ik voel me zelden bang of angstig (NEURO7).
32. Ik heb vaak het gevoel dat ik barst van de energie (EXTRO7).
33. Ik ben me zelden bewust van de stemmingen of gevoelens in mijn omgeving (OPEN7).
34. De meeste mensen die ik ken, vinden mij aardig (AGREE7).
35. Ik werk hard om mijn doelen te bereiken (CONSC7).
36. Ik word vaak boos over de manier waarop mensen mij behandelen (NEURO8).
37. Ik ben een opgewekt, levenslustig persoon (EXTRO9).
38. Ik vind dat we naar onze religieuze autoriteiten moeten kijken voor beslissingen over morele
39. Sommige mensen vinden mij koud en berekenend (AGREE8).
40. Wanneer ik een verplichting aanga, kan men er altijd op rekenen dat ik doorzet (CONSC8).

41. Te vaak, wanneer dingen fout gaan, raak ik ontmoedigd en zou ik het liefst opgeven (NEURO9).
42. Ik ben geen vrolijke optimist (EXTRO9).
43. Soms wanneer ik gedichten lees of naar een kunstwerk kijk, voel ik een rilling of golf van opwinding (OPEN9).
44. Ik ben ongevoelig en onsentimenteel in mijn houding (AGREE9).
45. Soms ben ik niet zo betrouwbaar en geloofwaardig als ik zou moeten zijn (CONSC9).
46. Ik ben zelden verdrietig of depressief (NEURO10).
47. Mijn leven voltrekt zich in een snel tempo (EXTRO10).
48. Ik heb weinig interesse om te speculeren over de aard van het heelal of de mensheid (OPEN10).
49. Over het algemeen probeer ik attent en voorkomend te zijn (AGREE10).
50. Ik ben een productief persoon die altijd de klus klaart (CONSC10).

51. Ik voel me vaak hulpeloos en wil dat iemand anders mijn problemen oplost (NEURO11).
52. Ik ben een erg actief persoon (EXTRO11).
54. Als ik mensen niet aardig vind, laat ik ze dat merken (AGREE11).
55. Het schijnt me maar niet te lukken om de dingen op orde te krijgen (CONSC11).
56. Soms schaamde ik me zo dat ik me gewoon wilde verstopte (NEURO12).
57. Ik ga liever mijn eigen weg dan een leider voor anderen te zijn (EXTRO12).
58. Ik vind het vaak fijn om met theorieën of abstracte ideeën te stoeien (OPEN12).
59. Zo nodig, wil ik zelfs mensen manipuleren om te krijgen wat ik wil (AGREE12).
60. Ik probeer uit te blinken in alles wat ik doe (CONSC12).

**Second section of the questionnaire: measuring service quality.**

**Tangibles**
1. The hotel/motel is clean
2. Outside appearance is attractive
3. Interior design is attractive
4. The hotel/motel facilities are up-to-date
5. The employees are neat-appearing
6. The lobby area is comfortable
7. The parking space is adequate
8. The atmosphere and equipment are comfortable and appropriate for purpose of stay (beds, chairs, rooms etc. comfortable and tranquil)
9. Materials associated with the services are adequate and sufficient (soap, shampoo, towel etc.)
10. Food and beverages served are hygienic, adequate and sufficient.

**Responsiveness**
11. The employees are courteous
12. The employees give us special attention
13. Our requests are handled promptly
14. The employees adapt services to our needs
15. Room maintenance is adequate
16. The employees adapt well to handle peak customer traffic

**Knowledge**
17 Employees' knowledge of hotel procedures makes me feel comfortable
18. The employees provide adequate information about hotel/motel activities/facilities
19. The employees are knowledgeable about hotel/motel equipment (e.g. computer system and exercise facilities)
20. The employees are aware of group rates/special rates

Reliability and trust
21. The employees provide error-free records (e.g. receipts)
22. The front desk employee accurately verifies the reservation requests
23. The time it took to check in/check out is not too long
24. The reservation system (e.g. telephone/internet reservation) is easy to use
25. The hotel provides its guests a safe and secure place

Accessibility and flexibility
26. The hotel/motel is conveniently located
27. The employees are easily accessible when needed
28. Express checkout is available for guests
29. Services are accessible to disabled guests

Recovery
30. The employees are empowered to provide compensations for inaccurate service
31 The employees quickly apologize when service mistakes are made
32. Smoking rooms are treated to accommodate non-smoking guests if needed
33. Information on alternative lodging is provided when the hotel/motel is full

This questionnaire is based on the questionnaire developed by Olorunniwo (2006). Questions 8, 9, 10 & 25 are additionally added. Question 32 is revised to the actual situation.

Deel 2 van 3: meten van de ervaren service kwaliteit.

