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Understanding the moderating role of the professional service encounter in consumer perceptions of health service risks

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Understanding the moderating role of the professional service encounter in consumer perceptions of health service risks

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Abstract

Correct understanding of the risks of treatments is essential for consumers of health services. Yet, existing research has not examined how consumers understand risk in mixed-market health service environments, where private sector firms operate alongside established public sector providers, such as is the case in the UK. As the range and complexity of private sector health services increases, there remains uncertainty about how individuals will perceive, and respond to, the risks involved in using such services. In this research, I examine the role of the professional service encounter as a moderator of risk perception. I manipulate two key variables in the service encounter: emotional labour and professional role. Emotional labour, and the perception by the consumer of affect arising from the use of emotional labour, is a key technique used by service employees to create empathy and increase consumer engagement. Professional role refers to the varying levels of credence attached by consumers to health professionals representing either the private or public sector.

My hypotheses are that risk perception will be more strongly reduced by deep acting than surface acting (H1)and that high credence professional roles will more strongly reduce risk perception than low credence ones (H2). Through interaction effects, deep acting is hypothesised to have a greater impact on reducing the perception of risk where the professional role is private sector than where it is public sector (H3). Data on consumers' worry levels is also gathered, and it is hypothesised that health consumers would have high levels of pathological worry (H4), and that worry is positively related to gender (H5) and education level (H6). Finally, general risk perception and risk taking data are gathered, and I hypothesise that health risk taking

would be negatively related to health risk perception (H7). These hypotheses are tested using online video stimuli with a sample (n=285) of health service consumers.

Findings suggest that the consumer perception of risk is moderated not by emotional labour on its own, but by the interaction effects between emotional labour and professional role. Whilst surface acting reduces risk perception when the doctor holds a private sector role, the opposite is the case when the doctor is from the NHS. This suggests that the role of emotional labour is dependant on the professional context in which the health service is offered, and the relative position and status of the health service consumer. Furthermore, it was found that there was little evidence of pathological worry amongst health service consumers. This supports the concept that the 'worried well' are a reflection of the increased awareness of psycho-social conditions amongst health service consumers, and the challenges this provides to the professional status of health professionals. The implications of this research suggest that a combination of higher consumer demands for health services and the lack of political will to reform the NHS system will lead to a larger 'grey market' for health services in the UK, where private and public services are used together by consumers to meet their changing needs.

Common Cold

by Ogden Nash

Go hang yourself, you old M.D,!
You shall not sneer at me.
Pick up your hat and stethoscope,
Go wash your mouth with laundry soap;
I contemplate a joy exquisite
In not paying you for your visit.
I did not call you to be told
My malady is a common cold.

By pounding brow and swollen lip;
By fever's hot and scaly grip;
By those two red redundant eyes
That weep like woeful April skies;
By racking snuffle, snort, and sniff;
By handkerchief after handkerchief;
This cold you wave away as naught
Is the damnedest cold man ever caught!

Give ear, you scientific fossil!
Here is the genuine Cold Colossal;
The Cold of which researchers dream,
The Perfect Cold, the Cold Supreme.
This honored system humbly holds
The Super-cold to end all colds;
The Cold Crusading for Democracy;
The Führer of the Streptococcracy.

Bacilli swarm within my portals
Such as were ne'er conceived by mortals,
But bred by scientists wise and hoary
In some Olympic laboratory;
Bacteria as large as mice,
With feet of fire and heads of ice
Who never interrupt for slumber
Their stamping elephantine rumba.

A common cold, gadzooks, forsooth!
Ah, yes. And Lincoln was jostled by Booth;
Don Juan was a budding gallant,
And Shakespeare's plays show signs of talent;
The Arctic winter is fairly coolish,
And your diagnosis is fairly foolish.
Oh what a derision history holds
For the man who belittled the Cold of Colds!

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Research has indicated that 50% of readers form a preliminary judgment of an academic work by reading acknowledgements (Hyland, 2003). With that in mind, I would like to thank many people.

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Glossary of Terms

CT Scanner - A special kind of X-ray machine that sends out multiple beams, instead of the single beam received through an X-ray. This produces a much more detailed computer generated 2D image, or can reconstruct multiple images to produce something similar to a 3D image.

DOSPERT - Domain Specific Risk-Taking scale for understanding propensity to take risks, an understanding of these risks in adult populations.

Deep Acting – A method of emotion management used by customer-facing employees who attempt to experience the desired emotion so that the correct, positive, emotional display follows.

Emotional Labour - The management, manipulation or suppression of one's feelings in order to portray a specific outward appearance to others.

Asymptomatic Health Screening – Testing for presence of specific medical conditions in those who may be in a risk group for those illnesses, but have no symptoms of that illness.

HPA – Health Protection Agency, the UK government body responsible for protecting public health.

General Anxiety Disorder - A level of exaggerated worry that occurs even when there is little to provoke it

PSWQ – Penn State Worry Questionnaire, a valid and reliable measure that has been used extensively to measure pathological worry.

Surface Acting - A method of emotion management used by customer-facing employees who attempt to 'fake' the desired emotion without actually feeling it.

1. Introduction

1.1 Introduction and Research Scope

In November 2006, the UK public health authorities responded to a major incident involving radiation, when former Russian spy Alexander Litvinenko died after being poisoned in a London restaurant with the highly radioactive substance, polonium-201. The Health Protection Agency (HPA), the body responsible for communicating to the public during such incidents, had to manage public perceptions of health risks in an environment of high media coverage, and little public understanding of the impact of radiation on public health. Frequent communication by the HPA, and a perception that espionage was at the root of the poisoning, reduced the overall concern of the general public (Rubin et al., 2007). Yet, there was criticism from those who had come into closer contact with the radiation; for example, by working at the restaurant, and received tests as a result. Whilst the public health authorities tried to reassure those who were tested, by informing them that results were 'of no concern', individuals felt this advice was vague and in some cases caused anxiety (Rubin et al., 2007). Although health professionals wanted to protect the public by not giving them information they perceived could not be understood, the expectation of those subject to the tests was for a greater level of information.

This research considers how consumers perceive health service risks where it matters most, namely in high involvement professional service encounters. The example above illustrates the challenge that health professionals face in explaining complex

risks to the general public. Whereas professionals view risk on a macro-level population basis, often based on a mathematical calculation, for individuals risk is more often socially constructed and perceived from a personal standpoint (Taylor-Gooby & Zinn, 2006). Additionally, as individuals' expectations and knowledge of health services have increased, they have become more willing to question and challenge the power of professionals.

Health services are arguably the most important category of service for consumers (Berry & Bendapudi, 2007). Health services face many challenges, however, these are not so much clinical challenges, as challenges in the allocation of resources and meeting consumer demands. In this thesis, I use the lens of services marketing applied to the UK health service context to consider how consumer evaluations of the service encounter influence health outcomes. The key variable in this study is risk perception, rather than other measures such as consumer satisfaction or measures of service quality. The ability to understand and take appropriate action on health risks is critical to ensure that consumers do not select a health service that could cause them harm. When the risk is embedded in the service offering itself, the role of risk perception in a service encounter becomes key. Indeed, if consumers are unable to correctly understand and action information in such a way, it draws into question the appropriateness of the "consumer" metaphor from health services.

The particular focus of this research is to look at the way in which information is communicated between the professional and the consumer during the service encounter. All service encounters present opportunities for consumers to come into

contact with an employee of a service provider. In routine service encounters, such as in retail outlets, restaurants or hotels, an organizational goal is for the organizationally desired displays and emotions to be shown by service agents in order to maximize service effectiveness and customer satisfaction (Rafaeli & Sutton, 1987). Research into a range of service contexts has identified that managing emotional displays is a key driver in preventing service failure. For example, airline attendants are taught to use managed emotional displays as a means of giving appropriate service to difficult passengers over a sustained period of time (Hochschild, 2003). Alternatively, debt collectors are taught to manage their emotions to maximize the amount of debt recovered (Sutton, 1991). Debtors who act aggressively receive a calm emotional response, whilst those who respond with some remorse for their debt receive a more aggressive response. Many other service settings, including hotels (Grayson, 1998), supermarkets (Tolich, 1993), and universities (Ogbonna & Harris, 1994) use emotion management as a means of managing service quality. The use of such emotion management techniques by employees requires 'emotional labour' (Hochschild, 2003; Rafaeli & Sutton, 1987) which can be categorized as either 'surface acting' or 'deep acting'. So as to meet work-specific display rules, surface acting is used by service employees to hide or fake felt emotions, whilst deep acting involves attempting to experience the desired emotion so that the correct, positive display follows (Goffman, 1968). Surface acting can be seen as acting in bad faith as the service employee is going through the 'motions of emotion', whereas with deep acting, the service agent is attempting to actually experience the emotions themselves. For example, the put-on sneer, the posed shrug, the controlled sigh (Goffman, 1959) are forms of surface acting to change the way we appear to others (Hochschild, 2003). Deep acting, on the other hand, is a display of spontaneity, a self-induced and 'real' emotional display,

such as has been highlighted in recent calls for more authentic displays in the service experience (Thompson et al*.,* 2006). Yet, emotion is a difficult concept to operationalise with substantial disagreement, even at a basic level as to classifications of emotions (Lewis & Haviland-Jones, 2004). Here I focus on how emotional labour is perceived by health service consumers, rather than on the specific emotions used by employees.

In this research, I use the framework of emotional labour as a means of understanding and researching how emotion is enacted in dyadic service encounters. Emotion has become a pervasive theme in the organizational theory literature (e.g. Sturdy, 2003; Putnam & Mumby, 1993), and practitioner concepts, such as emotional intelligence (Goleman, 1995), feature high on the bestseller lists.

1.2 Background to Research Project

This research has been funded by a studentship that I was awarded by the UK Economic and Social Research Council (ESRC). This places certain requirements on the research that are reflected in this thesis. Primarily, these are that the research must refer to, or be of direct benefit to the United Kingdom. Secondly, the scope of the research should include an exploration of service professionals. Both of these comprise important aspects of the research focus and endeavour. Perhaps the primary decision has been the selection of the health context. A number of other professional research contexts were evaluated before choosing health. These included private banking and legal services. Whilst they all offer service contexts that are worthy of research, nothing came close to matching the potential challenge of researching healthcare. A theme running through recent papers on health service research and a

theme that is supported in this thesis is that health services are one of the most critical services that consumers come into contact with. For many people at key times in their lives health services have a unique position as being the most important services that they consume. It may well be an understatement to comment that the overall body of research into health services does not match its importance to society. Outside the United States, the deployment of marketing concepts in health service delivery has been somewhat taboo. This has particularly been the case in the UK, with the central role of the National Health Service (NHS), not only in health delivery but also in the collective consciousness of society. Whilst there have been attempts at a more customer-focused delivery of health services, a theme which I will cover in this thesis, more often than not the term 'marketing' has become associated with policies of weakening the NHS model. This particularly relates to the view that commercial associations will affect the centrepiece policy of health services being free at the point of delivery. The decision to choose a healthcare context is, therefore, informed by the belief that not only can a marketing perspective provide a better understanding of how consumers evaluate healthcare, but that it is essential in a world where the NHS monopoly is weakening, and raised consumer expectations of health service delivery could be unmet by a health service that is facing increasingly constrained resources.

The UK health system has long talked about treating patients like consumers, yet the sort of consumer they had in mind is compliant, interested in healthcare, and willing to operate within the constraints of a single-market public sector system. Indeed, the word 'healthcare' has been stated by many writers as indicative of an organization-centric policy, rather than one built around the needs of consumers.

"I had done what doctors do in this country, which is to treat people when they

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come in with a disease. My patients had good medical care but not, I began to think, great healthcare. For most, their declines, their illnesses, were thirty-year problems of lifestyle, not disease...Modern medicine does not concern itself with lifestyle problems. Doctors don't treat them, medical schools don't teach them and insurers don't pay to solve them. I began to think this was indefensible." (Peters, 2008:51)

To counter this, the consumer whom I investigate in this research is interested in health, rather than just healthcare, with 'health' being a much more inclusive and overarching notion of wellbeing and lifestyle rather than a concern with reacting to illness after it has occurred. As such, I refer to health service consumers, rather than 'patients' or 'the ill', or 'the public', because whether or not it is organizationally desired, those sampled for this research behave like consumers.

Moving on to the service encounter, the presence of a professional provider presents a number of differences over a routine service encounter (Bloom, 1981). I make the distinction between routine service encounters and professional service encounters based on the self-identity of the service worker, and the extent to which they conform to professional norms that make them subject to occupational control. Firstly, choosing a professional provider and using the service requires a high level of involvement from the consumer. Secondly, it is difficult for consumers to correctly evaluate service quality before, during, and after the delivery of the service. Thirdly, when consumers need a professional, it is often in a hurry. As such, consumers do not have the luxury of spending large amounts of time and effort evaluating service

providers. Fourthly, consumers often have high levels of loyalty to individuals who are the service providers. Finally, Bloom (1981:86) notes that these professional service providers are "often bound by professional norms that frequently prevent them from doing everything possible to please a client or customer". Therein lies the paradox of the professional service encounter. To comply with occupational norms, professionals such as the doctor must often take actions that run against the immediate wishes of the consumer or the organization. For example, doctors may present a diagnosis that does not match with the perception of illness maintained by the patient.

Marketing theory has often concerned itself with the balance between managerial control and consumer control, as evidenced by the drive for organizations to develop a marketing mindset (Kotler, 1977). This has resulted in marketing logics that, to varying degrees, reflect the balance between consumers and the managerial structure of the organization (Vargo & Lusch, 2004). Yet, this ignores the third type of control, occupational control, which is brought to a service environment where professional roles dominate (Friedson, 2001). Early research on professionals in a marketing context (Bloom, 1981) focused on the applications of conventional marketing approaches to 'learned professions', such as medicine and law, that previously had legal statutes preventing marketing from being applied. I take a broader view of the concept of the 'professional', acknowledging the increasing identification with 'professionalism' through a wide range of industries. The phrase 'professionalism' may previously have been limited to the learned professions but is now used almost universally as a term to denote the offering of superior service. For example, a leading coffee chain refers to its staff as "...smiling professionals who enjoy their daily routine and especially dealing with our satisfied customers" (AMT, 2007). It is unlikely that

there is much room for 'barristas', itself a manufactured occupation, to undertake behaviour outside that required organizationally or by consumers.

Healthcare is a pertinent subject of research into professional services for two reasons. Firstly, those researching professionals generally agree that if any trade deserves to be referred to as a 'profession' it is that of the doctor (Gabe et al., 2004), and there exists a strong theoretical base from which to inform this research. Secondly, healthcare is facing significant structural changes across the developed world as consumerism combines with an aging population to create higher expectations for the level of health services that are to be delivered. This creates a situation where US medical associations campaign against provision of health services in high-street retail locations in order to protect their professional interests, rather than on the basis of consumer needs (Japsen, 2007). Therefore, the focus is on the health service consumer and the way that information about risks can be more effectively communicated to them in an environment of increasing consumer choice in healthcare. I argue that given the high levels of trust invested in medical professionals, and the traditional dominance of the face-to-face service encounter as a primary form of communication in healthcare, the role of the service agent is critical in influencing the outcome of the service encounter. Although service encounter outcomes are frequently seen in the context of customer satisfaction, in the healthcare context, I focus on another variable - the consumer's perception of risk. The management of healthcare is framed and delivered within the context of a need to manage risks (Slovic, 2000) but, at a consumer level, it is the *perception* of risks that drives both unhealthy behaviour, such as drinking or smoking, and the decision to seek the sort of health services described in this research.

1.3 Research Aims and Contributions

The aims of this research are twofold. The primary aim is to explore the links between the way that information is communicated in professional service encounters and consumer perceptions of risk. Specifically, I use the framework of emotional labour to understand how the perceived emotional authenticity of the service agent influences consumer perceptions of risk. I consider how two variables, emotional labour and the professional role, alter consumer perceptions of health information by adopting an experimental research design with video stimuli. This is an important contribution in a professional service encounter as the correct interpretation of the advice or information distributed by the professional is a key precedent to consumer satisfaction. Emotions are particularly important in such service encounters because people's perceptions can be self-enhancing (Agrawal et al., 2007). This means that individuals tend to underestimate the likelihood of a particular health problem affecting them and may, therefore, pay less attention to information designed to increase awareness about a particular disease (Raghubir & Menon, 1998).

A second aim is to extend the understanding of healthcare consumers specifically through the analysis of their perceptions of health risks and the extent to which they show significant levels of worry in psychometrically-examined tests. In order to add specificity to the term 'worry', this research investigates whether consumers have a level of worry that can be described as a General Anxiety Disorder (GAD). GAD is a level of exaggerated worry that occurs even when there is little to provoke it (NIMH, 2008). Whilst some level of worry is normal, even healthy as it enables alertness to

danger, GAD implies a level of worry beyond that which disrupts and interferes with daily life (Mayo Clinic, 2007). Whilst there has been substantial earlier reference to this type of consumer in the media and amongst practitioners, most often under --of the banner of 'the worried well', there is little empirical evidence to back up the popular, and often negative, perceptions of such consumers. As Bennett (2005:1) writes:

> " 'Worried well' is not the happiest description of individuals who seem to have done nothing more self-indulgent or irrational than submit themselves for vaccination, to better protect themselves from becoming too ill to work or to look after their families."

The specific context of this research is the emerging provision of health tests or health screenings by the private sector to asymptomatic patients - people without any specific symptoms who are, in effect, referring themselves for a test. This is a large industry both in the US and Japan, which is supported by sophisticated marketing campaigns and celebrity endorsements, and has recently become established in the UK. Because of monopolistic healthcare provision, the UK provides a unique position compared to other developed countries in which to observe the impact of the application of consumerism in the healthcare setting. I explore the concerns of UK public health bodies as to whether the public as consumers are able to correctly evaluate the risks involved with these tests. I shall look at risk evaluation related to high radiation exposures common to some procedures; as well as the potential psychological consequences of partaking in these tests. Given the high levels of trust associated with the NHS and its medical professionals, and the dominance of the face-to-face service encounter as the primary form of communication in healthcare, the

role of the professional service agent is critical in influencing the outcome of any service encounter. It is therefore important to develop an understanding of any process that may challenge this.

This research contributes in four key ways to the extant body of knowledge. Firstly, whilst there have been a large number of studies on emotional labour (Nunan & Knox, 2005), these have been focused on its use by the individual rather than the impact of its use on the consumer. This has contributed to an extensive body of research in the organizational sociology and organizational behaviour literature but has resulted in limited coverage in the marketing literature. If emotion management is so critical in customer facing roles in organizations, then it follows that understanding this from the consumers' perspective is a worthy endeavour. Secondly, the contextual focus of emotional labour research has been on routine service encounters rather than those involving professionals. This, in part, reflects the limited body of research on professional service encounters but also the difficulty of gaining access to data from professional contexts due to the substantial ethical issues based on access to consumers in these worlds. The practical challenges of researching consumers in a coffee shop, for instance, are much less than gaining access to patients in a healthcare setting. Thirdly, there have been recent calls for further research into healthcare services, as a key consumer service encounter that has suffered from a dearth of research (Berry & Bendapudi, 2007). Developing a better understanding of how consumer perceptions of the healthcare service encounter are formed is therefore a key contribution of this research. Finally, there is a distinctive methodological contribution. I approach the ethical and practical issues involved when sampling the health services domain by adopting a novel, online sampling method adapting

consumers' use of search engines in seeking health information.

1.4 Research Questions

The research aims are encapsulated by the three research questions and their subsequent hypotheses. The primary question focuses on emotional labour in the service encounter, whilst the second question considers the specific issue of perceived risk and worry for healthcare consumers. The final question considers the relationship between engaging in health related risks and risk perception. The full process of hypothesis development is expanded in Chapter 2.

Q1. How do emotional labour and professional role influence risk perception in the professional service encounter?

> H1: Deep-acted emotional labour will result in a greater reduction in consumer perception of health screening risks than surface-acted emotional labour.

> H2: Encounters with private sector professionals will result in a greater reduction in consumer perception of health screening risks than encounters with NHS professionals.

> H3. Deep-acted encounters with NHS doctors will result in a greater reduction in consumer risk perception than deep-acted encounters with private sector doctors.

Q2. How are risk perceptions and worry states related to the risks of health screenings for healthcare consumers?

H4: Health service consumers demonstrate levels of worry associated with a general anxiety disorder.

H5: Levels of worry will be higher amongst women than men.

H6. Levels of worry will be positively associated with education level.

Q3. What is the relationship between health risk perception and partaking in health risks?

H7: The greater the perception of health risks, the lower the likelihood of partaking in activities that increase risk to health.

1.5 Structure of this Dissertation

In the forthcoming chapters, I first consider extant research on emotional labour and establish its context in professional service encounters. I focus on consumer evaluations of professional service encounters in terms of risk perception and its link to emotional labour in the professional service encounter. I seek to explain 1) how emotional labour and professional role influence risk perception; and 2) how risk and worry states relate to the risks of health screenings for UK consumers. I then present information on the data collection process, including initial exploratory interviews and details of the experimental design adopted for the study, the pre-test, pilot and the main study data collection process. Following this, the results are then reported and

analysed. Additionally, I present methodological findings based on the novel sampling and research design used in this doctoral project. Finally, I consider the implications, both for the theoretical development of research on professional services and the specific public policy implications for healthcare marketing.

2. Review of Literature on Health Service Delivery

2.1 Introduction

In this chapter, I explore the literature on health services and health service delivery in the context of the professional service encounter. Whilst there is a global demand for health services, health service delivery remains particular to local contexts and needs. Any theory relating to health service delivery needs to be understood in the context in which the service is being delivered. I therefore review the literature on the main issues around contemporary health service delivery, both those works with an international focus and those specific to the UK National Health Service.

However, before reviewing this literature, I will first position my research in the context of the marketing literature. I acknowledge that it is not typical to apply marketing concepts to health services within the UK. Approaches to UK health service marketing adopt one of two angles. Either, they take a highly organisation-centric approach, with initiatives designed for 'customers' but without the effective input of service users. Alternatively, health service organisations attempt to apply managerially-oriented approaches to marketing more suited to corporate marketing departments. For example, plans within the NHS to make hospital pay rates performance-related, based on the survival rates of patients, drew widespread criticism for being inappropriate for the professional environment within health

services (BBC, 2008).

"As a highly trained professional, I do my very best for my patients and I do not need financial inducements to persuade me to operate even better. All our patients deserve the highest level of surgical care we can give them. It's a bit like saying to an airline pilot, if you don't crash your airplane we will give you more money."

A key part of the health service literature is the role of the health service encounter involving the interaction between doctor and patient. Firstly, it is a focus on process and interaction, rather than transactions that is relevant to health services marketing. The Nordic School's questioning of the value of exchange as a marketing concept compares with many current critiques of the healthcare industry that focus on the volume of treatments, rather than taking a more holistic approach to consumer healthcare (Peters, 2008). In the US, the process of creating a functioning market for healthcare has created substantial incentives for over-consumption and over-treatment (Longman, 2007). Such transactional approaches have at their heart a marketing objective of making customers choose one firm's offerings over those of competitors (Grönroos, 2007b). Yet, consumers have difficulty choosing between service providers when they are in a situation of information asymmetry, as they are with health services. Grönroos (2007b) suggests that the highest-level marketing objective should be in creating a trusting relationship and an emotional connection with the customers. Whilst the 'firm' may be a private or public sector organization, the theme of this research is the focus on relationship and, thus, the overall health lifestyle of the

consumer rather than an individual illness 'transaction'. That is not to say that I ignore the importance of the concept of transactions, particularly in an environment where many health service encounters are, by necessity, homogenous. Rather, I look at the concept of a relationship and transactions as interdependent (Palmer & Bejou, 2006), with relationships with health professionals often being formed by a series of individual transactions over a long period of time.