Graag zo eerlijk mogelijk invullen hoe u de service kwaliteit van het hotel waar u verbleven bent ervaren hebt.

volledig mee oneens
mee oneens
geen mening
mee eens
volledig mee eens

Tastbare zaken
1. Het hotel/motel is schoon.
2. De buitenzijde van het hotel/motel is aantrekkelijk.
3. Het interieur heeft een eigentijdse inrichting.
4. De hotel/motel faciliteiten zijn up-to-date.
5. De medewerkers zien er netjes uit.
6. De lobby is comfortabel.
7. De parkeerruimte is voldoende.
8. De ambiance en de inrichting zijn comfortabel en toereikend voor het verblijf (bedden, stoelen, kamers etc. zijn comfortabel en rustgevend).
9. De aangeboden service artikelen zijn adequaat en voldoende (zeep, shampoo, handdoeken etc.).

**Responsiviteit**
11. De medewerkers zijn hoffelijk en gastvrij.
12. De medewerkers geven je special aandacht.
13. Verzoeken worden direct afgehandeld.
14. De medewerkers passen de service aan onze wensen aan.
15. De kamers zijn goed onderhouden.

**Kennis**
17. De kennis van de medewerkers over de hotel procedures maken dat ik me comfortabel voel.
18. De medewerkers geven voldoende informatie over de hotel/motel activiteiten/faciliteiten.
19. De medewerkers weten veel over de hotel/motel apparatuur (bijvoorbeeld computer systemen en sportfaciliteiten).
20. De medewerkers zijn op de hoogte van groepskortingen en speciale kortingen.

**Betrouwbaarheid en vertrouwen**
22. De baliemedewerkers controleren nauwkeurig de reserveringsverzoeken.
24. Het reserveringssysteem (bijvoorbeeld telefoon / internet reservering) is gemakkelijk te gebruiken.
25. Het hotel verschaft zijn gasten een veilige en zekere plaats.

**Toegankelijkheid en flexibiliteit**
26. Het hotel/motel is gemakkelijk bereikbaar.
27. De medewerkers zijn gemakkelijk aanspreekbaar indien nodig.
28. Het is voor gasten mogelijk om snel uit te checken.
29. Faciliteiten zijn toegankelijk voor minder validen.

**Hulpvaardigheid**
30. De medewerkers zijn bevoegd om compensatie te geven voor onvoldoende service.
31. De medewerkers verontschuldigen zich snel wanneer er fouten zijn gemaakt.
32. Rookruimtes zijn aanwezig om rokende gasten van dienst te zijn.
33. Informatie over alternatieve logeermogelijkheden worden gegeven wanneer het hotel/motel is volgeboekt.

Third section of the questionnaire: profile of the respondents.

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<tr>
<th>Gender</th>
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<th>Female</th>
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<tbody>
<tr>
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<td>35-44</td>
<td>45-54</td>
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<td></td>
<td>55-64</td>
<td>65 and over</td>
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<td>Asia</td>
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<td>Americas</td>
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<td>Oceania</td>
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<td>Bachelor’s degree</td>
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<tr>
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<td>Blue collar</td>
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<tr>
<td></td>
<td>Retired</td>
<td>Housewife</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td></td>
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<tr>
<td></td>
<td>Others</td>
<td></td>
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<td>Frequency stay at hotels</td>
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<td>One a year</td>
</tr>
<tr>
<td></td>
<td>Twice a year</td>
<td>Three times a year</td>
</tr>
<tr>
<td></td>
<td>Four times a year</td>
<td>Five times a year or more</td>
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<tr>
<td>Number of stars of the last hotel you stayed:</td>
<td>None</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td></td>
</tr>
</tbody>
</table>
Service quality in the hotel sector and the influence of personality traits

Region / location of this hotel
- Africa
- Asia
- Europe
- Americas
- Australia
- Oceania

Reason for stay in this hotel
- Business
- Holiday
- Others

Above mentioned questionnaire is partly based on the questionnaire of Akbaba (2006).

Derde deel van de questionnaire: profiel van de respondenten

Deel 3 van 3: Profiel van de respondenten.

Geslacht:
- Man
- Vrouw

Leeftijd:
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 en ouder

Etnische achtergrond:
- Afrika
- Azië
- Europa
- Amerikaanse landen
- Australië
- Oceanië

Huwelijkse staat:
- Getrouwd / samenwonend
- Alleenstaand
- Anders

Opleiding:
- Geen school opleiding
- Basisschool
- Lager beroepsonderwijs
- Middelbaar beroepsonderwijs
HBO (bachelor)
Universiteit (master)
Doctorale graad
Anders

Beroep:
Executive / manager
Self-employed
Kantoorpersoneel
Fabrieksmedewerker
Gepensioneerd
Huisvrouw
Student
Anders

Aantal verblijven in een hotel:
Minder dan 1x per jaar
1x per jaar
2x per jaar
3x per jaar
4x per jaar
5x per jaar of meer