Secondly, there is the question of how customers capture value from health services. Application of the biomedical model of health services (Annandale, 1998), where the focus is on diagnosis and application of specific scientifically determined treatments, can be seen as representing a mode of health services that has more in common with a value-in-exchange perspective. Diagnosis is something that is done to the patients and a one-way asymmetry between patient and doctor is assumed. Taking such a view, health services are essentially a means of transferring the 'goods' of the treatment. This biomedical model has faced extensive criticism from researchers into health services as increasing health disparities by failing to take into account social factors, as well as the role of interaction during the service encounter in determining diagnosis (Thomas et al., 2004). An alternative approach, congruent with the Nordic School, is to view treatment aspects as part of a service process, and that value is created through interactions with customers (Grönroos, 2006). With this in mind, the theme running through the following literature review is to explore the key factors influencing the interactive service experience.

2.2 Interactions and Service Delivery

"Because interactions enable the firm to enter the consumption and usage processes in a direct and active way, when developing marketing theory, the focal construct should be interaction rather than exchange." (Grönroos, 2007b: 200)

At the core of services are the person-to-person interactions between customers and employees of an organization. These service encounters are critical in terms of determining consumer perceptions of service quality (Czepiel, 1990). Concern for service quality in a service encounter is not new. In ancient Rome, the role of nomenclator was highly desired by powerful businessmen and politicians. Nomenclators were a form of personal assistant who excelled at putting names to faces, and remembering key facts (Leon, 2007). By whispering information into the ear of their employer, they would create a more favourable impression in any negotiations. I use this example to illustrate that the importance of interactions in services is something to be rediscovered, rather than discovered. It was the rise of the worldwide quality movement in manufacturing through the 1980s that brought attention to the link between service quality and business success (Bitneret al., 1994). Initial attempts at managing service quality took their cue from manufacturing and focused on reducing the number of defects. Approaches such as zero-defects or six-sigma quality drives are examples of this. Thus, managers were mentored to focus on the service profit chain and apply metric driven approaches to services (Heskettet al., 1994).

As a result, much service work has become synonymous with the control and management of employees' actions and also the quality of the interaction between employees and customers. That employees should be trained to give a certain 'emotional' response or impression to customers is taken for granted in a range of service industries. The forced smile and robotic chants of 'have a nice day' are emblems of such strategies. Take the following example from an employee handbook for a gourmet deli (Steinberg & Figart, 1999):

> "Customer courtesy begins and ends with you… Under no circumstances should a customer ever wonder if you are having a bad day. Your troubles should be masked with a smile. Tension can be seen and received negatively resulting in an unhappy dining experience, or what is called frustrated food… Once an unhappy customer walks out the door, they are gone forever!"

This presents a challenge in the majority of service industries where customer-facing staff are relatively poorly paid and roles suffer from high turnover. For many workers, the shift from industrial to service roles has seen a sharp deterioration in living standards (Nelson, 1994), together with a reduction in full-time employment and greater inequality in earnings (Nelson & Lorence, 1988). Given the challenges of working in the service industry, it is not surprising that attempts to manage service quality in this way have met with more limited success than was experienced by the quality movement in manufacturing. In particular, attempts have been made to standardize and manage the emotional interactions in the service encounter. Perhaps the most visible mantras of this are slogans such as 'service with a smile'. The wide use of scripted encounters in telephone call centres has led to customer dissatisfaction at the authenticity of service encounters and, thus, the level of service quality being

delivered (Hochschild, 2003). The more that organizations offer service experiences that are standardized, managed, and thus easily measurable, the more consumers seek encounters that could be viewed as more authentic, and thus more 'real'. It is without irony that some authors suggest that the next era for services marketing should be based on the systemic management of this 'authenticity', much as there was a previous focus on managing service quality (Gilmore & Pine, 2007).

The service encounter does not take a homogenous form. Interactions between customer and employees can take on different meanings, depending on the purpose of the encounter, the nature of the service being provided, and the role and position of both the customer and the employee. Whilst service encounters are often considered as being dyadic, there are frequently situations where multiple customers or multiple employees take part in an encounter (Solomon et al., 1985). Similarly, many services, such as in healthcare, law or education, consist of a number of service encounters delivered over a period of time. What all these encounters have in common is the unpredictability of the human interactions that are key in service outcomes, as Knisely (1979) notes:

> "The real intangible is the human element which, with the best will in the world, most of us cannot control to anywhere near the same degree that a product manager controls the formulation of a beauty soap."

Whilst much research and marketing foci have concentrated on 'routine' services, at the other end of the spectrum there exists the world of professional service

encounters. The traditional role of the professional may be seen as running counter to a marketing ethos of 'putting the customer first', where it is the role of the professional to use their judgment to decide what is best for the consumer (Hogg et al., 2005) Yet, practitioners of professional services, for so long protected by their status and professional power, are facing substantial challenges, not least from more informed consumers who have increasingly unrivalled access to specialised information (Hogg et al., 2003).

2.3 Professionals and Service Delivery

2.3.1 A Brief History of the Professional

The modern concept of a professional has its origins in the status professions that emerged from medieval universities (Elliott, 1972). These were law, medicine, university teaching, and priesthood. Professionalism can be associated with the increasing specialisation of labour that occurred during, and since, the industrial revolution. Yet, for professionals, the specialisation became discretionary in nature; a very different type of specialisation from that experienced by the pin makers in Adam Smith's 'Wealth of Nations' (Freedman, 1976). Discretionary specialisation, as opposed to the highly controlled and managed specialisation seen on factory production lines, implies that each new task is distinct, requiring fresh judgment. Doctors, lawyers and other professionals must approach each encounter without an expectation that it will be a repeat of a previous encounter. Yet, in a modern context, the word professional has entered 'corporate speak' as a verb to describe almost any type of work that delivers high standards of service. For example, UK coffee chain AMT describes its staff as 'smiling professionals' (figure 2.1).

Source: http://www.amtcoffee.co.uk
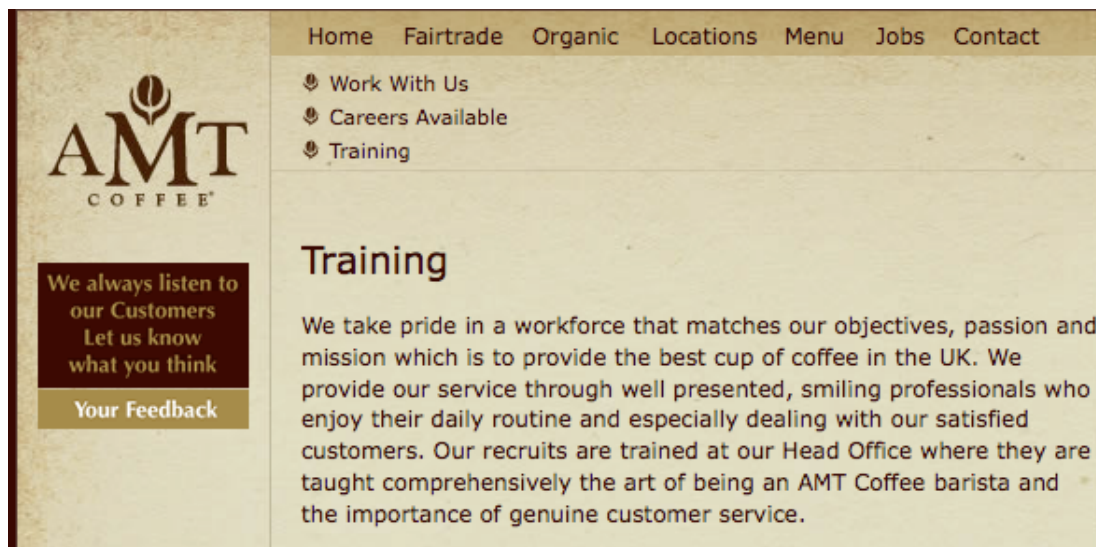
Figure 2.1 AMT coffee careers

Professionalism has become associated with offering aspirational levels of service. The definition of a professional service encounter would, therefore, seem to rest on an understanding of what exactly defines a profession. Whilst the coffee store 'barista' may be over-optimistic in terms of classification as a professional, there are many other examples of job roles for which members have high levels of self-identification. To answer the question of whether marketing is a profession requires consideration of the basic building blocks of a profession. Professionalism involves a set of institutions that allows individuals, as professionals, to make a living whilst controlling their work (Friedson, 2001). More specifically, professional work requires such specialisation of knowledge that it cannot be standardised and, thus, membership of the profession must be enforced by requirements for specific education or work experience. Additionally, the type of work done by a professional cannot be standardised to the extent that it becomes commoditised. To put it another way, if 'service with a smile' is what is required for professionals to deliver a service, it is up to the professional to decide whether or not to smile, rather than following a set of organizational rules.

Five elements forming an ideal-typical construct of professionalism are suggested in table 2.1.

1	Specialised work in the officially recognised economy that is grounded in a body of theoretically based, discretionary knowledge and skill and that is accordingly given special status in the labour force.
2	Exclusive jurisdiction in a particular division of labour created and controlled by occupational negotiation.
3	A sheltered position in both external and internal labour markets that is based on qualifying credentials created by the occupation.
4	A formal training programme lying outside the labour marketing that produces the qualifying credentials, which is controlled by the occupation and associated with higher education.
5	An ideology that asserts greater commitment to doing good work than to economic gain and to the quality rather than the economic efficiency of work.

Adapted from Friedson, 2001.

Table 2.1 Elements of ideal-typical professionalism

2.3.2 Challenges to Professional Authority

The ideal-typical form of professionalism assumes a level of protection from market forces and also protection from consumers. More significantly, this ideal type of profession prevents over-supply and thus ensures its members are in a position to continue trade (Enright, 2006). Of course, the ideal-typical professional is a theoretical construct and goes beyond what can be seen in actual professions working

in a real-world context (Friedson, 1999), although some professions come closer than others in terms of meeting the ideal. To return to the previous question of the specific nature of professions, inevitably there is a continuum. Marketing meets some of the requirements of a profession but not others (Enright, 2006). Yet, the overall position of what is and is not a profession should be seen in the light of a number of threats to all forms of profession. The role and power of professions has been weakened by a number of factors that have, at the same time, led to an increase in the power vested in consumers (Laing et al., 2005). Firstly, professional services are characterised by information asymmetry between the consumer and professional. The educational standards and specialised knowledge required by professionals have meant consumers have little choice but to allow professionals to make decisions on their behalf. However, the diffusion of education and the increase in educational standards across society have served to reduce the educational gap between professionals and consumers (Hogg et al., 2005).

Secondly, this information imbalance has been challenged by the increase in highly specialised information available direct to the general public (Hogg et al., 2003). Whereas consumers might have always been able to access information, the Internet has given them access to the same type of information previously only available to professionals. As the following example indicates, such levelling of information asymmetry can be seen as threatening professional autonomy and power:

"A New York rheumatologist describes a scene at rounds where a professor asked the presenting fellow to explain how he arrived at his diagnosis. Matter

of factly, the reply came: "I entered the salient features into Google, and [the diagnosis] popped right up." The attending doctor was taken aback by the Google diagnosis. "Are we physicians no longer needed? Is an observer who can accurately select the findings to be entered in a Google search all we need for a diagnosis to appear—as if by magic?" (Lindberg & Humphreys, 2005)

Thirdly, the rise of consumer culture in the context of professionals increased consumer awareness of the ability to choose between professionals. The very presence of marketing activities across professional services and, with it, a strong consumer culture is a relatively new phenomenon. It was only in 1980 that the US Federal Trade Commission pressed for the 'deregulation' of professional services including doctors, lawyers, accountants and dentists in order to encourage marketing activity and greater consumer choice (Stiff & Gleason, 1981). Professional associations argued strongly against this change, maintaining that marketing methods would attract a lower quality of professional and would create pressure to reduce prices, which would mean that a number of services previously operated by professionals would be instead provided by para-professionals (Bloom & Stiff, 1980). Despite these arguments in many service categories, consumers are now able to shop widely among service providers. The ability for consumers to get a second opinion means that professionals are under greater pressure to ensure that consumers are satisfied with their service outcomes.

Fourthly, there is the role of the media in influencing the way that consumers view professionals. Bodies of professional knowledge are built through the debate amongst professionals, with consensus forming over time as to the 'best' way of providing a

service. Yet, this debate is often presented by the media and understood by the public, as reflective of uncertainty over the underlying body of professional knowledge (Pettset al., 2000). For example, when a 1998 paper in the Lancet (Wakefield et al., 1998) questioned the efficacy of the single MMR vaccine (mumps, measles and rubella), it received massive media publicity. Competing claims and counter-claims amongst health professionals over which vaccine was safer caused confusion amongst the general public who, in many cases, stopped giving their children either sort of vaccination (Murch, 2003). Vaccination rates dropped as low as 61% in London and, by 2005, mumps and measles epidemics had occurred in the UK, Ireland and the Netherlands resulting in the deaths of a number of children (Pepys, 2007). Further scientific studies found no evidence for the original concern of a link between the MMR vaccine and autism.

Yet, consumer exposure to a debate that would have previously taken place only amongst professionals caused substantial professional mistrust. Even as the media reported that the risks were unfounded, private health providers offered single vaccines as an alternative to MMR (figure 2.2). At a broader level, this represents an example of public challenges to the claims of science and its rationality. Scientists, and by extension professionals, are emotional beings and whilst these emotions help further the cause of science, they can also cause confusion, debate, and occasionally distortion of scientific rationality in the pursuit of personal goals (Thagard, 2004).

Source: The Guardian 5th February 2008

Figure 2.2 Article and advert for MMR single vaccine

Finally, there is the role of the risk society (Beck, 1992) where risks in modern society are produced by human activity and thus can be measured and managed, rather than occurring through natural forces. In turn, this causes increasing individualism due to "the loss of traditional security with respect to practical knowledge, faith and guiding norms" (Beck, 1992). I will review the role of risk in consumer decision-making later in this chapter. However, it is worth first considering the different constructions of risk between professionals and members of the public. Whilst professionals focus on quantitative measurements of risk, for the public, risk is more often a social construct where the understandings are driven by the memorability, representativeness or the

emotional content of the risk (Pidgeon, 1999). As these threats to professionals highlight, the role of the professional in today's society and the way that the service encounter is constructed are fundamentally different from the ideal-typical professional.

"The circumstances in which an occupation becomes able to organize and control its own work are generically different from the situation today in which…. a consumer chooses who is to perform what tasks and how much will be paid, and on what terms, for performing them." (Friedson, 2001:180)

2.3.3 Health Service Professionals

I use the phrase 'health service professional', awkward as it may be, instead of the word 'doctor', to recognise the fact that there are large numbers of professionals other than doctors who are involved in health service delivery. Despite this, it is difficult to write at length about professionals without reference to the archetype professional, the doctor. The professional status of doctors has its origins 2400 years ago in the oath of Hippocrates, which includes the following excerpt (Edelstein, 1943):

"I will hand on precepts, lectures and all other learning to my sons, to those of my master and to those pupils duly apprenticed and sworn, and to none other."

Whilst the line 'and to none other' may form an exaggeration of current practice (Tallis, 2005), doctors are no different from any profession in seeking to exert their

professional authority over and above both consumer and organizational authority (Friedson, 2001). Indeed, a consumer orientation has been found to undermine the ability of professions to control their work (Wilensky, 1964). One prominent example of this is the opposition from many in the medical profession to the founding of the NHS, on the basis of it weakening the position of the physician within the health system (Rivett, 1998). It should also be highlighted that the power-balance in the doctor-patient relationship as perceived today is very different from the situation in the 17th Century, where doctors were only paid if the patient was healed (Pomata, 1998). The disappearance of payment-per-result for doctors coincided with the increasing professionalization of medicine (Gigerenzer, 2002).

The question arises as to where to draw the boundaries when defining who is, and who isnot, a health service professional. The original impetus for UK doctors being regarded as professionals occurred with the requirement in 1858 for all doctors to be registered with the general medical council; a move that was followed by debates on whether nursing could also be considered a profession (White, 1976). The situation has expanded today so that, in addition to doctors, nurses and dentists, thirteen other job categories are recognised as being health professions, and are regulated by the UK Health Professions Council. The list includes arts therapists, biomedical scientists, chiropodists/podiatrists, clinical scientists, dieticians, occupational therapists, operating department practitioners, orthoptists, paramedics, physiotherapists, prosthetists & orthotists, radiographers and speech & language therapists (Health Professions Council, 2008). However, the designation and integration of these new professions and their registration by the Health Professions Council were driven not so much by demand from the professions themselves, but by a requirement to meet

consumer demands for a regulated service.

2.3.4 The Professional Service Encounter

As professionals must be distinguished from non-professionals, the professional service encounter must be delineated from the routine service encounter. Marketing theory has often concerned itself with the balance between managerial control and consumer control, as evidenced by the drive for organizations to develop a 'marketing mindset' (Kotler, 1977). This has resulted in marketing logics that, to varying degrees, reflect the balance between consumers and the managerial structure of the organization (Vargo & Lusch, 2004). Yet, this ignores the third type of control, occupational control, that is brought to a service environment where professionals dominate. I make the distinction between routine service encounters and professional service encounters based on the self-identity of service workers, and the extent to which they conform to professional norms that make them subject to occupational rather than managerial control. The content of routine service encounters, such as in restaurants and hotels or onboard aeroplanes, are driven by sets of organizational rules. Whilst there is inevitably an element of flexibility in almost all such service roles, the employee is bound to follow the organizational guidelines, often with the flexibility built around 'giving the customer what they want'. This might be translated as giving the customer what they want profitably. For example, whilst hotel staff may be able to change a customer's room, or order a specific food item, there are organizational limits set within even the most customer-centred organization. For example, Ritz-Carlton gives every employee a $2000 'empowerment fund' to deal with any customer complaint on the spot (Blanchard & Bowels, 1993). With Yum

Brands, owners of KFC and Pizza Hut, employees are empowered with just $10 to deal with dissatisfied customers, but the implications are the same. Although the service employee can behave autonomously, this autonomy is tightly controlled by the organization.

In contrast, a professional service encounter, whilst existing in an environment of organisational and consumer power, is ultimately governed by occupational codes. For example, lawyers have professional obligations that ensure that they preserve the confidentiality of their clients. Doctors may refuse to prescribe certain treatments to patients whom they believe do not require the treatment, even if the patient requests it. Similarly, doctors may ignore organisational requirements to avoid prescribing expensive treatments or medications, as their professional norms require them to give the best treatments currently available. Whilst the goal of a service firm, such as a private-sector healthcare provider, may be to maximise profits, this goal can clash with that of the professional, which is to maximise the quality of treatment received by the patient.

Bloom (1981) identifies a number of ways in which a professional service encounter can be said to differ from a routine encounter. Firstly, choosing a professional and using the service requires a high level of involvement on the part of the consumer. Visiting a lawyer or a doctor requires more extensive engagement, and most professional services involve multiple encounters that extend over a period of time (Johnson & Zinkhan, 1991). Buying a coffee, on the other hand, requires only a limited amount of engagement with the service provider assuming the consumer is

knowledgeable about the service offering.

Secondly, it is difficult for consumers to correctly evaluate service quality before, during, and after the delivery of the service. In professional services, this can be seen in the information asymmetry that exists between the professional and the consumer. An underlying reason why consumers seek professional advice is because the professional is in possession of information that the consumer lacks. Such information imbalance would allow one side of the relationship to manipulate or overcharge the other. For example, Akerlof (1970) highlights how the information imbalance in the used car market reduces the incentive for high quality vehicles and increases the likelihood of low quality cars - 'lemons' - being put on sale. In situations of asymmetry, consumers look for signals to help reduce the information imbalance. In the car example, these include reputation, advertising or warranties. It is relatively easy for consumers to find information on the quality of such service providers, for example, through a range of online review sites. For professional services, these signals, where they exist, are of more limited value. Due to the highly individual nature of services, it is difficult for direct comparisons to be made between service providers, even where service rankings exist. Furthermore, privacy requirements in many professions prevent the effective collection of data that would enable comparative devices to be offered.

Thirdly, when consumers need a professional, it is often in a hurry. As such, consumers do not have the luxury of spending large amounts of time and effort evaluating service providers. The face-to-face nature of professional service delivery

means that geographic constraints require local delivery of a service. Geographic restrictions on practice also restrict selection; in the US lawyers are licensed by state, and medical registrations for doctors often exist on a per-country basis.

Fourthly, consumers often have high levels of loyalty to the individuals who provide a service. Without mechanisms to judge service quality, and based on the restrictions previously outlined, consumers are more likely to stick with professional service providers who have previously delivered satisfactory service. Finally, Bloom (1981) notes that these professional service providers are "often bound by professional standards that frequently prevent them from doing everything possible to please a client or customer". Therein lies the paradox of the professional service encounter. To comply with occupational norms, professionals must often take actions that run against the immediate wishes of the consumer or the organization.

2.4 Health Service Delivery in the UK

2.4.1 The National Health Service

The delivery of health services within the UK is defined and controlled by the omnipresent National Health Service (NHS). The idea of a single national health system was conceived in the period after the Second World War. However, its origins go back further, to the increasing development of voluntary health services during the latter part of the 19th Century, and the growth in public health services during the early part of the 20th Century (Webster, 2002). Thus, it was not the case that there was no healthcare available to the UK population; rather that health service delivery

was inefficient and unequal. In the 1930s, political embarrassment was caused by poor health outcomes in the UK when compared to the 'white dominions' such as Australia and Canada (Webster, 2002). Public health services were offered on a local basis, often with a great deal of overlap between services. The Second World War brought rapid centralisation and the development of a coherent national health system to cover emergency treatments (Webster, 2002). Post-war, the ambitious social agenda of the Labour government set the scene for the establishment of a centralised, free at the point of service, health service. Although establishment of the NHS may seem as an obvious progression, the UK was the first developed country in the world to adopt such a system (Klein et al., 1996). Substantial opposition to establishing the NHS came both from doctors, keen to protect their income streams, and the political opposition then led by Winston Churchill (Rintala, 2003). That the NHS was established at all is testament to the persistence of Aneurin Bevan, Minister of Health, who turned his position as *de facto* wartime opposition leader to lead the nationalisation of the majority of UK hospitals (Webster, 2002). His approach to getting health professionals to sign up to the concept of the NHS was a pragmatic one and can be summed up by his famous, alleged, statement about negotiating with doctors, 'I stuffed their mouths with gold'.

Following the establishment of the NHS in 1948, it did not take long for budgetary issues to surface. The initial £150million budget overran by 35%, and the situation did not improve in subsequent years (Klein et al., 1996). The original aim of the NHS - providing 'adequate' care for all, was being challenged by the economic realities of post-war austerity. A government committee setup to investigate the costs of the NHS identified issues that still resonate with some of the contemporary challenges facing it

(Guillebaud, 1956: 14).