Aantal sterren van het hotel van uw laatste verblijf:
Geen
Een
Twee
Drie
Vier
Vijf

Regio / locatie van dit hotel:
Afrika
Azië
Europa
Amerikaanse landen
Australië
Oceanië

Reden voor verblijf in dit hotel:
Zakelijk
Vakantie
Overig

Deze questionnaire is gedeeltelijk gebaseerd op de questionnaire van Akbaba (2006).
Appendix 4: linear regression results SPSS

Linear regression of personality traits on the dimension tangibles of service quality

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/Criteria=PIN(.05) POUT(.10)
/NORIGIN
/DEPENDENT TANGm
/METHOD=STEPWISE EXTROm AGREEm CONSCm
/PARTIALPLOT ALL
/SCATTERPLOT=(ZRESID ,ZPRED)
/RESIDUALS HIST(ZRESID) NORM(ZRESID).

Regression

[DataSet2] D:\Datas\Eddy\Open Universiteit\Afspraken\SPSS\Bestanden\7. Mean values variables, resp. 1110 removed.sav

<table>
<thead>
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<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
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<td>.</td>
<td>Stepwise (Criteria: Probability-of-F-to-enter := .05, Probability-of-F-to-remove := .100).</td>
</tr>
<tr>
<td>2</td>
<td>CONSCm</td>
<td>.</td>
<td>Stepwise (Criteria: Probability-of-F-to-enter := .05, Probability-of-F-to-remove := .100).</td>
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a. Dependent Variable: TANGm

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<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>.064</td>
<td>.45736</td>
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a. Predictors: (Constant), AGREEm
b. Predictors: (Constant), AGREEm, CONSCm
c. Dependent Variable: TANGm
Linear regression of personality traits on the dimension tangibles of service quality

### ANOVA

<table>
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<td>Total</td>
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a. Predictors: (Constant), AGREEm
b. Predictors: (Constant), AGREEm, CONSCm
c. Dependent Variable: TANGm

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
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<th>Standardized Coefficients</th>
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a. Dependent Variable: TANGm

### Collinearity Statistics

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a. Dependent Variable: TANGm

### Excluded Variables

<table>
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<tr>
<th>Model</th>
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<th>Sig.</th>
<th>Partial Correlation</th>
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</thead>
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a. Predictors in the Model: (Constant), AGREEm
b. Predictors in the Model: (Constant), AGREEm, CONSCm
c. Dependent Variable: TANGm
Linear regression of personality traits on the dimension tangibles of service quality

<table>
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<tr>
<th>Model</th>
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<th>Minimum Tolerance</th>
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a. Dependent Variable: TANGm

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<th>Condition Index</th>
<th>Variance Proportions</th>
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a. Dependent Variable: TANGm

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a. Dependent Variable: TANGm

Charts
Linear regression of personality traits on the dimension tangibles of service quality

Histogram

Dependent Variable: TANGm

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TANGm
Linear regression of personality traits on the dimension tangibles of service quality

Scatterplot

Partial Regression Plot

Dependent Variable: TANGm

Dependent Variable: TANGm
Linear regression of personality traits on the dimension tangibles of service quality
Linear regression of personality traits on the dimension responsiveness of service quality

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA = FIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT RESPm
/METHOD = STEPWISE EXTRoM AGREEm CONSCm
/PARTIALPLOT ALL
/SCATTERPLOT = (ZRESID, ZPRED)
/RESIDUALS HIST(ZRESID) NORM(ZRESID).

Regression

[DataSet2] D:\Data\Eddy\Open Universiteit\Afstuderen\SPSS\Bestanden\V. Mean values variables, resp. 1110 removed.sav

<table>
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a. Dependent Variable: RESPm

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<th>Adjusted R Square</th>
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a. Predictors: (Constant), EXTRoM
b. Predictors: (Constant), EXTRoM, AGREEm
c. Dependent Variable: RESPm
Linear regression of personality traits on the dimension responsiveness of service quality

### ANOVA

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a. Predictors: (Constant), EXTRCm  
b. Predictors: (Constant), EXTRCm, AGREEm  
c. Dependent Variable: RESPm

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
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<th>Sig</th>
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a. Dependent Variable: RESPm

### Coefficients

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a. Dependent Variable: RESPm

### Excluded Variables

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<th>Sig</th>
<th>Partial Correlation</th>
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a. Predictors in the Model: (Constant), EXTRCm  
b. Predictors in the Model: (Constant), EXTRCm, AGREEm  
c. Dependent Variable: RESPm
Linear regression of personality traits on the dimension responsiveness of service quality

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
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a. Dependent Variable: RESPm

<table>
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a. Dependent Variable: RESPm

Charts
Linear regression of personality traits on the dimension responsiveness of service quality
Linear regression of personality traits on the dimension responsiveness of service quality
Linear regression of personality traits on the dimension responsiveness of service quality