"But even if it were possible, which we very much doubt to attach a specific meaning to the term 'an adequate service' at a given moment of time, it does not follow that it would remain so for long with merely normal replacement. There is no stability in the concept itself: what might have been held to be adequate twenty years ago would no longer be so regarded today, while today's standards will in turn become out of date in the future. The advance of medical knowledge continually places new demands on the Service, and the standards expected by the public also continue to rise."

Subsequently, the determination of costs for the NHS has not started from the basis of patient need but on what the allocated tax revenues can afford. This change, from guaranteeing a specific level of service to providing the best overall service with the funds available, resulted in Bevan's resignation. Yet, it has become enshrined in law over subsequent decades, as attempts by the public to force the NHS to provide them with certain treatments have consistently failed in the courts (Longley, 1993). Even the introduction of more consumer-focused policies, such as the 'Patient's Charter' in the 1990s, did not guarantee access to specific treatments but rather made somewhat vague promises such as the right to dignity. One might argue that without further definition, this is little better than the original promise of adequate healthcare. The NHS stands alone amongst healthcare systems in the developed world in guaranteeing not a certain standard of care, but guaranteeing access to some care. It is a system without entitlements where once access has been granted it is for health professionals

to determine which treatments are affordable (Klein et al., 1996). Whilst the budgets have increased massively since the early days of the NHS, it is still a system based on rationing of services - a rationing that takes many forms.

Focusing on the present, there is little current political or social will for changing the fundamental principles behind the NHS within the UK, yet change is required. The NHS Next Stage Review (Department of Health, 2008) highlights in detail the reasons why the existing NHS structure is unsustainable. These are detailed in six challenges (Table 2.2). The report refers to how expectations and quality of life have increased since the 1940s, and the challenge of an aging population who will require expensive health services. Also identified is the concern that modern consumers, used to commercial approaches in service management and customer experience, will simply not respond to the concept of the NHS in the same way that previous generations did.

"They expect not just services that are there when they need them, and treat them how they want them to, but that they can influence and shape for themselves. Better still, they will want services that 'instinctively' respond to them using the sophisticated marketing techniques used by other sectors. This is more than just a challenge for healthcare, but for our whole model of how we think about health." (NHS Next Stage Review, 2008:28).

Challenge 1	Even Higher Expectations
Challenge 2	Demand Driven By Demographics
Challenge 3	Health in an Age of Information and Connectivity
Challenge 4	The Changing Nature of Disease
Challenge 5	Advances in Treatments
Challenge 6	A Changing Health Workplace

Source: NHS Next Stage Review, 2008

Table 2.2 Challenges to the Future of the NHS

A consequence of the dominance of the NHS is the relatively small role of the private health sector in the UK compared to other countries. Seventeen percent of health expenditure in the UK goes on private healthcare, compared to 24% in France and Germany and 30% in Australia and Canada (Klein, 2005). This may suggest that the role of private providers is unimportant, and discrete from the offerings in the NHS. However, the reality is that the history of the NHS has created a high-degree of interdependence between the public and private sectors. The most visible aspect of this is that the majority of private sector doctors have full-time 'day jobs' as NHS doctors. Indeed, nearly 70% of NHS consultants also practice in the private sector (Klein, 2005). Government policy since the 1970s has encouraged the delivery of some NHS services by the private sector to the extent that 19% of private sector work is paid for by the NHS (Moore, 2009). To confuse matters even further, some key NHS 'branded' services are operated by the private sector. For example, most GP services are run as autonomous businesses by a group of GPs who are not paid a salary but remunerated in relation to the number of patients they attract. Whilst the political debates around the threat that the private sector poses to the NHS are strong,

the reality from a consumer's perspective is that the private sector is not a competitor to the NHS, but more a mirror of the services it provides. The private sector deals predominantly with elective, rather than acute, surgery and as such it can be said to be about improving the quality of life rather than saving lives itself (Klein, 2005). The role of the private sector within the UK can be seen in the context of providing a means for consumers to escape the inevitable rationing of non-emergency service inherent in any system where needs are unlimited, but funds are not. With the exception of a few services not available on the NHS, such as many types of cosmetic surgery, the purpose of the private health sector is to deliver services more quickly, but for a fee, than is available on the NHS (Rose, 2008).

2.4.2 Rationing and the National Health Service

Despite high consumer expectations, and the language of consumer choice being frequently used in relation to the NHS, the NHS system is fundamentally a rationed, rather than a market, system. Figure 2.3 shows the front page of the leaflet sent to everyone in the UK in 1948 to describe the new NHS and encourage people to sign-up for a doctor. Even 60 years ago it was deemed necessary to highlight that the NHS was not a charity and that it was a taxation-funded service. Thus the NHS is a system of finite resources, yet it deals with needs that rise at such a rate that they are, for all practical purposes, infinite.

THE NEW

NATIONAL

HEALTH

SERVICE

*

Your new National Health Service begins on
5th July. What is it? How do you get it?

It will provide you with all medical, dental, and
nursing care. Everyone—rich or poor, man, woman
or child—can use it or any part of it. There are no
charges, except for a few special items. There are no
insurance qualifications. But it is not a "charity".
You are all paying for it, mainly as taxpayers, and
it will relieve your money worries in time of illness.

Source: Ministry of Health, 1948

Figure 2.3 'Introducing the New National Health Service' Leaflet

A move against rationing was introduced on the 20th March 2008, with patients who require non-emergency treatment within England being able to visit any NHS hospital, or a number of private sector hospitals with contracts with the NHS. Yet, despite the presence of the ability for patients to choose, there is still a clear lack of mechanisms for consumers to evaluate service quality. As one doctor, writing anonymously, notes it is only the potential promise of consumer-focused performance

data that is likely to put consumers in the position of making choices (M.D., 2008:10)

"Most patients will choose to stick with their nearest hospitals; but choice has
the potential to improve quality and safety in the NHS by putting reliable,
independent, unbiased performance data in the public domain and making all
hospitals up their game."

Rationing has a link to the word 'rationality', as shown by its Latin roots, thus
providing an indication that any rationing process should give, in some sense,
everyone what is their due (Klein et al., 1996).Yet, rationing in the NHS is an
emotion-laden and divisive issue, often seen as being anything but fair. In a strict
sense, this reflects the fact that resources allocated to the NHS are not rationed at a
macro level, but are allocated through a priority setting process. As the NHS is paid
for out of general taxation rather than any ring-fenced funds, its budget is set through
a process of ongoing negotiation between various government departments and the
treasury. From a consumer perspective this may seem to be a purely semantic
difference where, at a micro level, they have been unable to access a particular health
service. Rationing, such as is evident within the NHS, can take a number of forms
(Klein et al., 1996; Parker, 1975), both overt and covert.

Firstly, there is rationing by denial. This is the most overt form of rationing and works
by excluding those who do not meet a specific threshold for receiving access to a
service. Within the NHS there are certain services that are rationed in the sense that
they are not offered by the NHS at all. For example, many forms of cosmetic surgery

are restricted unless there are psychological grounds for offering the surgery. Rationing by denial is arguably the fairest of the rationing techniques, as its methods can be objectively determined, and the means of rationing equal to all. Clearly, the level of fairness is limited by the ability of an individual to pay for any denied treatments outside the NHS. An anecdote about Soviet economic policy tells the story of a Soviet official visiting London and, being impressed by the availability of food, asking to speak to the person responsible for the city's bread production (Hartford, 2007). Yet, if the same official had asked to speak to the person responsible for allocation of pharmaceuticals, he need have looked no further than the National Institute of Clinical Excellence (NICE), the organization responsible for deciding which treatments and medication should be provided by the NHS.

NICE was established in 1999 in response to the need for a more equitable and consistent means of deciding which treatments should be provided by the NHS. This was partly a response to internal markets within the NHS, having created varying access to treatments depending on an individual's geographical location within the UK, a so-called 'postal code lottery'. NICE bases its evaluations on two criteria - clinical and economic evidence (Rawlins & Culyer, 2004). In terms of economic evidence, NICE considers the issue of whether a specific medicine or treatment represents value for money. As such, the simple acronym QALY has become one of the most powerful phrases in the worldwide pharmaceutical industry (EIU, 2008). QALY stands for cost per quality-adjusted life year and seeks to answer the basic question of whether it is worth paying to keep someone alive. It has been suggested that the answer to this question, at least from the cold economic viewpoint of NICE, is between £20,000 and £30,000 per year (EIU, 2008). In practical terms, this has led to

a standoff between pharmaceutical companies and NICE whereby access to the NHS is available only in line with substantial price drops (EIU, 2008). With its huge centralised budget, NICE has become such a powerful determinant of pharmaceutical pricing around the world, and many firms are keen not to reduce prices under pressure from NICE for fear of having to offer price reductions in many other markets (EIU, 2008). This system of rationing has received criticism from representatives for those groups who have lost out through the system. Indeed, the decisions made by NICE make for some emotional reading. For example, the Royal National Institute for the Blind unsuccessfully campaigned against a NICE decision that expensive treatments for age-related macular degeneration could only be given to those who were already blind in one eye (RNIB, 2007). Yet, the NICE system has been held up as an example of a highly efficient process for rationing resources in a non-market health system (Sculpher et al., 2001).

A second form of rationing is the use of selection. This limits the provision of services to specific groups who are most in need or most likely to benefit from the service being made available. Examples of this within the NHS system include the provision of free medication for children and the elderly, in addition to free dental treatments for children. There is much wider use within the US healthcare system where Medicare, for those over 65, and Medicaid, for those on low incomes can be seen as specifically selecting groups who would most benefit from treatment. Whilst it has similarities to rationing by denial, the difference is the selection up-front of specific groups who are to be helped.

A third form of overt rationing is termination of services. Providers can simply decide to stop providing a service. Whilst within the mainstream NHS this is not an overt strategy, the concept of turning patients onto the streets not being within the overriding ethos of the NHS, there have been examples of patients from outside the UK who are classified as health tourists. In this case, health tourism means specifically visiting the UK for the purposes of receiving free medical treatment. Some NHS hospitals have adopted a termination form called 'stabilise and discharge'. For example, whilst heart attack victims normally stay in hospital for 10 days, under the 'stabilise and discharge' system they are forced to leave the hospital within 48 hours unless they can make immediate payments (Furlong, 2008).

Then there are the more covert forms of rationing. Rationing by deflection exists where different organizations within the healthcare system attempt to pass an individual between providers in order to protect their own resources. Two similar approaches to rationing are the use of deterrence and delay. Deterrence implies making it difficult or inconvenient to use a service. For example, if hospital waiting areas are unpleasant, then certain groups may decide not to use them. Similarly, long delays in access to health services can put off those in less need. As many conditions can resolve themselves after a few visits, the practice of requiring a week or more delay for appointments to see general practitioners can produce a more efficient use of resources. However, this inevitably leads to situations for many types of medical treatment where delays leave those most in need of treatment vulnerable. As an extreme example, some cancer patients in Scotland were left waiting over 200 days for treatment – a practice that ultimately reduced costs, but only because many patients died before the treatments could begin (Martin, 2007).

A final form of rationing is one of dilution. Rather than targeting specific services, dilution implies a wholesale reduction in the depth of service received. Examples of this within the NHS have been the shortening of the length of appointment times for visiting doctors, or the phone and web based NHS Direct service, that offers a nurse based service for minor conditions.

2.4.3 Marketing and Consumerism in Health Services

The role of marketing in healthcare, particularly in the UK context, is highly contested. Healthcare practitioners, particularly doctors, often see the rise of consumerism as a threat to their professional status, whilst patients prefer to be known as patients (Evans, 2005). For the 'no-logo' generation, consumerism carries connotations of greed and manipulation, quite the opposite of the image normally associated with the 'caring' NHS. More significantly, consumerism has failed to take hold in the UK because of the role of the NHS. This contrasts with the US where "Consumer-Driven Healthcare" is the moniker being attached to current rounds of health-care reform (Scandlen, 2005). This follows a US backlash against "managed healthcare", where the insurance companies, rather than individuals, manage health choices (Rosenthal et al., 2005). Whilst, from the perspective of the European social-healthcare model, it may seem that the US healthcare system has always been more customer focused the trend over the last few decades has been toward taking spending decisions away from the individual. Whereas in 1960, US consumers paid directly for around half of healthcare expenditure, by 2002 this figure had fallen to 14% with third-party organizations, principally insurance companies, paying for expenditure

(Scandlen, 2005). In this sense at least, the US model has some similarities to the UK in that it is not the user who directly pays for the healthcare treatment.

The difference in attitude towards healthcare consumerism between the US and the UK is down to one key difference; the fact that healthcare rationing is accepted as a key part of the UK health system (Maynard, 2005). That is to say, that the reasons that the US spends twice as much of its GDP on healthcare than the UK is because more limitations on health spending are tolerated in the UK on the grounds that the NHS is more equitable (Maynard, 2005). Thus, the primary role of the private healthcare sector in the UK has been established to reduce waiting times and provide a way that people can "buy themselves out" of the rationing situation.

Whilst there is a large body of organizational research focusing on the healthcare domain, it is dominated by organizational behaviourists (Laing et al., 2002). There is a great deal of research in terms of understanding the way that health service organizations are run but far less in terms of the delivery of services themselves. This is reflected in the prevailing attitudes towards marketing in the UK healthcare sector. Within the NHS these attitudes are complex, with professionals indicating a fear that even mentioning the 'm-word' might compromise the ideals of the NHS. Two quotes from a marketing consultant attending a conference sum up these complex, and sometimes contradictory, attitudes towards marketing. Firstly there is the question of whether marketing should be referred to at all, as this report from a conference for marketing professionals working in the NHS highlighted.

"It was even suggested by some audience members that it would be helpful not to use the word marketing in the NHS setting as this may provoke a defensive response due to a lack of understanding of what marketing can do for such an organization." (Hudson, 2007)

Secondly, there is the sense amongst the public that marketing is an activity that creates little value for health service consumers within the NHS.

"NHS managers are sensitive to public opinion and can guardedly see that patients might feel that money spent on marketing is money not spent on cleaning wards." (Hudson, 2007)

That marketing is such a dirty word within the NHS is perhaps not surprising given its questionable role within a system that to function has to ration services and deny consumers choice. Even within the health industry, marketers have to face criticism for taking decisions on a purely commercial basis that have profound social implications. For example, of 1223 new pharmaceutical products released between 1975 and 1997, only four were specifically designed for the developing world (Holm, 2002). Even those researchers who advocate the use of marketing within the healthcare sector seek to establish their credentials by first documenting the failings of corporate marketing (Sheaf, 1991).

2.4.4 Marketing & Health Communication

Within the NHS, marketing has become associated with health communication, essentially something used to change consumer behaviours with regards to their interactions with the NHS. One example of the way in which marketing has been adopted by the NHS, as well as the wider public sector can be found in social marketing. Social marketing has been defined as 'the systematic application of marketing alongside other concepts and techniques to achieve specific behavioural goals, for a social good' (National Social Marketing Centre, 2007). Social marketing has its origins in a paper by Kotler & Zaltman (1971) that suggested the use of commercial marketing techniques for the process of behavioural change to encourage compliance, rather than through using legal means to force compliance. The combination of the words 'social' and 'marketing' in one sentence itself creates challenges for those who view social causes as being incompatible with a commercially oriented marketing approach (Jesson, 2007). The challenge for such hybrid approaches is how they fit in with the approaches of many social organizations which campaign for behavioural change based on legislation and whether, in certain contexts such as smoking where the problem is one of a chemically addictive substance, persuasive marketing approaches can ever be truly effective.

The concept of health service marketing is far more widely used and accepted in a US context. For example, the Centre for Disease Control and Prevention, an arm of the US government, specifically uses the term health marketing as opposed to its UK equivalent, the Health Protection Agency, which relies on more general phrases such as health communications. The official definition of health marketing is as follows:

"Health Marketing involves creating, communicating, and delivering health information and interventions using customer-centred and science-based strategies to protect and promote the health of diverse populations." (Centre for Disease Control and Prevention, 2006).

Effectively, health marketing is being defined as using the full tools of the commercial marketing, combined with the evidence-based culture of health research, to improve the health of a population. Whilst a shift to consider the impacts of people as customers and, subsequently, more sophisticated marketing techniques is a worthy goal, it ignores two fundamental issues with the health or social marketing agenda. Firstly, the resources made available for public health marketing are limited. As a senior public health practitioner noted, there is far more scientifically-grounded, evidence-based research being produced than there are resources to implement the findings of such research (Lefebvre, 2006). The definition of health marketing as stated above is related to changing behaviour, be it in encouraging better eating habits or to stop people smoking. In such a way, they are up against a much more powerful and wealthier health marketing lobby, that of the commercial healthcare industry. Whilst government sponsored health information is labelled as propaganda (Furedi, 2006), health marketing by private firms is ubiquitous. It is useful at this stage to provide a clarification of the definition of health marketing. On the one hand, health marketing activities by private sector firms seek to change, or reinforce, behaviour patterns that increase consumption of a good or service. This is at odds with the goals of public health marketing where behavioural changes are focused on improving public health. For example, when the first evidence of links between smoking and

lung-cancer were developed in the 1950s, two parallel health marketing campaigns were launched. Public health bodies firstly sought to publicise the health impacts of tobacco consumption. At the same time, tobacco firms launched a campaign of disinformation aimed at making the research sound disreputable (Gigerenzer, 2002). It is no surprise that the medical professional has substantial discomfort at the use of marketing in a health service context (Jesson, 2007).

Yet even if there is discomfort at the use of marketing terminology within health services, political pressure responding to increasing public expectations has resulted in the increasing demands for patients to be considered as consumers. The use of the language of consumerism in UK health services is a relatively new phenomenon, first applied to health as in other UK public services, throughout the Thatcherite reforms of the early 1980s. Such attempts were criticised on the grounds that the consumer paradigm is inappropriate in a context where individuals do not directly pay for the service, choice is exercised for them by the health professional, and where consumers of health services are, at the same time, producers of good health (Gabe et al., 2004). For example, between 40% and 50% of morbidity and mortality rates are related to behavioural factors such as smoking, stress and overconsumption of food and alcohol (Thorpe, 2005). Initial attempts at a customer focus in healthcare did little to give customers real choice as they relied on satisfaction measures based on the hotel aspects of care such as the quality of food (Calnan & Gabe, 2001).

Further reforms of the NHS in the early 1990s brought the internal market and the "Patients Charter" (Gabe et al., 2004). In theory, the internal market sought to give

purchasing power to patients who would then need to be treated as consumers. However, in practice the internal market was, and is still, only a quasi-market with the funding distribution stopping with GPs who became proxy-consumers prescribing choices to patients and then making purchasing decisions on their behalf (Gabe et al., 2004).

Since the Labour government came to power in 1997, the NHS has seen a massive increase in expenditure, nearly tripling from its 1997 level to £92.6billion in 2007/08 (Department of Health, 2006). Despite a focus on improving the customer experience through a reduction in waiting lists and new services such as NHS Direct and NHS Walk-in centres, more than three-quarters of the new money going into the health service is required simply to cover the increasing costs of providing existing levels of healthcare to an aging population (Adam Smith Institute, 2004). Criticisms of such a consumer model are widespread. As Thorpe (2005) highlights, a large proportion of increasing healthcare spend is going towards expensive treatments for preventable diseases, such as type-2 diabetes. The consumer processes that encourage patient choice in receiving such treatments do little to encourage behavioural changes to prevent the disease from occurring in the first place. What is more, through removing the financial burden from the individual customer, a moral hazard situation is created.

The rise of consumerism and the consequent assault on professionalism (Friedson, 2001) can be exemplified by the common use of the term 'worried well' to refer to health consumers. The phrase originated in the USA in the mid 1990s, in response to increasing consumer access to health information, after the rise of the Internet as an

information medium. This notion that those who ignore the wishes of the medical profession must themselves suffer from a medical condition, such as hypochondrias or anxiety disorders (Burton, 1999), can be considered an indication of how little the medical profession has shifted from the form of ideal-typical professional. Friedson (2001:17) defines this role as where 'work is so specialised as to be inaccessible to those lacking the required training and experience'. Yet, this description of health consumers is one determined not by research into consumer opinions, but rather from the perspective of health professionals. The first research question in this study, therefore, deals with developing a deeper understanding of the healthcare consumer.

2.4.5 The Health Service Encounter

Having previously detailed professional service encounters in general, I now look to the health service encounter with a particular focus on encounters within the NHS. A factor unchanged across health services over the last 3 millennia is that health services have been delivered through face-to-face interactions between some sort of health expert and a customer needing health services (Brown et al., 2006). In the NHS alone, there are over 300 million face-to-face service encounters each year, 90% being consultations with GPs (Department of Health, 2000). We can look further at general statistics for what happens during individual consultations. A typical consultation averages 13.3 minutes, each GP sees on average 117 patients a week and 90% of consultations are resolved without a need for further referrals (Royal College of General Practitioners, 2004). Yet, there is also wide variation between patients in terms of usage of services and it has been estimated that 15% of patients consume

two-thirds of healthcare costs (Newman et al., 1999). Those more likely to frequently use health services can be characterised as older, female, and less likely to be in full-time employment (Kapuret al., 2004). By contrast, younger men in full-time employment were less likely to visit their doctor regularly. Consumers' relationships with health systems, and their experience with health services, are defined by their interactions within the context of these dyadic service encounters with a health professional. This is most typically a doctor, although increasingly there are many other types of health professional with whom patients are likely to come into contact. The key issues in the health service encounter are communication, information and compliance, each of which I will now address.

The importance of effective communication in the health service encounter is underlined by the emphasis now put on communications training by medical schools (Tallis, 2005). Indeed, communication problems currently account for the largest proportion of complaints against doctors (Royal College of Physicians, 1997). A vivid example of the challenges faced by health professionals is given by Tallis (2005) based on two different patient experiences with the NHS. The first comes from the son of a patient, who had recently died, commenting on the treatment received by his father from their long-standing family doctor.

"The doctor would come round at the drop of hat to see my dad. A marvellous

GP… kind, and very tired-looking" (Tallis, 2005:45)

The second quote comes from somebody unhappy with the standard of care they had

received from their GP:

"And then he [the surgeon] spoiled it. He said it was unusual to find gallstones in someone so young - I was in my mid-twenties - since sufferers are normally 'the four Fs: fair, fat, fertile and forty. You're certainly not three of those but hopefully you're still fertile!' I was mortified... The surgeon told me I would have to have my gall bladder removed using keyhole surgery…. I started thinking about all the questions I should have asked. I had been given very little information about my condition. What are the potential risks? Who was the surgeon and what was his track record? Are patients considered too stupid to understand what's going to be done to them?" (Tallis, 2005)

The first quote is from the son of a patient of Dr. Harold Shipman, a family doctor and notorious serial killer in the North of England, who killed as many as 250 of his patients over a 27 year period. Despite the quantitative data, such as frequency of deaths and the frequency with which Shipman was present at deaths indicating high levels of risks, his patients saw nothing wrong. Despite being a serial killer, Shipman performed the role of the avuncular GP well, and escaped suspicion from the local community. The second quote, on the other hand, is from a young patient given the latest medical treatment requiring a couple of days off work, as opposed to the normal six-weeks. Despite the excellent clinical treatment, the patient objected to the 'patronising' manner of the surgeon and judged the experience with the NHS to be a failure.

Health services have both similarities and dissimilarities with other types of services (Berry & Bendapudi, 2007). Health services are intangible in that the core medical service is delivered through a performance from a health service professional. Production of the service is also inseparable from consumption in that patients must be present when the service is delivered and it is also perishable. If an appointment with a health service professional is missed, then the human resources allocated to that appointment cannot be reused. Finally, like many other complex services, consumers are at a disadvantage due to information asymmetry between the professional and the consumer. Yet, there are three substantive ways in which health service encounters are different from other types of service encounters (Berry & Bendapudi, 2007). Firstly, consumers of health services are usually sick or fear that they are sick. Health service consumers are likely to face high levels of stress and anxiety and, whilst health service providers may attempt to improve the quality of the surroundings, hospitals are fundamentally not pleasant places to be (Cmiel et al., 2004). Secondly, customers are usually reluctant to be health service consumers, a reluctance that may limit opportunities for co-production of the service (Bendapudi & Leone, 2002).

"Service scholars rarely consider the issue of customer unwillingness to perform the co-producer role. In health care, customer wants and needs frequently conflict. Customer co-production often involves directly confronting fears ("Will the test reveal cancer?"), considerable inconvenience and cost ("I can't miss two weeks of work to have the surgery"), and making lifestyle changes ("The doctor wants me to stop smoking, but I've never been able to do it before")." (Berry & Bendapudi, 2007:114)

Thirdly, there is the question of the level of risk that customers are putting themselves under. Service failure in health services is widespread, from hospital infections (Burke, 2003) to wrongly prescribed medication (Institute of Medicine, 2006). The consequences of service failure impact directly on the well-being of consumers in a way that is not paralleled by any other service.

I now move on to the issues of information flow within the health service encounter. Traditional educational models of doctor-patient communication assume a simple one-way transfer of information from doctor to patient (Marteau and Johnston, 1990), with information asymmetry existing in the dyad. The level of asymmetry between health service consumers and professionals is an aspect of health service encounters that has been highlighted extensively in the literature (Brown et al., 2006), most critically by economist Kenneth Arrow in his seminal 1963 article. In this article, Arrow argues that due to asymmetry and imperfect access to information it is not possible to achieve the competitive equilibrium found in many other consumer markets. Whilst Arrow is making a theoretical, economic, argument for the uniqueness of health services from a consumer's perspective, some scholars have voiced frustration at his research being used to exaggerate the extent of this uniqueness. As Robinson (2001:1045) argues, no doubt with some irony:

"To some within the health care community, the uniqueness doctrine is self-evident and needs no justification. After all, health care is essential to health. That food and shelter are even more vital and seem to be produced without

professional licensure, non-profit organization, compulsory insurance, class action lawsuits, and 133,000 pages of regulatory prescription in the Federal Register does not shake the faith of the orthodox."

Focusing this sense of uniqueness on the health service encounter, there are four aspects of these encounters that can be highlighted (Sloan, 2001; Arrow, 1963). Firstly, there is the basic fact that in most cases consumers are likely to be less informed about conditions than doctors. Even in the age of information availability on the Internet, most people visit doctors for their professional expertise.

Secondly, the need for health services is probabilistic, in that it cannot be easily predicted. Whilst health screenings can go someway to giving consumers information, the likelihood of suffering from a specific illness is small. This means that, except in conditions of chronic illness, there is no incentive for consumers to gain information, as they are unable to predict which illnesses will affect them. Thirdly, in most cases health services are not experience goods. That is, whilst consumers have a need for health services throughout their lives, the specific health services vary. Thus consumers cannot learn from experience in the same way that they might be able to for other consumer services, or even other professional services that they purchase more frequently. Health services are therefore credence goods (Emons, 1997) that rely on tapping the experiences of other customers or a level of trust in the health professional (Sloan, 2001). In the environment of the NHS, the NHS itself serves to provide credence to the professional. However, this lack of experience is in itself asymmetric due to doctor specialisation and training doctors are able to gain extensive

experience of each treatment. Finally, there are externalities in healthcare consumption (Sloan, 2001). It is important to consider not only the matter of how the individual is involved in consumption but also the role of consumption among others. For example, for vaccination programmes to be effective they require a large proportion of the population to become vaccinated so as to develop a general immunity amongst the population.

Finally, there is the question of patient compliance. It is important in health service encounters that consumers not only listen to and understand the information but also take the appropriate behavioural action required. It is easy to assume, in a world of easy access to Internet-based health information, that patients are in a position to understand and interpret correctly all the information available. Yet, as can be demonstrated by several classic studies into patients' understanding of the content of health service encounters, this is not always the case. For example, 80% of patients were unable to locate the stomach and 60% the heart (Boyle, 1970), whilst half of people believed that lung cancer due to smoking was easily treated (Roth, 1979). Where patients are unable to understand what a particular treatment means for them or even the basic content of what is being said during the consultation, it increases the chances of lowering levels of compliance with the recommendations of the health professional.

Whilst models of asymmetry often focus on the one-way asymmetry attributed to doctors and health professionals, (Brown et al., 2006) there is also the question of the role that the health consumer plays in the information flow. It is the health consumer

who has initiated the encounter and the information the consumer chooses to give to the health professional will, in turn, influence the outcome of the service encounter. For example, health consumers can choose to withhold certain information about their condition or about previous treatments. A patient may have concerns about a particular illness based on information gathered after an Internet search but be unwilling to admit the source of this information to the health professional. Where individuals are asymptomatic or presenting with psychosocial conditions that make diagnosis based on physical conditions more difficult, the role of this sort of asymmetry becomes more critical. Under such circumstances, a form of dual-asymmetry exists as both the health care professional and the consumer hold information that the other side needs in order to ensure a successful outcome to the service encounter.

2.4.6 Consumer Evaluations of the Health Service Encounter

Traditionally, measures of health service quality have been focused on macro measures, such as overall life expectancy for a population or death rates from specific diseases and illness (Dagger et al., 2007). Yet increasing consumer focus, and a shift towards patient-centred care, has created demand from consumers for relevant health care metrics. In market oriented health systems such as the US, providing such measures of health service quality has also been seen as good business sense and a means of providing differentiation between health service providers (Headley et al., 1993). Existing measures of service quality may be inappropriate in that they do not take into account the complexities of the health context (Draper & Hill, 1996).

The shifts towards more consumer-focused health service delivery have been matched by increasing discussion over the role that patients play in evaluating the quality of health service delivery (Dagger & Sweeney, 2007). Many existing measures overlook the important role of such softer, demand-side, evaluations of service quality in determining how consumers respond to health services (Dagger & Sweeney, 2007). The challenge is, therefore, to produce measures of health service quality that are meaningful to consumers whilst also reflecting relevant clinical outcomes. The problem is that consumers are often in a poor position to judge correctly the clinical outcome of service encounters and, therefore, depend more on non-clinical measures (Laing et al., 2002). There is also the question of to what purposes these evaluations can be put, even where patients' evaluations of service quality are measured.

'It must be remembered that one can have a satisfied patient who has had inappropriate investigation, incorrect diagnosis, inappropriate therapy and a less favourable outcome than could have occurred with treatment of better quality'. (Hopkins, 1990:55)

Studies have found that patients often disagree with professional evaluations, such as those from doctors or governmental organizations, of the quality of health services being received (Rashid et al., 1989). There is the additional challenge of distinguishing between the evaluations of service quality and the underlying differences between groups of consumers, such as variances in the underlying expectations of the standard of the health service to be received (Laing et al., 2002). Then we come to a question of whose satisfaction it is that should be measured. It is

all too easy to imagine a dyadic relationship measure between a patient and a doctor, yet the reality is that many of those who are most in need of healthcare, such as the young, elderly and those with mental health problems, are those most likely to have difficulties in responding to a Likert scale (Smith, 1993). There are also the many carers for whom the delivery of the health service will have a substantial impact.

More generally, there is the question of the failure of satisfaction measures for health services to successfully predict health behaviours (Laing et al., 2002). The link between satisfaction and behaviour is a complex one, even in the management literature where achieving a consistent definition of the satisfaction construct is a challenge (Fitzpatrick, 1990). Furthermore, applying measures that compare expectations with performance, such as SERVQUAL (Parasuramanet al., 1988), presents challenges when studies have found that health consumers are generally unwilling to give any sort of negative evaluation in surveys about the clinical services they receive (Hopkins, 1990).

3. Key Concepts, Theoretical Framework and Research Hypotheses

3.1 Introduction

In this chapter, I develop the theoretical framework that underpins this research, and highlight literature relating to the variables underlying the theoretical basis of this research. I discuss the relevant literature on emotion and the development of the construct of emotional labour. Additionally, I consider the concept of risk and the role that risk plays in developing consumer perceptions of services. I analyse the relevant literature pertaining to both consumer risk perception and emotional labour in service encounter. Whilst there is a broad literature on both these topics, to develop a framework for this research, I focus on the role of risk perception in health services and use the lens of emotional labour to analyse affect in the service encounter. The chapter is completed by development of the hypotheses that are to be empirically tested in this research and reported later.

3.2 Consumer Risk Perception

3.2.1 A Brief History of Risk

The goal of this research is to consider how a certain type of consumer perceives risk. The development of risk has been closely related itself to the development of human society (Gallant, 1991). Risk has become a key part of everyday life in today's world. Citizens of Western societies are encouraged to be knowledgeable about the risks of

everyday activities, and avoid risk where possible. For example, travellers in the UK are expected to check the Foreign Office's risk advisory before they leave for a foreign destination. The Department of Health gives further advice on health risks, whilst not to mention the Department of Trade and Industry highlighting airlines where there is a greater risk of an accident. Upon arriving at the airport, the security lines are dictated by the current Home Office risk level of terrorism, only to find that the flight has been cancelled due to the risk of bad weather. Upon leaving the airport we are warned about the risks of getting into an unlicensed taxi. However, despite the preponderance of risk communication, in previous centuries the uncertainties facing everyday life did not require communication by the government.

Not so long ago, a discussion of risk would have focused on the unpredictability of natural disasters and acts of God (Taylor-Gooby & Zinn, 2006). For example, in the Middle Ages danger was an ever-present part of life, creating uncertainty and insecurity as a result.

"Food supply at the end of the middle ages in Europe was very tenuous. Grain provides the basis of the diet, and production was vulnerable to the vicissitudes of the season. Infant mortality was very high and lifespans short (reaching the age of 40 being considered a fair lifespan)….In this world insecurity was rife and permanent." (Lupton, 1999 :2)

In such an environment, to help develop a sense that such dangers were under control, value systems developed that enabled the creation of this control to take place. For

example, in medieval France value systems combining Christianity, magic and superstition such as that where kittens born in May must be drowned, was a mechanism for managing these dangers (Muchembled, 1985).

In Western societies, the association of risk with the impact of random acts of nature has been replaced by a concern with risk as a function of modern technology (Taylor-Gooby & Zinn, 2006). Although kittens born in May are no longer drowned, the need to feel in control of risks has not diminished. This may seem a paradox, as few living in western societies have personal experience of the sort of dangers that were present in medieval societies. Yet, Western societies are increasingly dominated by a culture of fear, specifically a fear of taking risks (Glassner, 1999).

> "As in pre-modern times, the symbolic basis of our uncertainties is anxiety created by disorder, the loss of control over our bodies, our relationships with others, our livelihoods and the extent to which we can exert autonomy in our everyday lives." (Lupton, 1999:3)

A review of the contemporary literature on risk requires the reader to straddle two very different worlds. One world consists of measurable financial, or economic risks, where there is an attempt to quantify the financial impact of a decision. The other world is one of individual fear where risk, as a social-construct, represents a challenge to the fundamental need for humans to tend towards certainty. Scholars representing each of these views have been on a collision course over the past few decades. This

can be summed up by a review of two Royal Society[1] reports into the public understand of risk published in 1983 and the second in 1992 (Adams, 2001). The first report, entitled 'Risk Assessment' (Royal Society, 1983), was an uncontroversial, though much referenced, source that discussed the issues around communicating objective risks to the public. The second report 'Risk: analysis perception and management' (Royal Society, 1992) drew in a wide range of authors from many different academic disciplines, including sociologists, anthropologists and economists. The Royal Society ended up distancing itself from this report, disclaiming its involvement in the resulting document (Adams, 2001). The first of the reports made a distinction between an objective risk, that is a probabilistic judgment by experts as to the likelihood of a particular risk occurring and perceived risks, that is, the way that the general public would respond to these risks. The implication of such an approach is that risk is something that can be measured and assessed in a quantitative way. Risks are scientific and evaluations of risk that diverge from this scientific approach, whilst understandable, are due to psychological difficulties in evaluating risks. The controversy in the 1992 report was over this basic demarcation; that risk is something that exists independent of people's perception of it. The respondents could not agree on the basic definition of risk.

"The view that a separation can be maintained between "objective" risk and "subjective" or perceived risk has come under increasing attack, to the extent that it is no longer a mainstream position". (quoted in Adams, 2001:9)

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1   The Royal Society is the de facto scientific academy of the UK.

A similar situation occurred in the US National Academy of Sciences that attempted to maintain consensus by divided the debate on risk into two separate arguments, one on estimating objective risks and the other on judging what formed an appropriate level of risk (Douglas & Wildavsky, 1982).

> "The estimation of risk is a scientific question - and, therefore, a legitimate activity of scientists in federal agencies, in universities, and in the National Research Council. The acceptability of a given level of risk, however, is a political question, to be determined in the political arena." (Douglas & Wildavsky, 1982:62)

To distil the philosophical position for the social origin of risk to a political debate is, perhaps, to misunderstand the basis for these views. The argument against such objectivist positions on risk is that many modern risks are socially constructed. For example, the simple act of measuring certain risks may increase the public perception of that risk and thus reduce the level of risk seeking activity. On the face of it, this is a challenge between a subjectivist and objectivist view of risks. In this section, I consider both these perspectives, and attempt to reconcile them in the context of consumer risk perceptions in a service encounter.

Objective approaches to risk are often led by economists and, as such, can be aligned with approaches to risk originating in financial services. This financial perspective of risk can be captured well by the writings of Harry Markovitz and his theories of portfolio selection. Put simply the Markovitz curve, now a standard feature of

investment fund brochures around the world, suggests that with a portfolio of stocks, higher levels of return are associated with higher levels of risk. The greater the expected return, the greater the variance in risk. To supporters of portfolio theory, the sort of risk promoted by Markovitz appears to place risk as a number, just another line to be calculated on a balance sheet. Yet, these appearances are deceptive. In his PhD defence Markovitz's external examiner (Milton Friedman), complained that the thesis was not about economics (Holton, 2004) and Markovitch later wrote at length on the importance of subjectivity in risk calculations. In documenting the literature on this measurable approach to risk, Holton (2004) considers there to be two key elements: exposure and uncertainty. Risk therefore becomes "exposure to a proposition of which one is uncertain" (ibid:22). Objective approaches to risk still dominate at a public policy level, where the goal of many government departments, be it transport, law and order or health promotion, is to reduce perception of such risks at a population level. In his classic book on risk, Bernstein (1996) defines risk management as follows:

> "The essence of risk management lies in maximizing the areas where we have some control over the outcome whilst minimizing the areas where we have absolutely no control over the outcome and the linage between effect and cause is hidden from us." (Bernstein 1996:197)

Thus, the management of risk relies on being able to control the risk and, in turn, controlling a risk creates a requirement that it should be possible to measure it. Where cause and effect cannot be linked, it should be ignored, as the risk cannot be managed.

The corollary to this is a view of risk as being socially determined. As Douglas & Wildavsky (1983) put it, 'We cannot know the risks we face now, or in the future, but must act as if we do'. Viewing risk as a social construct recognizes that there are a number of dynamic social processes that underlie the way people respond to risks (Kasperson et al., 1992). In this view the very judgment about what is a risk, and what isn't is socially defined. This is because if we acknowledge the interlinked nature of risks between them, understanding and managing risk requires a level of total knowledge about the sort of risks that society faces. The understand of risks varies widely between different groups, even within the same society, as does the way in which some groups frame risk as being 'things in the past', where as for others risk is 'things in the future' (Douglas & Wildavsky, 1982). This interlinking can be seen in the example of UK campaigns to increase road safety for children. These campaigns appear on the surface to have worked, as the proportion of children killed in the UK as a result of road traffic accidents has been reduced nearly 50 fold between 1922 and 1986, in proportion to the volume of traffic on the roads (Hillman et al. 1990). Yet, at the same time, the proportion of children being driven to school has risen from 9% to 80% (Adams, 2001). Here it is, the awareness of risk, and increased vigilance as a result, that has altered behaviour in a way that was perhaps unintended by the traffic planners. Such processes can be seen to contribute to an explanation of why certain hazards and events which might be seen as relatively low risk receive more attention within a society (risk amplification), whilst other much higher risks receive less attention (risk attenuation). Examples of risk amplification could be seen as smoking, radon in the environment and car travel, whilst examples of risk attenuation could be the risks of nuclear power, Y2K, "Mad Cow disease" or terrorism. Glassner (1999) goes as far as to suggest that many contemporary risks are not merely socially

amplified, but a product of the social imagination. In an essay entitled "Why Americans fear the wrong things", Glassner identifies many risks for which the public perception of the risk bears no relation to the risk itself, including hospital superbugs, violence by young men, and unemployment relations. Content analysis of the number of people suffering from chronic illnesses in the US, based on exaggerated numbers reported in US national newspapers, came up with the statistics that there must be 543 million seriously ill Americans (Garfield, 1996). The estimate of women in their 40's of the lifetime risk of dying from breast cancer at 10%, has little relation to the actual rate of 1 in 250 (Berman & Wandersman, 1990).

As with many social science theories, there lies an epistemological middle ground, where objective and subjective risks lie side-by-side. This approach has most actively been pushed by Kasperson (1992), who argues that the role of society in influencing and creating risks does not mitigate the realization that many of these risks cause objectively measurable harm.

> "Risk, in our view, is in part an objective threat of harm to people, and in part a product of culture and social experience. Hence, hazardous events are "real"; they involve transformations of the physical environment or human health as a result of continuous or sudden (accidental) releases of energy, matter, of information or involve perturbations in social and value structures." (Kasperson, 1992:154)

Kasperson has been criticized for treating risks as both objective and subjective, yet in

the context of this study, it is a perspective on risk that can be directly applied to health services. Unlike many of the public to which Glassner (1999) refers, the health dangers related to excess radiation exposure are not imaginary; neither are the consequences of patients failing to receive a correct diagnosis for potentially fatal conditions. Yet, at the same time, attitudes towards personal safety that influence the demand for such health services are also highly influenced by culture and social experience.

Returning to the question of how information about risks is transmitted through society, these processes can be described through a framework known as the Social Amplification of Risk Framework (SARF). SARF provides a way in which to understand how a number of dynamic social processes underlie the way people perceive and respond to risk; that is, to consider risk not at an individual level, but to understand group level interactions that lead to attenuation or amplification of risks (Kasperson et al., 1988). The social amplification of risk is a well documented phenomenon in psychology (Kasperson et al., 1988), with the Kings Cross, Three Mile Island, Mad Cow disease and the future of Genetically Modified food being examples where the interpretation of the danger from the risk has been substantially greater than the physical harm. On the other hand, the risk of naturally occurring radon gas and smoking are socially attenuated and interpreted as being lower risk than is actually the case.

At a macro level, the statistical understanding of risk and probability has provided decision makers with a certain amount of predictive capability to manage uncertainty.

Yet, for individuals, a number of social processes can distort the way that risk is perceived, either making it seem more or less serious than is actually the case.

3.2.2 Risk Perception and Health Services

The ability to sense harmful environmental conditions is a necessary evolutionary mechanism for the survival of all species (Slovic, 1987). In the modern world humans do not only respond to risk but also create it. By way of a comparison, in 17th Century Paris, purchasing life insurance meant gambling on the longevity of the life of a famous person (Gigerenzer, 2002). If a person died before the estimated time, then the gambler would make a profit. Life insurance today is about providing certainty to the individual against that which is uncertain - death. The concept of certainty is relevant because, in the context of communicating risks, it is closely linked to the concepts of authority (Gigerenzer, 2002). This is compared to with a society of modernity where the technology driven risks that we face, such as with nuclear or chemical accidents, are hard to understand (Slovic, 1987). As such, the source of advice on how we perceive specific risks is embedded in authority and individuals look to these authority sources, such as professionals, on how to deal with certain risks.

There is little in the way of research to support the thesis that the way that professionals assess risks influences the way that consumers perceive these risks or respond to them (Slovic, 2000). Public health professionals identify specific health risks, such as those associated with drinking or smoking, and then attempt to identify those risks to the general public through communication activities. This assumes that individuals are able to correctly evaluate the risk information and, from this, form a

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correct 'rational' evaluation of the risk whilst taking appropriate behavioural action to reduce (Alaszewski & Horlick-Jones, 2003). This is problematic because of the macro/micro divide between the way that health professionals communicate risk and how the general public perceives it. Whilst professionals evaluate risks on a population level, individuals perceive and rationalize them on an individual level. For example, the UK controversy over the MMR vaccine was characterized by parents miscalculation based on an individual comparison of risks, which was compounded by a government response of providing further public health statistics (Hobson-West, 2003). By failing to provide sufficient context to the risks, the public were unable to accurately perceive the risks.

A clear example of the role of authority in risk perception and health services is the placebo effect. Studies have found that trusting in a doctor or other health professional does not just induce a psychological response but can bring about genuine physiological changes in conditions, including pain, depression, and Parkinson's disease (Anderson, 2006). Indeed, the perceived power of the placebo effect is so strong that there has been increasing controversy over the use and sanctioning of homeopathic medicines within the NHS (Singh, 2008). This controversy lies in the belief my many senior NHS managers that the benefits of homeopathic medicines are largely as placebos (Singh, 2008). The danger is not in the presence of the placebo effect itself but in the authority of homeopathic practitioners where operating outside of the remit of traditional medical practice.

Where technology is not present or fails to provide a suitable interpretation of a

particular illness, metaphor is often used as a means of understanding that which we are unable to comprehend scientifically. In the 1880s, neurasthenia was an illness that affected women disproportionately in the United States (Glassner, 1999). Symptoms were broad and the illness was subsequently thought to be a combination of various common psychological conditions, virus or food poisoning. At the time, however, a leading doctor proposed that neurasthenia was in fact the result of the rise of technology and a drive towards better education of women (Abbey & Garfinkel, 1991). Thus, the illness was explained through a metaphor that fitted the socio-cultural needs, and prejudices, of the public. A more modern example would be Gulf War Syndrome and the difficulties in defining the underlying illness. Such situations challenge the role of the scientific definitions of risk in that the basis of the risk definition is itself a social construct. The case of illness as metaphor extends into situations where there is no illness, but rather the offering of health services to those with no symptoms, but concerns over potential health risks. Thus, it is not illness as metaphor but rather treatment as metaphor. Health tourism, as previously discussed, is one type of metaphor, with the health service being put into the highly positive context of tourism. The health screening services, that form the research context for this study, use a powerful metaphor of the 'health MOT[2], situating the service as being routine.

3.2.3 Risk Communication and Health Screening

In the context of a professional service encounter the role of risk communication is as critical as that of risk perception. Many studies have identified that the way in which health risks are communicated to individuals has a strong influence on how people

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2   An MOT is an annual government mandated check of roadworthiness that must be taken by most cars in the UK.

perceive these risks (Edwards et al., 2004). Yet, as important, are the characteristics of the risk itself. In particular, there is the role of certain types of risks that can be labelled as catastrophic risks (Slovic, 2000). For example, studies into how people rate risks find have found that nuclear power is perceived as being far more risky than medical X-Rays, despite the higher radiation dosages received through X-Rays.

Health screenings, such as those involving radiation, can have a number of physiological, economic and psychological consequences. The physiological consequences relate to the potential harm of the radiation involved in undertaking a screening. From a UK perspective the economic consequences are that, whilst the consumer may pay for the diagnostic tests, it is the NHS who are likely to have to pay for any ensuing treatment. The potential unreliability of these tests could lead to substantial unnecessary cost. However, I focus here on the psychological consequences as these are the most influential from the consumers' perspective. This potential psychological impact of receiving test results from asymptomatic screening is considered on two levels. Firstly, how the individual's decision-making process might be altered by the receipt of test results, particularly where error exists in the test results. Secondly, the wider social impact of test results. There is little direct research on the potential psychological responses to CT scans, hence the following information has been generalized from studies in other medical contexts, including other uses of medical radiation.

Psychological outcomes at an individual level will depend on the motivations of the subject undergoing screening. This will be based on the communications advanced by

those promoting the screening tests. A desire for a healthier lifestyle, as well as increased anxiety about personal health, have been found to be factors that increase demand for health screening (Michie et al., 1995). Public health campaigns are often based on a fear-reassurance model, creating fear through identifying the negative health consequences of certain behaviours, such as smoking, and reassurance by providing a route for further action to be taken. In order to generate anxiety, and demand for health screening, the communications models adopted by such private firms are likely to adopt a similar approach. Research has shown that messages that inspire fear or guilt can be persuasive in making individuals take positive action on their health, provided there is clear information given to act on the fear (Robberson & Rogers, 1988). This means that in the case of positive test result from a screening, very clear processes should be in place through which the individual can receive further treatment. This is important because, when the stakes become higher, psychological factors take a more important role in decision making. For example, when given medical results on relatively minor illnesses patients are able to take in many of the details and evaluate treatment options. However, when given a cancer diagnosis, patients can respond by remembering only the bad news and forgetting treatment details. Thus, the problem becomes not the screening test but the inability of the individual to deal with the information they get from the test (Rothenberg & Thomson, 1994). Additionally, recent studies have found that people are more likely to seek treatment for a disease they see as severe and treatable, than one that is severe and untreatable (Dawson et al., 2006). This suggests that understanding of treatment options can impact the decision to have a test in the first place.

For people living in fear of a particular disease, a negative result from screening can

reduce stress, and leave people feeling more positive than before the test took place. In contrast, a positive test can result in relief and a greater likelihood of taking appropriate action to deal with any condition. Research into ovarian cancer screening programs found that false-negatives caused distress (Andrykowski et al., 2004). However, this distress was short-term and typically localized around the condition and levels of distress were found to return to baseline levels within four months. This suggests that where an individual carries a belief that they are at risk, then a health screening can provide some positive psychological benefits.

In the case of somatoform disorders, such as hypochondria, similar benefits of health screening may exist by providing relief from anxiety over health. Yet, if a side effect of the promotion of health screening is to increase the general level of health anxiety in the population, then there are some serious potential consequences as a result of the relatively higher false-positive and false-negative rates that occur with asymptomatic tests. The lower incidence of the illness for which the subject is being screened means there is an alteration of the 'cost–benefit' outcome away from benefit and towards cost. Research has demonstrated that public responses to radiation risks are not uniform. Individual perceptions are highly dependent on both the source of radiation and the individual context in which the radiation has been received (Slovic, 2000). Although there are few studies to date on risk perception relating to CT scans, a number of more general studies have found that individuals perceive exposure to medical radiation as being very low risk, compared to other sources of radiation such as nuclear power. Studies on radiation risk have shown that public acceptance of radiation in a medical context is a function of the high levels of trust held in medical professionals (Slovic, 2000). With it, trust is based on a desire to remove uncertainty,

and the information provided by medical professionals can move this uncertainty in a particular direction, for example, by providing greater certainty through a correct diagnosis. This level of trust has translated into an expectation that the results of medical tests will be largely accurate and conclusive. Even if individuals are contributing to the increase in incorrect results by referring themselves the responsibility, or perception of blame, for any incorrect results are likely to lie with the medical professional. At an individual level this may result in a reduced in trust towards the medical professional and a greater likelihood of taking multiple tests in order to achieve certainty in diagnosis.

Such individual level impacts can also create group-level effects. Public perception of risks is likely to be amplified, or reduced (attenuated), by a range of social factors. The impacts of incorrect diagnoses, either positive or negative, are not localized to the individual, as is demonstrated by the SARF framework. Where there is a large variance between the perceived public benefits of asymptomatic screening, as created by promotion activities or the media, and the actual efficacy of the tests then this could result in a reduction in the trust held in medical radiation as a whole. If the trust in the technology fails, then the perception of the risk in having a test may be amplified and the public could question the value of medical radiation and avoid treatment. This is a comparable phenomenon to that seen in the case of the MMR jab. Given the current public acceptance of risks associated with medical radiation technology, the psychological impact of unregulated health screening is potentially much wider than the individual receiving their test results. For example, the case of a woman who underwent a genetic testing which indicated a likelihood of breast and ovarian cancers. After an operation to remove the ovaries, it was found that the test

results were incorrect – having been mistaken for another woman's (Peres, 1999). Although this could be dismissed as an isolated case, it raises questions over how the high level of media coverage given to the case may have led to public uncertainty about the accuracy and reliability of the testing procedures (Brashers, 2001).

In summary, at an individual level, there can be a number of benefits of screening tests, such as a reduction in anxiety provided through reassurance. Such benefits are likely to be greatest where the individual has a close emotional connection to a disease, such as through a family history. However, at a broader level, the number of false-positives and false-negatives stemming from asymptomatic screening could result in an overall reduction in the trust held in medical professionals, and uncertainty over the efficacy of screening technology. This could then be amplified to a wider mistrust in the use of radiation for medical purposes.

3.3 Emotion in the Service Encounter

3.3.1 A Brief History of Emotion Research

To understand why emotion is so important in the service encounter, I take a starting point outside the service encounter to focus on the extensive literature on theories of emotion. The mystery that has surrounded emotion has left a strong influence on the way that the subject is interpreted. Whilst scientific advances in the last century have gone some way in lifting the 'clouds of vagueness' (Arrow, 1992) that surround emotion, it is popular sentiment, rather than scientific evidence, that dominates the consensus around emotion in marketing. Interest in emotion in organizations has been

identified as a recent phenomenon (Sturdy, 2003). Similarly, the focus on emotion in the marketing literature has intensified over the last decade (Thompson et al., 2006), albeit with a strong focus on consumer research (Bagozzi et al., 1999). Yet, in a much wider sense, emotion has been a subject that has featured as part of human thought as far back as records exist. No academic discipline can claim exclusive rights to emotion, nor is it the sole preserve of the sciences (Fineman, 2004). This ambiguity has provided many writers with a blank canvas upon which to project emotion as the source for a greater art.

Emotion is a difficult concept to describe, let alone define. We may respond with anger to an indifferent hotel clerk, or concern at being treated by a fatigued doctor, but researching these responses presents a challenge. To name but a few aspects of this challenge, emotion is considered to be private, intangible, transient, unmanageable and in some senses unknowable (Sturdy, 2003). The neglect of the study of emotions in the social sciences can be put down to a view of emotions as part of biological processes that are inaccessible and uninteresting to social science research (Lutz & White, 1986). Before the 20th Century, much of the debate on emotion centered on the physical source of emotions. Although advances in science have enabled us to move towards viewing consciousness and emotion as being rooted in the mind (Damasio, 2000), debates over the mind-body duality are based on several thousand years of history. Such views reflect the dominant theme in both Greek and Roman literature, of the heart being the seat of mental processes (Wellcome Trust, 2006). Yet, at the same time as Aristotle was focusing on of the heart, Greek scientists were already clear on the role of the mind in human behaviour:

"Some say that we owe our consciousness to our hearts and that it is the heart which suffers pain and feels anxiety. But this is not the case; …rather, it is the brain which is responsible for all these." (Wellcome Trust, 2006:1)

Author	Basis for Inclusion
Plutchik	Acceptance, anger, anticipation, disgust, joy, fear, sadness, surprise
Arnold	Anger, aversion, courage, dejection, desire, despair, fear, hate, hope, love, sadness
Ekman, Friesen, and Ellsworth	Anger, disgust, fear, joy, sadness, surprise
Frijda	Desire, happiness, interest, surprise, wonder, sorrow
Gray	Rage and terror, anxiety, joy
Izard	Anger, contempt, disgust, distress, fear, guilt, interest, joy, shame, surprise
James	Fear, grief, love, rage
McDougall	Anger, disgust, elation, fear, subjection, tender-emotion, wonder
Mowrer	Pain, pleasure
Oatley and Johnson-Laird	Anger, disgust, anxiety, happiness, sadness
Panksepp	Expectancy, fear, rage, panic
Tomkins	Anger, interest, contempt, disgust, distress, fear, joy, shame, surprise
Watson	Fear, love, rage
Weiner and Graham	Happiness, sadness

Adapted from Ortony & Turner, 1990

Table 3.1 Classifications of basic emotions

Perhaps the most effective descriptions of the challenge of emotion was made by Plato, in Phaedrus, with the human soul portrayed as a charioteer whose vehicle is drawn by two horses; one powerful but unruly (emotional self) and the other disciplined and obedient (rational self). Whilst these views may seem naïve, they are

not so far from many of the current observations of emotion held by marketing practitioners.

The current interest in emotions arises after almost a century of neglect. After scholars such as Darwin, James and Freud so successfully captured scientific attention in the late 19th and early 20th Century, the advent of behaviourism in the 1920's and post-war cognitivism left little room for research into emotion (Evans, 2004). Advances in computation enabled the testing and refuting of the claims of behaviourism, and "it once again became acceptable for scientists to talk about 'the mind" (Evans & Zarate, 1999:7). Much recent research into emotion has sought to answer the question of 'what is emotion?' through seeking to understand what emotions are (table 3.1). One approach has been to look at emotion at an abstract level with a focus on general dimensions, such as positive and negative affect (Laros & Steenkamp, 2004). An example frequently popularized in consumer research (Havlena & Holbrook, 1986) can be seen in the Mehrabian & Russell's (1980) PAD paradigm where emotions are defined in terms of continuous dimensions of Pleasure, Arousal and Dominance. An alternative is that all emotion stems from a basic set of categories, with models varying in the number of items on their list of emotions. Moving from measuring emotionality to measuring emotions were models such as the Differential Emotion Scale (Izard, 1977). This scale classifies ten fundamental emotions and contains a self-rating scale of three adjectives for each emotion (i.e. 30 in total). Plutchik (1980) refined this to a scale of eight primary emotions which has been widely used in consumer research (cf. Holbrook & Westwood, 1989).

Another approach has sought to discover specific basic emotions, the building blocks

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upon which other more complex emotions are based. Yet, there is considerable disagreement even, over what constitutes a basic emotion. Ortony and Turner (1990) discovered no less than 14 different classifications of basic emotions from leading emotion scholars and concluded that there was no theoretical basis for a distinct set of basic emotions.

3.3.2 Contemporary Debates in Emotion

"At first glance, there is nothing distinctly human about emotions since it is clear that so many nonhuman creatures have emotions in abundance; and yet there is something quite distinctive about the way in which about the way in which emotions have become connected to the complex ideas, values, principles, and judgments that only humans can have, and in that connection lies our legitimate sense that human emotion is special." (Damasio, 2000:35)

One way of the debate would be to consider emotions from a disciplinary perspective. For example, one could compare the psychological and sociological perspectives on emotion. However, rather than falling back on these disciplinary silos I will briefly focus on two higher level theoretical perspectives. This divides current perspectives on emotion into two camps adaptive perspectives and socially constructed perspectives (Prinz, 2004).

The adaptive perspective is based on an evolutionary view that emotions have adapted to meet various challenges faced by our ancestors (Prinz, 2004). To give a classic example, fear exists as a mechanism for preparing us to flee. Whilst this may have originally been for fleeing from a dangerous animal, fear has evolved to cope with

more contemporary social situations (Plutchik, 1980). Adaptive perspectives on emotion, as with all evolutionary approaches, are synonymous with Darwin. Indeed, Darwin's interest in emotion was driven by the knowledge that in demonstrating the universality of emotions, it would be possible to support more general theories of evolution (Ekman, 1999). Historically, evolutionary approaches to emotion have suffered in the early part of the 20[th]Century due to the politics of science (Ekman, 1999), and later due to the more general neglect of emotion research in science (Damasio, 2000). Yet, this situation is now changing:

"In recent years both neuroscience and cognitive neuroscience have finally endorsed emotion. A new generation of scientists is now making emotion its elected topic." (Damasio, 2000:40)

Alternatively, social constructionists argue that adaptive approaches to emotion are overly reductionist in nature (Fineman, 2004). According to social constructionism, emotions are shaped by the social circumstances and culture of a particular society. Whilst psychology seeks to discover whether people are 'reality-oriented', the sociologist additionally asks 'which reality?' (Berger & Luckmann, 1966). Realities that are taken for granted by service firms may, in fact, be socially defined. For example, when McDonalds opened its first branch in Moscow, employees were trained to always smile at customers. Yet, when smiled at, customers felt they were being mocked since smiling was not part of the Soviet service reality

Unlike more general arguments about evolutionary theory and Darwinism, opponents of adaptive theories of emotion argue that evolutionary psychologists simply have an

incorrect theory of what emotions are (Prinz, 2004). The concept that differences in emotions are based in cultural factors is strongly criticized by psychologists such as Paul Ekman:

> "A few scientists went so far as to claim that the very idea of emotions was an invention of Western culture. Emotions are a fiction (they said) – an explanatory device used in some cultures to explaining what they do; emotions have no biological or psychological reality." – (Ekman, 1999:xxiii)

Yet, whilst social constructionism has suffered in emotion research, from scientific advances, there are still limitations in the adaptive perspective. For example, emotions exist in eastern cultures that have no counterpart in the West, such as the Japanese terms 'oime' for indebtedness and 'fureai' for connectedness (Markus & Kitayama, 1991). Even where emotions could be clearly shown to have an evolutionary basis, the circumstances in which they are used often require a human interaction which itself is socially constructed, for example in a service encounter. It is not surprising that hybrid theories of emotion taking account of both theoretical perspectives are now being proposed (e.g. Hochschild, 2003; Prinz, 2004).

3.3.3 The Role of Emotion in Marketing

> "An ordinary person, wheeling a shopping cart through the aisles of a supermarket, is in touch with her deepest emotions." – J.K. Galbraith, (quoted in Travis, 2000:xiii)

Though dated, as the use of gender implies, Galbraith's statement goes to the heart of

how marketers perceive emotions. In an era where 'loyalty beyond reason' (Roberts, 2004) and 'creating an irrational edge' (Travis, 2000) are key marketing maxims, a customer not in touch with their deepest emotions during a consumption experience is suggestive of a marketing failure. After a focus on rational decision making, based on utilitarian product attributes and benefits, marketing research has begun to consider the role emotions play in consumer behaviour (Laros & Steenkamp, 2004). There is consensus that emotion plays a key part in consumer satisfaction (Isen, 1987; Phillips & Baumgartner, 2002). Emotion can intensify wants, desires and motivations (O'Shaughnessy & O'Shaughnessy, 2002) both positively and negatively. Ultimately, if emotion is to be valuable to marketers, it must have an influence on consumer choice processes. O'Shaughnessy (1989) suggests a number of choice criteria by which consumers evaluate a purchasing decision. I highlight some of them here, with reference to the role of emotions.

Technical criteria, such as the features of a product, can involve emotion. It is often written that there is a choice between the functional (i.e. technical) and emotional criteria of a product, and thus the emotional elements of choice lie elsewhere. Yet, this ignores the fact that emotion can be provided by the anticipation of a new feature (O'Shaughnessy & O'Shaughnessy, 2002). Even with the supposedly rational economic criteria such as price, emotion plays a key part in the way that customers make evaluations. For example, the perceived fairness of "all inclusive" prices, even where they make economically less sense.

Legalistic criteria reflect the fact that third party requirements can have a significant impact on the way in which people purchase. Often, this is because of laws, as

witnessed in the use of fear in campaigns to persuade people to pay their TV license. However, family members can have a similar effect, for example, though evoking emotion children can have a great deal of influence on the products and services their parents purchase (Schor, 2004).

3.3.4 The Role of Emotion in the Service Encounter

While there is a rich tradition of researching consumers' emotional responses to advertising, there has been little research on consumers' emotional responses to services (Price et al., 1995). That employees should be trained to give a certain 'emotional' response or impression to customers is taken for granted in a range of service industries. The forced smile and robotic chants of 'have a nice day' are emblems of such strategies. This presents a paradox in the service encounter, neatly summarized by Hochschild (2003:192) ''The more the heart is managed, the more we value the unmanaged heart''. The service management literature provides us with four factors that make emotional labour relevant to the service encounter (Ashforth and Humphrey, 1993). Firstly, service workers are at the customer-organization interface and represent the organization to customers. Secondly, service transactions usually involve face-to-face encounters between service workers and customers. Thirdly, because of high uncertainty in the encounter created by customer participation, these encounters have a dynamic and emergent quality. Fourthly, due to the intangibility of the services offered in the encounter, it can be difficult for customers to evaluate service quality. Taking these four factors into account, emotion has significant potential to impact on services encounters and thus the brands of the firm represented by the service employee. Service brands are formed through the relationship between the service organization and its staff (Dall'Olmo Riley & de Chernatony, 2000). It has

been argued by Vargo and Lusch (2004) that the separation of goods and services is part of an outdated dominant logic for marketing based around a goods-centered model. In its place, a service-centered dominant logic is emerging with the customer as a co-producer of the service, based on a process of relational and interactive exchange. The result for the service firm is that service and value are produced by joint contributions through interaction in the service encounter (Gummeson, 2004). Take for example a doctor with expertise in a certain specialty. To correctly diagnose and treat a condition, a doctor must interact with the patient. Yet, with the availability of medical information through a range of sources, patients often know more about their specific condition than the doctor who is treating them, as discussed earlier. Such perspectives support the relationship marketing view, in which providers and customers retain win–win relationships (Gummeson, 2004).

3.3.5 Challenges with these Conceptualizations

Three weaknesses have been identified with the current conceptualizations of emotion in marketing. The first is of definition, where words such as affect, emotions, moods and attitudes have often been used interchangeably and inconsistently in the marketing literature (Bagozzi et al., 1999). In this research, I will adopt Bagozzi's definition of these phrases where affect is an umbrella term for emotions and moods. I distinguish between moods and emotions, where emotions are short-term, lasting seconds or minutes, whilst moods can last hours or days.

Secondly, while service quality models such as SERVQUAL (Parasuraman, Zeithaml and Berry, 1988) and SERVPERF (Cronin and Taylor, 1992) take into account consumer perceptions of service quality, they have been criticized for failing to include evaluations of emotion (Liljander and Strandvik, 1997). Also, by focusing on

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consumer perceptions, these models do not take account of the dyadic nature of the emotional encounter between customer and service employee (Chandon et al., 1997). The need for research into emotions in a service encounter is enhanced by the expectation that emotion will play a greater role in service encounters than in the advertising or consumption of products (Price et al., 1995). In services, customer satisfaction is influenced by the quality of the interpersonal interaction - the service encounter - between the customer and contact employee (Bitner et al., 1994). The service encounter is a powerful differentiator between goods and services and it is argued that, from the customer's viewpoint, the service encounter is the service firm (Bitner et al., 1990).

Thirdly, there is the more general issue of the divide between emotion and rationality, or reason. The frequent references to functional vs. emotional factors in marketing echoes 500 year old debates about the divide between the functions of the mind and the heart (James, 1997). Yet, emotion and reason are inextricably linked. This is what Evans (2002) highlights as the 'Spock problem'. The fictional Star Trek character famously lacked emotion and, because of this, was deemed more intelligent than humans. Yet, without emotion, it would have been impossible for Spock to evolve. This is a negative view of emotion, as an 'obstacle to intelligent action' (Evans, 2002:31). Yet, just as too much emotion can cause people to make irrational decisions, such as betting too much money on the wrong horse, too little can have a similar effect. Where injury has led to deficiency in the parts of the brain that regulate emotion, medical researchers have found that individuals are unable to correctly calculate risk and are therefore cannot make even basic decisions (Damasio, 2000).

"The positive view of emotions does not always maintain that emotions are always useful. Rather… the best recipe for success is a mixture of reason and emotion." (Evans, 2002:33)

In this thesis, I adopt this positive view of emotion where emotion is not about persuading consumers to make irrational, rather than rational, decisions, but rather about being a central part of all decision making processes. As such, it is not a simple choice between emotion or reason, but rather an understanding of how the two combine to influence consumer decision making.

3.4 Emotional Labour

3.4.1 Introduction

To bring together the various conceptual and methodological approaches to emotion, the framework of 'emotional labour' (Hochschild, 2003) is used as a means of analyzing the use of emotion in a service encounter. The concept of emotional labour provides a means through which to analyse the use, or misuse, of emotion in the service encounter. Hochschild acknowledges the work of Darwin, Freud and Goffman as antecedents to her work and also specifically notes the contribution of C. Wright Mills. However, whilst Mills (1956) notes how salespeople were required to 'sell' their personalities, Hochschild criticizes the assumption that all one needs to successfully sell a personality is to possess one (Hochschild, 2003:ix). Emotional labour is described in the literature as the management, manipulation or suppression of one's feelings in order to portray a specific outward appearance to others (Grayson,

1998; Hochschild, 2003). For example, at a simplistic level, flight attendants are required to be 'nicer than natural', whilst debt collectors or law enforcers may be required to be 'nastier than natural'. Emotional labour emphasizes relational rather than task based work and can, therefore, be seen as important in the context of seeking to build service brands based on relationships.

Hochschild's original conceptualization of emotional labour focuses on distinguishing between 'surface acting' and 'deep acting'. So as to meet work-specific display rules, surface acting is used by service agents to hide or fake felt emotions, whilst deep acting involves the service agent attempting to experience the desired emotion so that the correct, positive, display follows (Goffman, 1968). Surface acting can be seen as acting in bad faith as the service agent is going through the 'motions of emotion', whereas with deep acting the service agent is attempting to experience the emotions. For example, the put on sneer, the posed shrug, the controlled sigh (Goffman, 1959), is acting to change the way we actively appear (Hochschild, 2003). Deep acting on the other hand is a display of spontaneity, a self induced 'real' feeling. For example, flight attendants at Delta are trained to treat passengers as if they were personal guests in their own living room. As one flight attendant noted (Hochschild, 2003:105), emotional memories were used to improve the service offered:

> "You think how the [passenger] resembles someone you know. You see your sister's eyes in someone sitting at that seat. That makes you want to put out for them. I like to think of the cabin as the living room of my own home. When someone drops in, you may not know them but you get something for them. You put that on a grand scale – thirty-six passengers per flight attendant – but

it's the same feeling"

Despite the application of emotional labour to a service environment, and the great deal of research focusing on emotional labour from a service employee/customer perspective, the ownership of the emotional labour concept has remained with its origins in sociology and anthropology. Indeed, whilst early research into emotional labour saw considerable attention to service encounters between customers and service agents (albeit with a focus on the agent), the sociological research agenda has moved on to more micro studies of emotional labour in the home, or specific work situations (cf. Hochschild, 1997).

3.4.2 The Origins of Emotional Labour

Whilst the term 'emotional labour' did not appear in print until 1983, its key concepts were outlined in Hochschild's (1979) paper 'Emotion Work, Feeling Rules and Social Structure'. In this paper, we are introduced to the emotion management perspective as an alternative to impression management and psychoanalytic perspectives as a way of viewing interaction. Hochschild describes emotion management as the type of work required to cope with 'feeling' rules, the norms that regulate the use of emotion in a social context.

> "We often speak of "having the right to feel angry at someone. Or we say we "should feel more grateful" to a benefactor…that a friend's misfortune "should have hit us harder", or that another's good luck should have inspired more joy." (Hochschild, 1979:654)

Hochschild also briefly introduces the concept of surface and deep acting, although the bulk of her paper involves situating her conceptual position in the context of previous work on emotion and expression management. Although this paper discusses the commoditization of feeling, it spends little time on examples of this in a commercial setting. Indeed, a main finding is the way in which middle class families prepare their children for emotion management more than working class families. Whilst Hochschild's paper refers readers to her forthcoming book, it took another four years for the first edition of 'The Managed Heart' to be published.

3.4.3 Emotional Labour as Feeling Rules

'The Managed Heart' (Hochschild, 2003) expanded on the 1979 paper, notably by introducing 'emotional labour' as a label. Whereas physical and mental labour had long been recognized as critical to the performance of work roles, Hochschild recognized that the changing economy, and an increasing focus on the provision of services, was dependant on a new type of labour other than either manual dexterity or raw intelligence. For example, whilst airline cabin crew require manual labour to push the catering carts, and mental labour to learn the various safety instructions, they also require emotional labour to interact with customers in ways expected by the firm. Whilst the 'soft' and intangible aspects of management had gained some currency with authors such as Peters and Waterman (1982), Hochschild added specificity. In a wide-ranging study of airline cabin attendants and other related staff, such as union officials and airline debt collectors, Hochschild built up a picture of the use of emotional labour in service environments. Feelings are seen as clues and have a signal function. For example, as Freud (2002) noted, feelings such as anger could signal danger and, although not every emotion signals danger, every emotion does have a

signal function (Hochschild, 2003). However, in service roles where emotional labour is required, Hochschild argues that these feeling rules are modified by organizational rules which alter the signal function of emotion. For example, when a member of cabin crew receives abuse from a passenger, they need to manage their emotional response in order to give an appropriate customer service response.

> "If they call me "honey" or sweetheart" or "little lady" in a certain tone of voice, I feel demeaned, like they don't know that in an emergency I could save their little chauvinistic lives. But when I get called "bitch" and "slut", I get angry…Now the company wants to say, look, that's too bad, that's not nice, but it's all in the line of public-contact work…They say don't get angry at that; it's a tough job, and part of the job is to take this abuse in stride" - (Member of Delta Airways Cabin Crew, quoted in Hochschild, 2003:20)

Hochschild identifies two ways in which emotion can be managed in such situations. Surface acting is defined as pretending to feel what we do, 'in surface acting we deceive others about what we feel but we do not really deceive ourselves' (ibid: 33). On the other hand, deep acting involves deceiving oneself in order to actually feel the correct emotion. In 'The Managed Heart' similarities are drawn between the Stanislavski System of acting (also known as Method Acting) and deep acting, where actors draw upon their own emotions and experiences to attempt to 'become' the character they are playing. In the context of the harassed member of cabin crew, deep acting could involve the flight attendant imagining the death of a loved one, or that the abusive passenger had recently lost a child, in order to demonstrate appropriate levels of empathy towards them. Not surprisingly, Hochschild finds that such use of

emotional labour has a range of negative consequences for employees including emotional numbness towards the role and stress disorders.

Yet, despite Hochschild's best-selling status, emotional labour had a slow start. Perhaps the main reason for the lack of follow-on research is the difficulty in applying the framework to other service sector environments. Whilst the anecdotes from flight attendants made the research look particularly relevant to management researchers, the research was framed by a Marxist outlook focusing on the exploitation of service workers, and particularly the exploitation of women in service roles. Emotional labour was therefore portrayed as negative from the individual's perspective. Combined with this was the concept of feeling rules, heavily based on interactionist theories of emotion, and a perspective described as 'radical' by other mainstream emotion researchers (Mathews et al., 2004).

Whilst Annat Rafaeli and Robert Sutton published a series of empirical papers on emotional labour, their 1987 paper is notable for being the first to extend the concept. They focus on the consequences of emotional labour to the service worker, noting that whilst Hochschild concentrated on the negative consequences of emotional dissonance, there are instances where 'faking in good faith' can help employees. For example, doctors may cope with burnout by acting concerned with patients. Rafaeli and Sutton propose two further types of emotional consequence for the employee – emotional harmony, and emotional deviance. Emotional harmony takes into account that employees can genuinely feel the emotions required by organizational feeling rules. Conversely, emotional deviance occurs when employees disregard organizational feeling rules and display only their own emotions. The authors propose

that this is likely to lead to negative consequences for the employee; a flight attendant who speaks their mind to an abusive passenger may reduce the chances of negative emotional dissonance but will also risk losing their job.

3.4.4 Emotional Labour as Display Rules

A major development from Hochschild's original conceptualization was provided by Ashforth and Humphrey (1993). Whilst Hochschild bases emotional labour on 'feeling rules', Ashforth & Humphrey instead refer to display rules. Whilst feeling rules are determined by the internal emotional state of the employee, display rules are based on the external, observable behaviour of the service agent. This reconceptualization aided researchers in two ways. Firstly, by focusing on the external display rather than the internal feelings, the opportunities for researching emotional labour from a service perspective become enhanced. Secondly, by focusing on behaviour rather than emotion, emotional labour gains conceptual clarity. To observe emotional labour, it is not necessary to understand the emotional state of the service agent, only the way in which they display their emotions. Specifically, the authors define emotional labour as the "display of expected emotions by service agents during service encounters" and make explicit the link between emotional labour and contemporary marketing theory.

3.4.5 Emotional Labour as Aesthetic Labour

Witz et al. (2003) take this perspective a step further by introducing the concept of aesthetic labour. They critique the widespread research into emotional labour in service environments by arguing that in service environments it is not just how the

employee feels that matters, but their whole display. Emotional displays are just one part of aesthetic labour. The authors give examples of corporate uniforms, hairstyles and even the way employees walk as ways in which aesthetic labour is required above and beyond emotional labour. They argue that presenting the correct aesthetic display requires effort in the same way as emotional labour. Whilst the importance of aesthetic effort might be questioned in comparison to that of emotional effort, the authors do propose that it will become increasingly important in service roles in the future.

3.4.6 Emotional Labour as Interaction

With emotional labour now conceptually anchored as a phenomenon relevant to services marketing, in two papers, Morris and Feldman (1996) attempt to add authenticity by conceptualizing emotional labour to more accurately reflect the added complexities inherent in real world service encounters. Morris and Feldman's conceptualization of emotional labour differs from Hochschild's original work both in terminology and scope. Whereas previously emotional labour was seen as a function of the individual, Morris and Feldman note emotional labour as a function of the role. Correspondingly, the concepts of surface and deep acting are virtually absent from their work. Like Ashforth and Humphrey (1993), and Rafaeli and Sutton (1987) before them, Morris and Feldman adopt Hochschild's interactionist view of emotion as a socially constructed phenomenon. In their 1996 paper, they replace Hochschild's two dimensions of deep and surface acting with four dimensions of emotional labour (1) Frequency of emotional display, (2) Attentiveness to required display rules, (3) Variety of expressed emotions, and (4) emotional dissonance. Of note is that emotional dissonance is no longer considered a consequence of emotional labour but

rather a dimension. By taking a role, rather than employee, perspective they view dissonance as incongruence between the emotional state of the employee and emotional requirements of the job. Whilst this could be seen as similar to surface acting, surface acting is really a management strategy used by the employee to deal with the dissonance. In summary, Morris and Feldman focused on the dimensions of emotional labour rather than the means through which emotional labour is managed by the employee. Its contribution can therefore be seen as complementary to existing conceptualizations. In their 1997 paper, made without reference to the 1996 paper, the authors refine the four dimensions to three, focusing on interaction rather than just display, and eliminating 'variety of expressed emotions'. Although no explanation is given as to why their conceptualization had changed, the focus on interaction rather than employee display more closely reflects the interactive nature of the service encounter.

3.4.7 Emotional Labour as Exchange

An alternative conceptual approach is made in two papers by Edward Lawler (Lawler and Jeongkoo, 1996; Lawler and Thye, 1999) which considers the role of emotional labour from a cultural-normative perspective. Whilst noting that the sociology of emotions and the sociology of exchange are distinct traditions, Lawler proposes that emotion norms which alter the public expression of emotion also entail actors managing their emotions to fit roles or positions. Lawler hypothesizes that reciprocal exchange will be more sensitive to emotional expressions than negotiated exchange. In reciprocal exchange, emotions "are also behaviours exchanged" (Lawler and Thye, 1999). Whilst social exchange theory has not yet been fully conceptualized in terms of emotional labour, its focus on reciprocal exchange does align with a marketing

paradigm based on co-creation of services.

3.4.8 Developing an Emotional Labour Scale

Two more recent contributions to conceptualizing emotional labour introduce a more positivist perspective, suggesting that both the presence of emotional labour and competence in carrying it out can be quantitatively measured. Grandey (2000) preceded a series of empirical studies (Grandey et al., 2005; Grandey, 2003) with a conceptual paper based on a psychological view of emotional labour. In this, emotional labour is viewed through the lens of emotion regulation theory. Grandey focuses on the individual employee rather than the role and, as such, conceptualizes emotional labour in terms of deep and surface acting. Two types of variables influence the emotional labour used: interaction expectations such as frequency, duration and variety of emotions, and emotional events based around whether the service encounter was generating positive or negative emotions. Grandey also considered individual characteristics, such as gender and affectivity, to suggest that competence in carrying out the correct type of emotional labour can be predicted. Taking a similar approach, and published almost simultaneously, Kruml and Geddes (2000) developed an emotional labour scale containing two dimensions, emotive effort and emotive dissonance. As antecedents of emotional labour they considered personal characteristics, such as age and gender, and also job role characteristics, such as the training received by staff and the autonomy given to decide the type of displays used. Kruml and Geddes conceptual contribution is two fold. Firstly, they abandon the use of qualitative research that had previously dominated the study of emotional labour in favour of quantitative models under which dimensions emotional labour can be measured. Secondly, they propose that organizations design human resource

processes and work environments around the prevention of emotional dissonance in order to maintain staff welfare, and also service quality standards.

3.4.9 Controlling Consumers through Emotional labour

An industry that gained renown for its labour control processes through the work of Goffman (1975) is the casino business. Sallaz (2002) provides a study of a Nevada casino where the tipped labour system controls the ways in which emotional labour is used in service interactions. Casino's workers are reliant on tips from customers to earn a reasonable living and, therefore, make extensive use of emotional labour to maximize the level of tipping. Customers who tip badly will be treated coldly, to the extent that they will be encouraged to leave the table. When new customers appear who may not understand the tipping norms in the casino, the croupier will act out an over elaborate emotional response to other customers tipping so that the norms become learnt.

Casinos are generally perceived to be high control environments where service workers have little opportunity for autonomous behaviour. Video surveillance, casino design and even staff uniforms are developed to avoid the opportunity for any behaviour other than that which is institutionally sanctioned. Yet, in this study, not only can appropriate tipping 'buy a smile' from a croupier, it can provide advice on the appropriate hand to play or shuffle the cards less frequently so as to benefit the gambler. One very experienced croupier even used her skills to throw the roulette ball so that it would not land on a non-tipping gambler's number. This research finds that even in the most highly controlled environment there are extensive opportunities for

employees to use autonomous emotional displays at the employer's expense. In a casino environment emotional labour has a clear value, and regular customers understand that they need to buy the appropriate level of emotional expression with tips in order to guarantee the appropriate level of service.

An extreme example of where emotions are used to control the service encounter is provided by Sutton (1991) in his study of debt collectors. In this role, emotion management is the primary method of exerting control over late payers and thus increasing the likelihood of money being received. In terms of the impact on the consumer, in as much as a debtor can be considered a consumer, the use of emotional labour is designed to create emotional dissonance. For example, an angry debtor would be dealt with by a debt collector acting calmly, or even being friendly, whilst a debtor who appeared calm or apologetic would be dealt with by a debt collector raising their voice. As such, emotional labour is a means of exerting control over customers in order to benefit the organization.

Whilst using the same data as in Sutton's previous study (1991), Rafaeli and Sutton (1991) expand their research by including a study of emotional labour in criminal interrogators. They focus on the 'good-cop, bad-cop' interrogation technique and the means through which a range of emotion management strategies were used in order to get a suspect to confess. Interrogators would deliberately use surface acting in order to appear inauthentic and then switch to deep acting to generate 'perceptual contrast' in the suspect's mind. Using interrogation provides an intensity of interaction not found in everyday service encounters, this paper gives a good example of the extent to

which emotional labour is not just a tool of social influence but also of social control.

In an extensive ethnographic study of US grocery store cashiers, Tolich (1993) finds that there are many situations where emotional labour is a source of enjoyment for store workers. However, Tolich distinguishes between autonomous and regulated emotion management. Regulated emotion management occurs where the decision to control the emotion is made by the organization where as with autonomous emotion management, the decision is made by the individual. For example, even though highly regulated in terms of the technical aspects of the role, in this particular grocery store staff had some autonomy over the way in which they displayed positive emotions. As one staff member put it:

> "I am constantly talking, telling jokes, and stuff. I get a little circus going in my unit. I say, "Hello, how are you doing?" I always have some conversation going. The topic of the day is what another clerk calls it. I kid a lot - like I might have some running joke going with some of the customers."(quoted in Tolich, 1993:375)

Contrast this with regulated emotions where checkout staff are required to follow a closely defined set of display rules such as keeping on a smile, however fake, and reminding the customer to have a nice day. Tolich argues that roles with higher levels of regulated emotions will increase the levels of emotional dissonance which, in turn, can reduce service quality.

3.4.10 Emotional Labour and Professionals

A longstanding criticism of emotional labour is its failure to consider its role in professional contexts (Wouters, 1989). The majority of research into emotional labour is based on relatively low pay, low status service work, as typified by Hochschild's studies of airline attendants or Sutton's (1991) work on debt collectors. However, there are a small number of studies that deal with emotional labour in professional contexts. For example, Zammuner et al. (2003) find that the dimensions of emotional labour as identified by Hochschild are relevant to doctors, nurses and technical staff in hospitals as are the negative consequences of emotional labour. In a different study, Wellington and Bryson (2001) highlight the absence of work studying emotional labour among well-paid professional employees. Through surveying the UK image consultancy industry, they argue that display rules, and the management of emotional displays as part of this are becoming more important for professional employees.

Studies of professionals serve to extend the concepts of emotional labour beyond those which might normally be considered in a marketing context. For example, Pentland and Carlile (1996) provide a rich example of the role of emotional labour in tax collection. Interviewing more than 80 US Internal Revenue Service workers, they found that contrary to stereotypes about tax inspectors, impression management was a key part of successfully performing the role. Whilst adopting a broader approach of tax collection as an 'expression game' (Goffman, 1970) the authors note that emotion management is an essential part of carrying out the role, as illustrated by one IRS inspector:

"You know you're really part of the IRS team when you can go out on an audit where the person has taken all kinds of questionable deductions so they can afford to have their kids teeth fixed. The guy starts, screaming or crying… To do your job, you have to go out there and explain it to him, empathize with his problem, maybe let him cry on your shoulder, and still get that adjustment. If you can do that and still live with yourself the next day, then you are really part of the IRS team." (quoted in Pentland and Carlile, 1996:279)

The authors conclude that whilst the IRS inspectors used impression management and emotional labour as a means of enhancing the outcome of the service encounter for them, the customers (tax avoiders) also manage their emotions as a means of maintaining the appropriate 'front' to the IRS. Thus emotion management becomes the means through which tax avoiders battle the tax collectors.

There have been a number of studies focusing on emotional labour in a legal context. Harris (2002) presents a study from the UK, carrying out interviews with 56 barristers. Unsurprisingly, Harris finds that barristers make extensive use of acting within the courtroom, yet he also finds that barristers use acting techniques much more widely to clients as well as the solicitors who bring them much of their business. Barristers' courtroom acting often reflects the display that clients want of them, be it aggressive or argumentative. Yet, this is typically surface rather than deep acting, reflecting the highly dramaturgical nature of the barrister's role where the courtroom 'act' is seen as equally important a mark of skill as legal knowledge itself. Some limited examples of deep acting are given, such as one barrister who imagines himself

into the role of a female victim, in order to help generate appropriate emotional responses from witnesses. Yet, the barristers appeared highly conscious of the need to maintain emotional control, and relied on surface acting to do this, even outside of the work environment. The author concludes by noting that the display of emotions in a professional capacity by barristers is not a reflection of self, but rather the use of emotion management strategies is seen as a key part of what it is to be a barrister.

Two further empirical papers examine the work of paralegals working in the US. Pierce (1999) carried out a 15-month study of paralegals working in two San Francisco law firms and found that emotional labour was used by these workers as much as a means of supporting their bosses, as it was for dealing with clients. One paralegal even referred to themselves as a "lawyers' emotional punch bag". Whilst Pierce looked primarily at larger law firms, Lively (2002) focused on paralegals in smaller firms working in consumer law, which was seen as more customer-facing than working in commercial law and requiring higher levels of emotional labour. Paralegals were found to use emotional labour primarily as a control mechanism to deal with customers who were often in highly emotional states, facing situations such as bankruptcy or divorce. As one divorce paralegal is quoted as saying:

> "I think our clients are in the most needy stages of their lives… We see them at their worst. We see all their weaknesses...we do have clients that get very angry, or very stressed out, freaked out…And a lot of times… if you're not careful, it can be contagious. You know, someone calls you in a panic; you have to be careful not to panic too." – (quoted in Lively, 2002:208)

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The emotional labour control mechanism is not only used to calm the emotional state of the customer but also to prevent emotion spreading to the paralegals. Emotional labour is used to allow the paralegals to separate themselves from the emotional state of their customers. Interestingly, Lively notes that as professionals, the work done by paralegals is not typical of Hochschild's interactive service work due to the length of the service encounter and the emphasis on forming a relationship in order to achieve appropriate levels of service quality.

Ogbonna and Harris (2004) provide a prescient example from the UK, carrying out qualitative research on the use of emotional labour with students amongst 54 lecturers in a range of UK universities. As a result of work intensification in Universities, through the growth in student numbers, staff have increasingly felt the need to use emotional labour to manage the 'service encounter' with students.

> 'I don't think it's feasible for us to care about every single student. Ten years ago I knew names and faces – today it's a miracle if I can remember what degree they're doing. Pretending to remember their problems and faking concern is just a coping response'. Lecturer, Old University –(Ogbonna and Harris, 2004:1197)

Indeed, the increased use of emotional labour comes as the need to 'provide a service' to students has become more pronounced. The authors found emotional labour had both positive and negative consequences. Firstly, emotional labour acted as a cognitive defence for academics giving them a form of coping mechanism. Secondly,

it was found that, contrary to in some other professions, emotional labour was rewarded.

'I have no problem with faking concern about students if it gets me another increment [point].' Lecturer, New University (Quoted in Ogbonna & Harris, 2004:1197)

However, whilst the familiar themes of workplace stress emerged there was also evidence that increased use of emotional labour had come at the cost of interactions with colleagues. Another more extreme example of the requirement for emotional labour in a university context is given by Miller (2002). She details a study into the aftermath of a tragedy at Texas A & M University in 1999, when 12 students were killed after a bonfire collapsed. Whilst this case is clearly an 'outlier' in terms of what workers will typically come across in their day-to-day role, the author draws a number of more generalized conclusions. Firstly, for professional service workers, such as academics, emotional labour is not merely part of the job but is attached to an individual's identity as being part of that profession. Miller found that there was a lack of explicit training or organizational requirements for the display of emotional labour, and academics had great difficulty in bringing their 'private' emotions into the workplace, whilst keeping the university functioning, and showing appropriate displays of sympathy and empathy for students who were affected.

Another example less commonly considered in a marketing context is in medicine. Zifko-Baliga and Krampf (1997) highlight the fact that despite the highly positivist

outlook in medicine, the importance of intangible 'soft' factors on in the doctor / patient interaction has been long known, if not entirely understood. For example, the placebo effect where a medical treatment which has no therapeutic value is administered as if it were a therapy and, in turn, the patient shows an improvement in symptoms. Under such circumstances, high satisfaction with the service encounter can lead to improvements in health. Zifko-Baglia and Krampf explore the relationship between patient evaluations of service quality using a survey of 1,259 recently hospitalized patients in the US. Using a modified version of the SERVQUAL model (Parasuraman et al., 1988), it was found that patients evaluated the technical aspects of the medical 'service' (e.g. clinical outcomes) using non-technical, or emotional criteria. The significance of dimensions such as "listened to me" and "made me calm" suggests that patients want their physicians to act authentically by showing belief in them.

Locke (1996) provides another medical example of the requirement for service workers to alter their emotional states as a response to customers. In a study of doctors in a paediatric hospital, extensive emotional labour was used to confront the fears and worries of the parents of the young patients. In this case, humour was used by doctors to 'diffuse' the tension felt by patients:

> Dr. Morris' right hand clasps the door knob. He opens the door slowly, gradually inserts only his head and right shoulder into the room. Rapidly, the head and shoulder retract into the hallway, the hand pulling shut the door. The young man's mouth opens in a half smile as he exchanges a questioning glance

with his parents...This peek-a-boo cycle is repeated… When next the door opens (for the fifth time), he walks into the room, extends his right arms, announces "Hi, I'm Dr. Morris," and shakes everybody's hand." – quoted in Locke 1996:50

As the author notes, this was no spontaneous display. The doctor had practiced the act many times so as to maximize its effect. This paper is one of the few examples of emotional labour being used by a service worker specifically for the consumer's benefit. Whilst widespread amongst doctors, there was no evidence that such performances were organizationally mandated or doctors specifically trained to carry out such performances. The importance of such soft skills is highlighted by Gorman (2000), who looks at care workers in the UK. The author notes that, as in medicine, 'winning hearts and minds' is a key part of care work, beyond the 'technical' health related skills and emotional labour is a means through which this can be achieved.

3.4.11 How Consumers Respond to Emotional Labour

But what of the consequences of service without a smile? What does it mean for the consumer? Pugh's (2001) empirical study of service encounters in 39 US bank branches found that customers 'caught' affect from employees in a process he termed emotional contagion. Displays of positive emotion were found to be related to positive affect being felt by consumers which led to more favourable evaluations of service quality. However, if, as Pugh suggests, positive emotions can be contagious to customers by extension more negative 'toxic' emotions can also be spread through the service encounter.

Whilst such studies tell us that the consumer can respond both negatively or positively to use of emotion in the service encounter, it does not provide detail on the mechanisms through which consumers make use of emotion and ways in which consumers might deploy their own emotion management strategies. The question of use of emotional labour by consumers is one that is the specific focus of only one paper. Tan et al. (2004) view the service interaction as dyadic and reciprocal and therefore take into account that both the customer and the service agent can influence the use of emotional labour in the service encounter. Through an empirical study of emotional labour in fast food outlets emotional contagion was seen to exist between consumers and staff, and vice versa. Whilst this research did not indicate whether emotional labour was being used by consumers, it suggests that consumer use of emotion management strategies could have a significant impact on the service encounter.

Dormann and Kaiser (2002) note that existing research has focused on employee rather than customer responses to emotional labour. However, one of the challenges in researching dyads is being able to match a customer to a particular service agent. Other empirical work on customers focuses on a group of customers in general and their thoughts on a group of service workers without the researcher being able to match a specific employee to a specific customer. The authors carried out empirical research in the setting of a kindergarten. This study is unique in actually specifying the dyad as the unit of analysis and providing a method by which the dyad can be identified. There is a high level of interaction between the kindergarten teachers and parents of children, with 79% of the 102 parents surveyed in the study having

interacted with their child's teacher 'in the last couple of days'. The findings were that emotional dissonance reduced perceived service quality. However, the data did not provide enough information to explain why this was the case, although the authors suggests it could be either an indication of customer dislike of inauthentic behaviour (they want to feel that the teacher is talking specifically about their child) or role dissonance (that the teacher is not well suited to the role).

3.4.12 Emotional labour in Health Services

Emotional labour has particular application to the healthcare environment. The term is well used within nursing, albeit in the context of the more general sociology of caring rather than the service encounter. There is little research specifically on service encounters within healthcare. Indeed, as Gabe, Elston, & Bury (2004) highlight, emotional labour has become almost institutionalized within healthcare:

> "Emotional labour has moved from being solely an analytical device to being almost a slogan, part of the caring discourse which nursing uses to establish a separate identity from medicine." (Gabe, Elston, & Bury, 2004:196)

The literature in areas such as medical sociology has maintained a focus on emotional labour in nursing. This reflects the contemporary interest, as promoted by Hochschild, in researching emotional labour in domestic environments and, as such, much of the medical emotional labour literature has focused on situations where home-like care is required, such as nursing homes. For healthcare professionals the key factor in the use of emotional labour has become the need to manage the service encounter and fit with

professional norms rather than organizational ones. Arguably, in an increasingly consumerised environment these pressures are greater, rather than lesser, than those described in Hochschild's low status service work. Indeed, whilst the phrase is not used specifically, as part of an impression management framework emotional labour has become a key part of medical training for doctors (Tallis, 2005). Existing literature on emotional labour in healthcare assumes that it is only used by those with specific training in emotional labour techniques and is thus delegated to "less highly trained and thus cheaper staff" (Gabe, Elston, & Bury, 2004:196). Whilst the healthcare sector has seen widespread use of the term emotional labour, it is applied with a more sociological focus on emotional labour in care. By contrast, in this research, I use a marketing lens to analyse the role and function of emotional labour in influence the decision making process of the healthcare customer.

3.5 Hypothesis Development

I now develop the specific hypotheses that form the basis of my research. These seven hypotheses fall into three categories, based on the three research questions identified in section 1.4. Firstly, I propose three hypotheses to explore the role of both emotional labour and the professional in determining consumer perceptions of risk within the service encounter. Secondly, I propose three hypotheses that explore the worry states of respondents, and in particular link to the concept of the 'worried well. Finally, I propose a hypothesis that looks at the relationship between risk perception and risk taking with regards to health risks.

The first set of hypotheses deal with the questions of how health risks can be best be

communicated to consumers. The consumption of health services presents the opportunity for consumers to cause harm to themselves in the process of consuming the service. It is therefore an important research aim to understand how to communicate risk to different groups who are at risk of this sort of harm (Berry &Bendapudi, 2007; Vidrine et al., 2007). There is substantial evidence that the affective elements of the health service encounter are an important determinant of consumer evaluations of satisfaction in the encounter. For example the provision of more personalized information, such as using the text, 'If you take this medicine...' rather than 'People who take this medicine...' (Berry et al., 2003) has been shown to increase the perceived satisfaction with the service encounter. More personalized approaches were also found to reduce the perceived risk of health screenings (Berry et al., 2003). More explicitly, use of humour was found to increase patient satisfaction with the service encounter but only where the humour was appropriate, or positive in nature, or self-effacing towards the doctor (Salaet al., 2002). Similarly, ensuring that patients have full access to available information, and that doctors are being straight with them and not trying to hide bad news also increased satisfaction (Ley, 1989). Literature on emotional labour has suggested that deep acting is more effective than surface acting for professional services, as consumers use the authenticity of the emotional display as a proxy for hard-to-judge technical skills of professionals such as doctors or lawyers. However, the context of this previous research has been the effectiveness of emotional labour on service satisfaction. Recent studies have questioned whether service satisfaction is an appropriate metric by which to judge health services, particularly as such metrics have originated from outside a health service domain and may not appropriately capture the complexity inherent in health services (Dagger et al., 2007). Whilst health service quality is a multi-dimensional

construct, I return to one element that is often overlooked in existing health service measures: the ability for consumers to cause themselves harm through consumption of the service. Indeed, by increasing the level of consumer choice the risk of consumers being able to harm themselves is also increased. I therefore focus the context on the perception of risk of a certain health service. This leads to H1 which suggests that creating a more authentic emotional display through the use of deep acted emotional labour will reduce the perception of risk.

> H1: Deep-acted emotional labour will result in a greater reduction in consumer perception of health screening risks than surface-acted emotional labour.

The role the health professional takes is likely to be important in determining the manner in which the patient's perceptions of risk are elicited from a service encounter. Research has indicated that the perceived authority of the health professional is positively related to satisfaction (Savage and Armstrong, 1990). Whilst health services can be regarded as very high in credence, within health services there is not a homogenous level of credence between suppliers. In particular, within the UK health system, there is the basic divide between the health professional representing either the NHS or a private sector provider. The question might be raised as to which of these two roles (NHS or private) provides the highest level of credence. Many within the medical profession rate the private providers as being of lower quality than those in the NHS.

"The satisfied patient may well be satisfied with very little. Did we not all know

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physicians with substantial private practices and a clientele of adoring patients but to whom we fellow physicians, with our insiders' knowledge would not send our dog?" (Claire, 1990:106).

The NHS is a system that engenders very high levels of public trust in both its doctors and Nurses (British Social Attitudes Survey, 2001). Yet, this same survey finds that trust in the ability of the NHS to provide sufficient resources, specifically, enough doctors to meet consumer needs, is very low. Paradoxically, market oriented reforms to the NHS have reduced the level of trust held by consumers in the NHS system (Taylor-Gooby, 2008). Taylor-Gooby suggests that operating within a public services model creates affective elements such as shared values and a belief in shared interests between the public and the service provided. However, a move to a more individualized market based model, even as a quasi-market, creates consumer driven considerations that outweigh these affective factors. Given the nature of private health services within the UK being provided as an alternative to a rationed system, I posit that the individuals visiting a private health service provider are likely to place higher credence in the private specific service encounter, even if their overall level of credence in the NHS is high. This leads to H2 which suggests that encounters with higher credence health professionals, such as private doctors, will reduce risk perception more strongly than lower credence professional, such as those representing the NHS.

> H2: Encounters with private sector professionals will result in a greater reduction in consumer perception of health screening risks than encounters with NHS professionals.

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As previously stated, the consumer is in a different position within an NHS driven model where there may exist a sense of shared ownership, whilst when faced with a market driven model the consumer is more likely to behave like a rational actor. In turn this raises the question of whether the impact of emotional labour upon consumer risk perception varies depending upon the professional role adopted. I propose that, due to interaction effects, more authentic emotional labour (i.e. deep acting) will have a greater impact on risk perception where the professional is a private doctor rather than from the NHS. This leads to H3.

> H3. Deep-acted encounters with NHS doctors will result in a greater reduction in consumer risk perception than deep-acted encounters with a private sector doctors.

One label frequently given to health service consumers, particularly by health professionals, is the term 'worried well'. The implication is that health service consumers are worrying themselves unnecessarily over their health, and that this worrying creates an unnecessary burden on the National Health Service. The term does not originate in the academic literature but is commonly used by both journalists and politicians. Statistics show that a quarter of GP visits are by people who are described as having nothing wrong with them has results in media reports suggesting a substantial increase in hypochondria (Murphy, 2007). Doctors find it frustrating dealing with patients who lack a discernible clinical diagnosis; a frustration that is magnified when the individual frequently visits the GP with similar types of complaint (Pontious, 2002). There is increasing concern that, with the availability of

health screening tests, worried health consumers will be able to access health services that may not provide them with clinical benefit, but instead increase the level of anxiety they feel (Hendersen, 2007).

There are some questions as to whether the term is appropriately used, given that worry in itself can be seen as a rational response to many of the government's health campaigns designed to generate an element of concern about specific health issues. However, there has been no research directly assessing whether those searching for health screening services have a level of worry that could be described as being beyond what is normal for everyday life (Mayo Clinic, 2007), known as general anxiety disorder (GAD). Whilst worry may seem like an everyday aspect of life in the 21st Century, the word 'worry' only reached wide use in the post-war period with the first academic study being carried out in the 1960s (Mennin et al., 2004). Prior to this, worry was considered as something that was done to others; a form of harassment even. Worry can be a difficult construct to measure in its own right, and it has been argued that it should be considered only as the cognitive component of anxiety (O'Neill, 1985). This makes GAD a particularly appropriate subject of enquiry, as it is a measure that has worry as a core component whilst providing a foundation of research and a series of valid and reliable measures on which to draw (Mennin et al., 2004). This leads to H4.

H4: Health service consumers demonstrate levels of worry associated with a general anxiety disorder.

There have been a number of media articles suggesting a profile or even a stereotype

of the sort of person who could be classified as the 'worried well'. Two in particular stand out. Firstly, the media often portrays women as more likely to be in this category than men (e.g. Randerson, 2006). Such labels, at least in terms of the worry construct, have been supported by extensive research into gender differences in worry (Robichaud et al., 2002). Research indicates that women have been found to worry at a level of between two and three times that of men (Borkovec, 1994). Furthermore, whilst men have been found to have higher levels of risk perception towards illnesses for which health screening services are typically purchased, women have higher levels of worry (McQueen et al., 2008). It has been suggested that these differences can be put down to a more negative problem orientation and greater engagement in thought suppression, a type of cognitive avoidance (Robichaud et al., 2002). Secondly, 'worried well' are more likely to come from higher tier education groups and be classified as middle-class (Aitkenhead, 1995). This leads to H5 & H6.

H5: Levels of worry will be higher amongst women than men.

H6. Levels of worry will be positively associated with education level.

Finally, I explore the relationship between the perception of health risks and an actual propensity to take risks in the context of the health screening. Many health communication programs are based upon an assumption, often incorrect, that perception of a health risk is in itself sufficient to induce behavioural change (Alaszewski & Horlick-Jones, 2003). However, risk perception is also highly context specific (Slovic, 1987). H7 therefore seeks to explore the relationship between health risk taking and risk perception for the specific sample group in this research.

H7: The greater the perception of health risks, the lower the likelihood of partaking in activities that increase risk to health.

4. Method

4.1 Overview

The aim of the adopted method is to test the hypotheses detailed in the previous section using an internet-based experiment with a video stimuli. The experiment adopts a full-factorial design, exploring the extent to which two independent variables, emotional labour and professional role, impact the dependent variable, risk perception. Respondents in this experiment were required to view a video containing information on the health risks related to various types of medical diagnostic tests that make use of radiation. Background demographic data were gathered, together with additional variables on 'worry' levels and general attitudes towards risk-taking and perceptions of health risks. To maintain external validity, the experiment itself was developed following a series of interviews held with medical and public health professionals and script development made use of material provided by the UK's Health Protection Agency (HPA), the relevant government body for the material under development. A pre-test was carried out to test that the experiment worked technically, was worded clearly, and that the independent variables were appropriately operationalised. Following this, a pilot study was carried out (n = 41) to test the strength of the experimental manipulation. In this chapter, I describe the rationale behind choosing an experimental method, how the experimental method was developed, the results of the pre-test and pilot studies, and the procedures adopted for carrying out the main study (n=285). I also highlight the substantial methodological and ethical issues that emerged from carrying out a sampling approach based in the

healthcare domain.

4.2 Choice of Method

The choice of method for doctoral research such as this relies on a number of epistemological assumptions. Viewing marketing through the lens of the philosophy of science may seem esoteric and at times even an unnecessary distraction (Tadajewski, 2004). Whilst I remain pragmatic in terms of the attitude towards research design and recognize that philosophical debates are, by their very nature, unlikely to be easily resolved, I also consider it important to outline the epistemological basis of the decisions taken in developing a research design.

Whether conscious or not, choice of research method is underpinned by the philosophical perspective of the researcher (Lutz, 1989). It is my view that the field of marketing needs to rely more on evidence-based research inquiry to inform decision-making rather than merely on 'common sense' approaches. In marketing, certainly amongst practitioners, the market for common sense advice is a large one. Indeed, one of the world's best selling marketing authors, Seth Godin, trades on providing common sense to practitioners such as "Choice makes some people stressed and unhappy. But it also makes lots of people happy. And now people have the choice." (Godin, 2008). Yet, some of the most successful marketing decisions of recent years have eschewed common sense and faced derision as a result. For example, in 2001 it was a commonly held belief that personal computers would only be sold online, at price brackets of under $500 using business models as pioneered by companies such as Dell. Yet, Apple computer ignored this trend (Edwards, 2001) and has successfully

set-up a global network of retail stores selling computers that most often cost in excess of $1000. In many marketing contexts, the social consequences of relying upon such conventional wisdom, defined by Galbraith (1958) as ideas that are acceptable but whose underlying truths are unexamined, can be considered as relatively minor. Yet, in health services, the consequences of relying on the wrong evidence can be a matter of life and death. As I highlighted in previous chapters, health services have many examples where a stubborn adherence to practice, even in the face of evidence, can cause substantial harm to consumers of these services. I believe that many of the characteristics of such 'conventional wisdom' are evident in the contemporary views held about health service consumers, such as the 'worried well'. As such, an evidence-based approach to investigating these issues is required.

Much existing research into the role of emotion in service encounters, such as those described in chapter 3take a largely qualitative, interpretivist approach. Indeed, a systematic review of emotional labour literature (Nunan & Knox, 2005) found that only 4 out of 75 peer-reviewed studies into emotional labour took a quantitative approach. Of these, only a very few use an experimental method (c.f. Grayson, 1998; Larson & Yao, 2005). Part of the explanation for this is the difficulty in operationalising emotional labour as a construct that can be measured quantitatively. Given the difficulties in answering the basic question of what an emotion is, or is not, research into the nature of emotions suggests that as soon as we are close to defining an emotion, new theories emerge that challenge this understanding (Solomon, 2004). Another explanation may lie in the origins of the concept of emotional labour in sociology and anthropology where qualitative, exploratory approaches to research are more common. The definition of emotion is a problem that I recognize as a challenge

and is not one I seek to answer directly in this study. Rather, I take the marketer's prerogative and deal with it by focusing on the consumer perception of affect rather than the emotion or emotional labour itself.

Regardless of the reasons behind the existing balance of research into emotional labour, in this research I seek to 'recognize the difference between a promising idea and proof' (Stouffer, 2006). There is a substantial base of literature that identifies emotional labour as being significant in the professional service encounter but in this research I seek to back this up with empirical evidence; something that an experimental method allows us to achieve. The use of experimental design for this research is driven by a desire to understand at some scientific level the relationships between variables and the corresponding impact on consumers. Lamenting the lack of progress made in developing experimental designs in social science, the sociologist Samuel Stouffer noted:

> "A basic problem - perhaps the basic problem - lies deeply imbedded in the thoughtways of our culture. This is the implicit assumption that anybody with a little common sense and a few facts can come up at once with the correct answer on any subject... hence much social science is merely rather dull and obscure journalism".   (Stouffer, 2006)

My approach is therefore grounded in a positivist epistemology in which I am searching for some objective evidence. However, I also accept the need for pragmatism; the presence of pragmatism perhaps representing the difference between the study of philosophical problems over the study of marketing problems. As evidence of this pragmatism, I partially identify with the critical realist perspective, in

that there are inevitably some aspects of the social world that are socially constructed. Ontologically, this means that if something is to be real in a positivist sense, it must bring about material consequences (Kaboub, 2001). Epistemologically, critical realism has within it an acceptance that the social world brings with it a disorder and dynamism not present in the natural world. This is a perspective that I believe is essential to enable research progress in a discipline containing many unknowns, despite large bodies of research (Damasio, 2000). I acknowledge that there are challenges within experimental designs. However, I do not accept the tenet that human behaviour itself is too complex to allow the quantitative prediction or interpretation of human behaviour (Macionis & Plummer, 1997). Rather, the challenge in carrying out research, particularly in a 'field' setting like in this research, raises the obvious question of how respondents alter their behaviour when they are subjects of research. However, there is no logical reason why this challenge in itself cannot be overcome and it does not nullify the philosophical goal of searching for some objective truth. Finally, my pragmatism also extends to this research making an impact within the health services community. The mantra and demand for evidence-based research is well understood. Yet, within the area of UK health service research, there is little of the sort of practical evidence which is present in other areas of health research. It is to this call for evidence that I seek to respond.

4.3 Research Context and Exploratory Interviews

The context of this research is the offering of health screening services by private sector health firms within the UK. The idea that a certain environment, poor diet, smoking, or failure to exercise may cause poor health may seem obvious today, but it is easy to forget that such risks were virtually unknown before the second half of the

20thCentury (Dawber, 1980). Unlike primary prevention, which seeks to modify the underlying risk factors behind an illness, such as smoking, health screening is a form of secondary prevention designed to detect an illness before symptoms become present (Ogden, 2004). A health screening can therefore be described as a health check for an asymptomatic illness, such as mammograms to screen for breast cancer. Three broad types of health screening can be identified. Firstly, opportunistic screening which involves taking advantage of a situation when an individual is already visiting a healthcare professional to carryout additional health checks; for example, checking someone's blood pressure when they visit a doctor with flu. Secondly, population screening where programmes are setup specifically to target certain illnesses, such as breast or cervical cancers. Thirdly, self-screening through which people are encouraged to perform self examination or can buy kits over the counter from pharmacies to measure blood pressure, cholesterol and blood sugar levels (Ogden, 2004). The rise in the popularity of self-screening can be seen as a response to a healthcare paradigm that is shifting towards consumer choice. It is the rise of self-screening that forms the specific context for this research.

Recently there has been substantial growth in the UK of firms providing these screening options directly to consumers using a range of marketing techniques previously unknown within the medical sector. This ranges from firms offering general 'Health MOTs' that involve a range of full-body scans, to services more targeted at groups more at risk of a specific disease. A typical example of the sort of marketing material used for a Health MOT is contained in figure 4.1. A further example of a more targeted health screening from Saga (a UK insurance company focused on consumers over 55) is shown in figure 4.2, with a full matrix of screening

services illustrated in figure 4.3. From a UK consumer's perspective these examples are notable for two reasons. Firstly, in both of these examples, consumers are given a choice of services, together with the information necessary to make the choice in the absence of a health professional. Secondly, prices are given and marketing techniques used to up-sell consumers to the more expensive service.

Package	Elements		Price
Essential MOT	**Comprehensive blood profile** > Full blood count > Haematology > ESR (sedimentation rate) > Liver Function > Kidney Function > Thyroid Function > HDL/LDL Cholesterol > Calcium > Iron and TIBC > Homocysteine > C-reactive proteine > PSA (for men) **Basic measurements** > Body fat, BMI, Waist-Height Ratio > Fecal Occult Blood Test > Urine Test > Blood Pressure > ECG > Lung function > Hearing test > Basic Vision Test	Cognitive function test (if indicated, e.g. stress, memory problems etc.) **Nurse Nutrition & Lifestyle Consultation** **Musculo-Skeletal Assessment** > Head-to-toe musculo-skeletal assessment led by senior physiotherapist > Video gait analysis > 'Kin Com' limb strength assessment > Force plate balance assessment **Clinical Exam** > Detailed review of family history and potential implied risks > Detailed review of participant's clinical history > Discussion of current symptoms and areas of concern > Head-to-toe clinical exam > Determination and sign off of any imaging investigations if indicated (extra cost) **Option to add specific imaging as indicated** **Detailed Health report & personalized screening plan** **Follow-on Support**	£950
Platinum MOT	**ALL elements of Essential MOT, PLUS:**	Imaging Program (always signed off and optimized by senior clinician): > Abdominal ultrasound (Radiologist-led, Aortic Aneurisms, Liver, Kidney, Gallbladder, Bladder & more) > CT Calcium Score (heart calcification) > MRI brain & carotids (stroke risk, signs of past silent strokes, brain matter change etc.) > Chest x-ray (if indicated)	£2990

Source: iHealth, 2008

Figure 4.1 Product description and pricing for 'Health MOT' service

The unique Saga MultiScan

Saga's main procedure, the Saga MultiScan, is a unique and affordable combination of CT scans and blood tests that have been chosen specifically to address the common concerns of people aged 50 and over. The screening process takes about one hour, and the price is substantially lower than the combined cost for the individual tests. The Saga MultiScan includes the following important elements:

- Heart Scan
- Virtual Colonoscopy
- Bone Density Scan
- Cholesterol tests.

Exclusive low price £530

The Saga Multiscan is available exclusively to our customers for the special price of £530. This is excellent value for money when you consider that the heart scan and virtual colonoscopy elements would cost a total of £845 if you had them separately. It also includes the additional insights of a Bone Density Scan and a cholesterol test. It is recommended that procedure like the Saga MultiScan are carried out only every five years. Taking the cost over a five-year period, the equivalent of £106 a year is a small price to pay for this valuable insight into the state of your health.

Source: iHealth, 2008

Figure 4.2 Product description for health screening targeted at over 50's

Scan/test	The Saga Multiscan	Saga Combination Scan with Virtual Colonoscopy	Saga Combination Scan	Heart and Lung Scan
Heart	✔	✔	✔	✔
Colon	✔	✔		
Lung		✔	✔	✔
Bones/Joints	✔	✔	✔	
Abdomen/Pelvis		✔	✔	
Cholesterol	✔			
Length of appointment	60 minutes	60 minutes	40 minutes	20 minutes
Price	£530	£825	£715	£385

Source: Saga, 2008

Figure 4.3 Product matrix for health screenings targeted at over 50's

The provision of such services has not been without controversy. Members of medical societies as well as government advisors have been quick to criticise these services. A leading Professor of medical screening, writing about the Saga screening product shown in figure 4.2, encapsulates the frustrations of health professionals as to the clinical needs for these services:

"The brochure states that 'if signs of illness are found before any symptoms show it is possible to take the appropriate remedial action more quickly - and potentially with a more effective result'. The keyword here is 'potentially' effective...The proposed screening is presented as desirable on the basis of a belief in its value, not based on evidence of value. The brochure states that some people opt to have a scan simply 'for their own peace of mind'. But contrary to popular belief screening is usually a weak means of providing reassurance because screening generally misses more cases of the diseases for which screening is carried out". (Wald, 2007)

A similar viewpoint has been articulated by the UK's Department of Health (2007) in an expert report that questions the value of these tests in relation to the potential health problems that could be caused by overexposure to such health screenings. They highlight that even if health screenings are taken up by a small percentage of the population and limited to those over 40, the number of extra deaths from radiation exposure from the scans would fall into the hundreds. Thus, the position of the health governing bodies at least is clear - consumers are unable to understand the risk involved in these asymptomatic health screenings and such services should not be

offered directly to consumers. However, there have also been a number of health professionals coming out to the defence of the provision of health screenings. They emphasize the many safety procedures taken by doctors who provide the tests. However, the most vehement arguments arise over the question of patient choice. This is illustrated by a quote from a NHS Consultant Radiologist who also works for one of the private sector health screening companies (BBC, 2007)

> "But what really worries me is that this report will be used by those who oppose private medicine for their own ends. The fact is: one size does not fit all, and if there are patients out there who want to take matters into their own hands, why should government stop them."

The question thus becomes one of consumer choice versus government control, even if by choosing a service consumers may be choosing an action that causes them harm. Although only one quote, this issue does perhaps go to the heart of the alternative health models discussed in Chapter 2 and the question over the role of the consumer in health services.

I came to this research with limited knowledge of the health services domain. In order to ensure the relevance of the research to the current policy and practice, it was necessary for me to spend a substantial amount of time building an understanding of the changes impacting the UK healthcare environment. As Converse & Presser (1986) note "If investigators consult only the likeminded, they are likely to constrict the intellectual range of their enquiry". To gather this expert feedback, exploratory interviews were carried out with a number of key professionals with experience of the

healthcare industry. Interviews, even of the exploratory kind, are not conversations and successful interviews require that the interviewer 'switch off' their own personality in order to gather the desired information (Oppenheim, 1992). The purpose of these interviews was to gain a better understanding of the healthcare context in order to inform the research design, validate the experimental design, and ensure compliance with ethical requirements. Those interviewed were all experts in health fields relevant to this research and were doctors, health academics, or public health professionals, the following job titles:

- Deputy Director of UK Public Health (HPA)

- Director, Radiation & Chemical Health Risks (HPA)

- Chief Scientific Spokesman (HPA / UK Department of Health)

- Principal Chief Scientific Officer (HPA)

- President, European Association of Medical Specialists (NHS)

- Professor of General Practice, Kings College London

- Deputy Head, Royal College of Radiologists

- Chair, Committee on Medical Aspects of Radiation in the Environment (Professor at Glasgow University)

All interviews were conducted in the workplace of the interviewee, and interviews lasted between 45 minutes and 1 hour 15 minutes. Extensive notes were made during the interviews and these notes were transcribed afterwards for exploratory analysis. Each interview began with a broad overview of how the interviewee viewed the topic of health screenings in general, and private sector health screenings in particular. This was followed with questions relating to how the risks of screening are explained to, and understood by, consumers. As the research materials were developed, further

iterative discussions were held with respondents, such as during the pre-test process, in order to ensure that materials were appropriate before being distributed to respondents.

These expert interviews provided extensive contextual background to the development of health screenings in the UK. The outcome of the interviews made it clear that there was substantial concern in the public health community about the rise of self screening. Additionally, the interviewees noted that there was currently little publicly available information on the profile of consumers seeking health screenings or how risk perceptions may vary between the NHS and the private sector. Overwhelmingly, respondents were concerned about the ability of consumers to correctly judge the risks of health screening tests. Indeed, all but one respondent doubted the effectiveness of screening tests and the need for them to be offered at all. Again, all but two respondents mentioned the phrase 'worried well' before being prompted by a question. All respondents considered 'worried well' to be an accurate description of healthcare consumers who can be described as a category of people using information sourced from the internet to become unnecessarily worried about their health. More specific outcomes from the interview process were the sourcing of, and permission for, a script to be used in the video using the actual information produced by the Health Protection Agency (HPA) to inform consumers. Additionally, the interviews provided suggestions for the development of a practical sampling frame taking into account the distinction, in terms of research ethics, between individuals and patients. A sample frame from a hospital-based population might be considered as consisting of patients, and hence require substantially tougher requirements in terms of ethical approval using procedures more normally designed for medical research. By

contrast, using a sample taken from the general public would not be considered as a patient group, provided that no questions were asked about specific medical treatments. This meant that it was not possible to ask questions related to previous experience of CT scans, ultrasounds or x-rays, as it might infer information about previous medical treatments. However, this was appropriate as this research is concerned with perceived health risk and so the research questions and hypotheses were not compromised by this design feature.

4.4 Ethical Considerations

A number of studies in social psychology have highlighted the potential power of those carrying out experiments upon those being experimented upon (Field & Hole, 2003). Research in healthcare raises a number of additional ethical concerns not present in other services or even other types of professional services. Indeed, the constraints placed on researchers who wish to carry out research into health settings have resulted in many professional services scholars choosing to research other service contexts, such as law (Brown, Crawford & Carter, 2006). These ethical constraints do not exist without good reason. Healthcare is a highly personal service that requires individuals to give levels of information to the healthcare practitioner that they might not divulge in any other context. It is not surprising, therefore, that any research into a healthcare context needs to take into account the extreme sensitivity with which private patient information must be evaluated. The ethical approach driving this research was to give confidentially, anonymity and privacy to all respondents, whilst ensuring they had sufficient information to understand the scope of the research without being deceived (Coolican, 2004). A primary

characteristic of ethical research is the use of informed consent (Bryman, 2001) and, as such, substantial effort was used to ensure that respondents understood the nature and purpose of the study.

Due to strict confidentiality rules and related guidelines around carrying out medical experiments, it is not desirable to involve people who are classified as patients in the context of the medical help they are receiving. Also, as a result of a concern with the ethical priorities endemic in the health care setting, it was decided to avoid direct observation of service encounters or interviewing consumers who had recently been part of a professional service encounter. The preferred option was the use of expert interviews, followed by computer assisted experimental design in relation to a sample derived from the general public. This allowed for confidentiality and limited the effect of perceived 'interviewer effect' on respondents in the case of the latter. Moreover, interviewing healthcare professionals provided me with valuable access and expert information into issues of risk and health screening.

It should be noted that in many other professional contexts, such as banking, accounting or education, the importance of customer confidentiality is such that it may be difficult or undesirable to gain a high level of access to the consumer side of the service dyad in a service encounter. This contrasts with routine service encounters, such as in a retail context, where gaining access to consumers is much simpler and less problematic from an ethical standpoint as the service consumed is not of a highly sensitive or personal nature. Research into service encounters, even in leading marketing journals (e.g. Grayson, 1998; Thompson, Rindfleisch & Zeynep, 2006),

focuses on service situations such as coffee shops or video rental stores that, perhaps conveniently, lend themselves to uses of student samples. Indeed, some 70% of studies in psychology make use of student samples (Coolican, 2004). The sponsors of this research, the UK's Economic and Social Research Council (ESRC), require that student samples are not to be used unless a strong case can be made for the research being based on student groups. This is another clear strength of the research design used for this study. It avoids student samples as these are unlikely to provide the same level of validity as one based on the general population. Whilst these ethical precautions and design features necessitated several months of extra work on the part of this study, they have resulted in opening up access to a group of consumers that has been the subject of limited previous research. I shall now describe in more detail specific steps taken to ensure that this research reached the highest standards of ethical compliance.

The use of a video stimulus required the presence of an actor to present the script to respondents. Given that the sample was composed of the 'worried well', an actor presenting themselves as a medical professional would have caused an issues. Ethical considerations would have required that a disclaimer be added to each video explaining that it was an actor playing a doctor, rather than an actual doctor. In turn, this could be considered as threatening the validity of the experiment and the consumer response to an actor playing a professional is likely to be different to the response to an actual professional. I then explored the potential of using a doctor playing himself to present the script. The main challenge here was not familiarity with the medical context, but familiarity with the concepts of emotional labour as required to alter the levels of affect in the experiment. However, discussions with three doctors

made it clear that they were familiar with the concepts of emotional labour. Indeed, two of the doctors were familiar with the term emotional labour having come across it in the context of literature for training nurses. One of these doctors was selected on the basis of holding roles both as a practising NHS and private sector physician, and could legitimately act both roles. In order to prepare for the experiment, they were asked to read excerpts of literature on emotional labour from Hochschild (2003), as well as visual depictions of authentic and inauthentic smiles as described by Ekman (2004).

Pre-testing of both the script and experiment was carried out with experts to ensure that the script was both accurately represented and provided a distinguishable level of emotional labour between levels. This aspect was also further tested during the pilot test. The script itself originated from a leaflet provided by the UK's Health Protection Agency (HPA)in conjunction with three of the Royal Colleges representing radiographers, radiologists and general practitioners, entitled 'X-Rays - How Safe Are They?' (Health Protection Agency, 2001). The leaflet was designed to be read by consumers, rather than specialists, and used appropriate non-technical language where possible. The length of the leaflet itself was viewed as too long to use directly as a script as it took over 25 minutes to read. Permission was granted by the Health Protection Agency (HPA) to use only the sections of the leaflet directly relevant to the health screening tests that form the focus of this research. The full text of the script used is contained in Appendix 3. As previously stated, informed consent is a key part of ethical research. Before engaging in the research study, all potential respondents were given a clear explanation of the purpose of the research and reassured as to the anonymity of any data gathered. The screens shown to respondents can be seen in

figure 4.4 and figure 4.5. At the end of the study, respondents were referred back to the Health Protection Agency website containing expanded information on the topic, together with guidelines as to where to go to for additional information. Ethics approval was given from the Cranfield School of Management ethics committee with the additional proviso that during the online survey, all questions should be optional. That is, if a respondent chooses not to answer a specific question, they should still be able to progress through the survey.

Figure 4.4 Information page for respondent consent
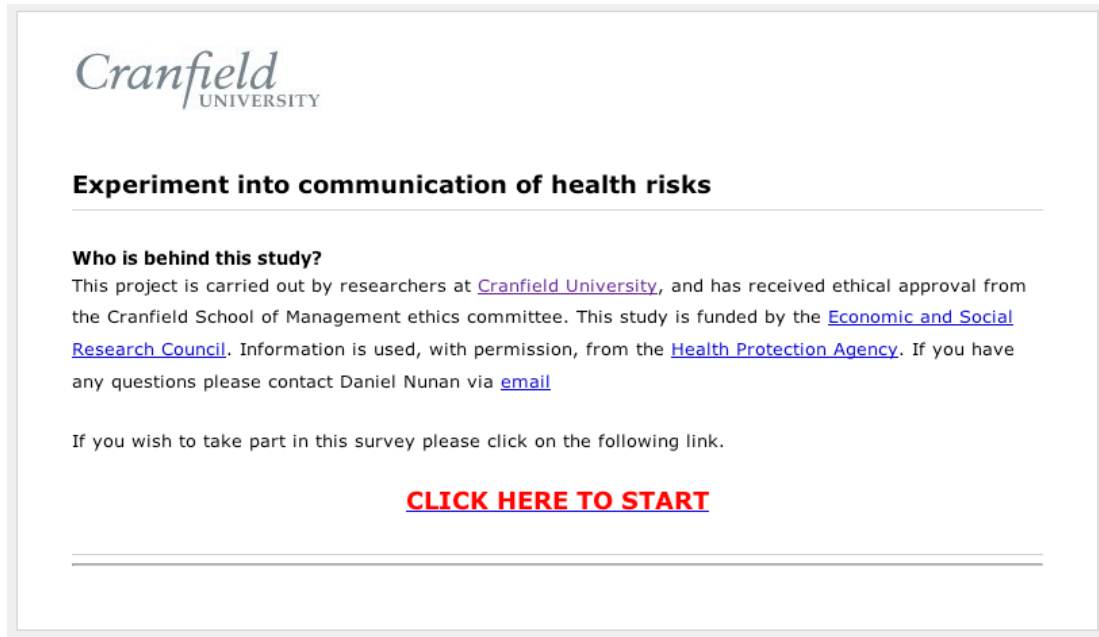
Figure 4.5 Further consent information page

4.5 Measure and Question Development

The method adopted for this study involves creating an experiment that uses a video stimulus to alter the type of emotional labour and the professional role seen by the subject. Valid and reliable instruments were used to assess respondents' attitudes to health risk and worry before they view the video stimulus. After viewing the stimulus, they answered questions relating to their attitude to specific health risks contained in the video stimulus. The process that respondents followed is shown in figure 4.6.
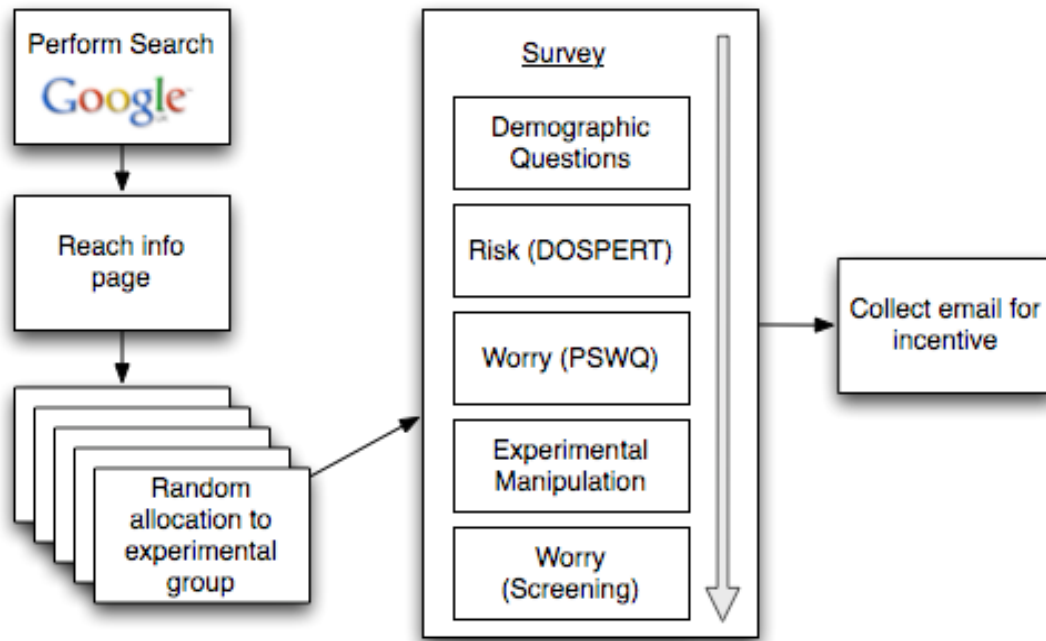
Figure 4.6 Process for completing experiment

Three key psychometric measures were required for this survey: a general measure of risk perception; a measure of pathological worry; and a domain specific measure of risk perception for the health screening example used in this research. In terms of measuring risk perception, I used the widely accepted Domain Specific Risk Taking scale, known as DOSPERT (Weber et al., 2002). DOSPERT takes account of the fact that people have substantial differences in their attitudes towards risk depending on the domain in which the risk resides (Weber et al., 2002). For example, an individual's perception of financial risks may differ from the perception of health risks. As DOSPERT contains a specific Health/Safety domain, it is possible to assess risk perceptions directly relevant to a health issue. Specifically, the health domain questions from the shorter version of DOSPERT designed for more general adult (i.e. non-student populations) were used (Blais & Weber, 2006). This 12-item DOSPERT

scale asks two sets of questions relating to the perceptions of risk and the likelihood of a consumer partaking in that risk (the full set of questions that form this survey are contained in Appendix 2). In order to measure pathological worry, I used the Penn State Worry Questionnaire, PSWQ (Meyer et al., 1990). Again, the questionnaire is a valid and reliable measure that has been used extensively to measure for pathological worry. The PSWQ is a 16-item measure that asks how respondents feel about worry in a range of situations. It has been widely used by family doctors as a means of identifying people with excessive levels of worry (Shearer & Gordon, 2006). Finally, a 6 item measure specific to the health screening domain, based on the DOSPERT scale, was used to assess respondent completion after the video stimuli had been delivered. This consisted of three two-item measures, one for each of the CT Scans, Ultrasound and X-Ray.

4.6 Constructing the Online Survey

Due to the use of video stimuli, a computer-based delivery mechanism is required. Two options were considered to achieve this: one through the experiment running as an application on any PC without an Internet connection and the other for the experiment to be available exclusively through a web browser. Both approaches had advantages and disadvantages. Running an experiment as an application on a personal computer allows for greater flexibility in constructing the experiment; however, it also requires the respondent to possess technical knowledge to install the program and, given the sampling approach, this is likely to raise questions over respondent drop-out rates. Running the experiment through a web browser requires an internet connection with reasonably high bandwidth to enable viewing of the video files. However, it also

requires no specific extra technical knowledge other than having access to a web browser and an understanding of basic web interfaces. Internet-based surveys also have the advantage of being able to send survey data instantly upon completion to a central database, making collecting the data for analysis a much faster and more accurate process. I therefore chose the internet-based option for the survey and developed the questionnaire using an online survey service. The specific service was highly customizable, a necessary requirement given the features of this survey, such as random assignment to groups, assuring anonymity of respondents, and the display of the video without any additional technical knowledge being required by respondents.

Four different versions of the video stimuli were developed to cover the different scenarios under which the research would be carried out– emotional labour and professional role. Emotional labour was manipulated in terms of deep and surface acting, whereas professional role consisted of introducing the person in the video as being either an NHS doctor or private sector doctor. The process by which the videos were created is outlined in the following section. Additionally, a control group consisting of those who viewed the video script in text form only was also included. The survey was hosted on a www.cranfieldresearch.org domain to provide a clear link to Cranfield University, and all respondents were randomly allocated to one of five experimental groups as follows:

1. Deep Acting / NHS Doctor

2. Deep Acting / Private Doctor

3. Surface Acting / NHS Doctor

4. Surface Acting / Private Doctor

5. Control Group (no video)

4.7 Developing the Video Stimulus

As a first stage, a script was developed for the video using content supplied by the Health Protection Agency (HPA - see appendix 3 for the full script). This contained information on the risks of various different types of medical diagnostic tests that involved radiation and was designed for distribution to the general public. The script was developed using the same wording, but was limited to sections on common tests, specifically X-Rays, CT Scans and ultrasounds. Clear links back to the full documentation on the Health Protection Agency (HPA) website were placed at the end of the survey. The actor used for the video is a consultant physician and radiologist with a professional knowledge of the specific medical technologies used as part of the video. Although I considered using a professional actor rather than a practitioner for this part, questions were raised by the Health Protection Agency (HPA) as to the ethical concerns of having a non-medical practitioner posing as one. As discussed earlier in section 3.4, this raised the question of whether an actual healthcare practitioner was able to 'act' the different levels of emotional labour to the same standard as a professional actor would. However, it became clear that there was no problem in using a doctor who was familiar with the concept of emotional labour and its use in managing service encounters with patients, especially after being exposed to the literature on emotional labour.

The video itself was recorded using professional video recording equipment. Each

scene was recorded three times, for both the surface acting and deep acting levels, so as to control for external variables. The videos that were eventually used were selected on the basis of those that were most closely matched in terms of time, sound levels and lighting. Care was taken to ensure that videos were of identical lengths and narrated at identical speeds to reduce the potential for extraneous variables. Although the videos were recorded on broadcast quality tape, this would have required extremely long download times and, potentially, the installation of specialist software by the subject. For the online delivery of the experiment to be effective, it was important that the video was displayed almost instantaneously. It was therefore necessary to reduce the quality of the video somewhat in order to enable it to be displayed on a typical standard speed broadband Internet connection available in a large percentage of UK homes. It was also necessary to find a way to display the videos in the commonly used Macromedia Flash format, the standard for displaying a video within a web browser. Firstly, I experimented with using the publicly available Google Video service as a way of converting and loading the video file. However, although the video loaded very quickly, the quality was not sufficient to be able to clearly distinguish the facial expressions as required by emotional labour. I therefore created, and tested, several bespoke video file formats that maintained and hosted the files on a high bandwidth hosting service. Figures 4.7 and 4.8 give example screenshots from the video. Each shows a frame at an identical moment in time from both the surface acting and deep acting condition.

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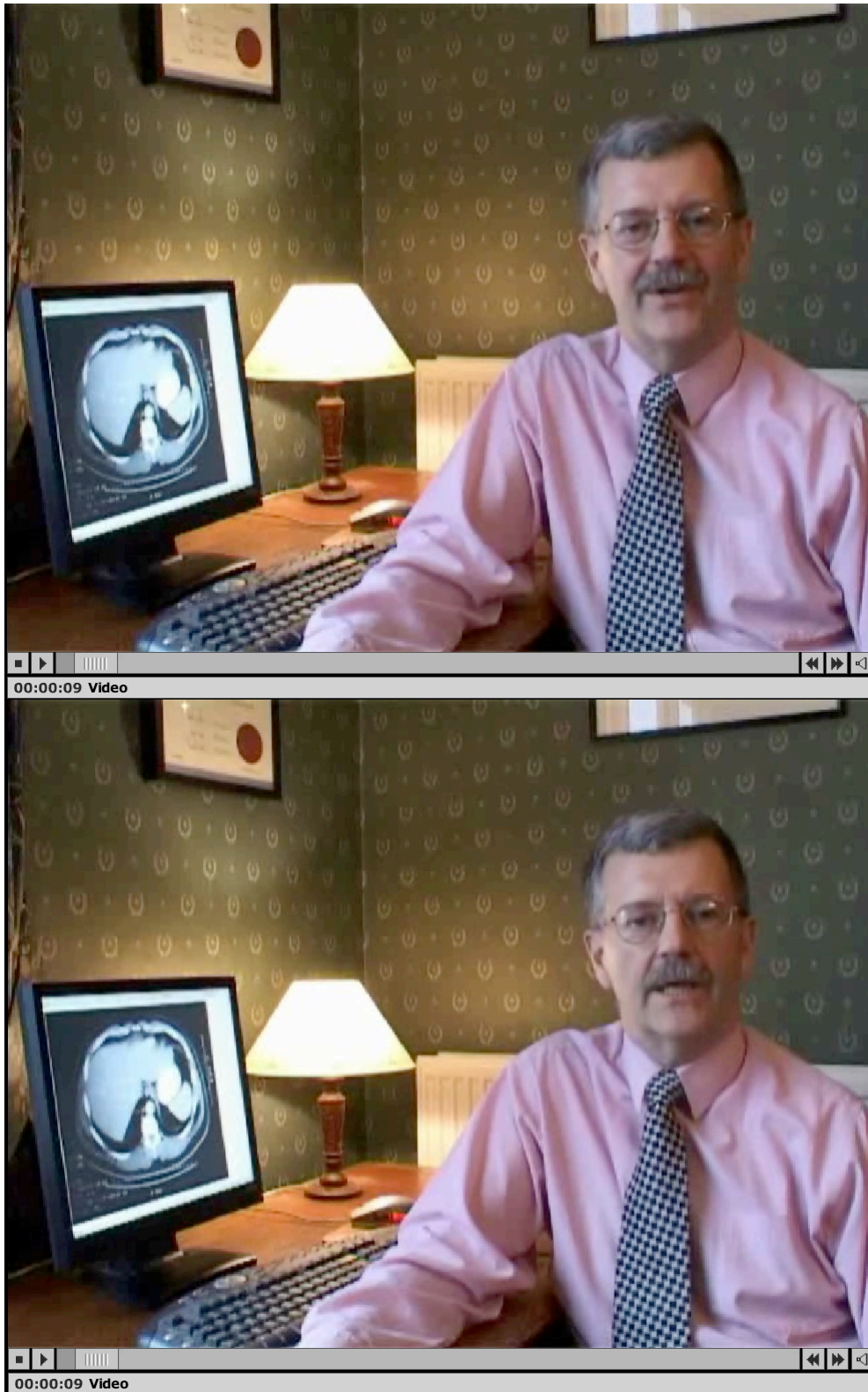
Surface acting (above) deep acting (below)

Figure 4.7 Video screenshots 1
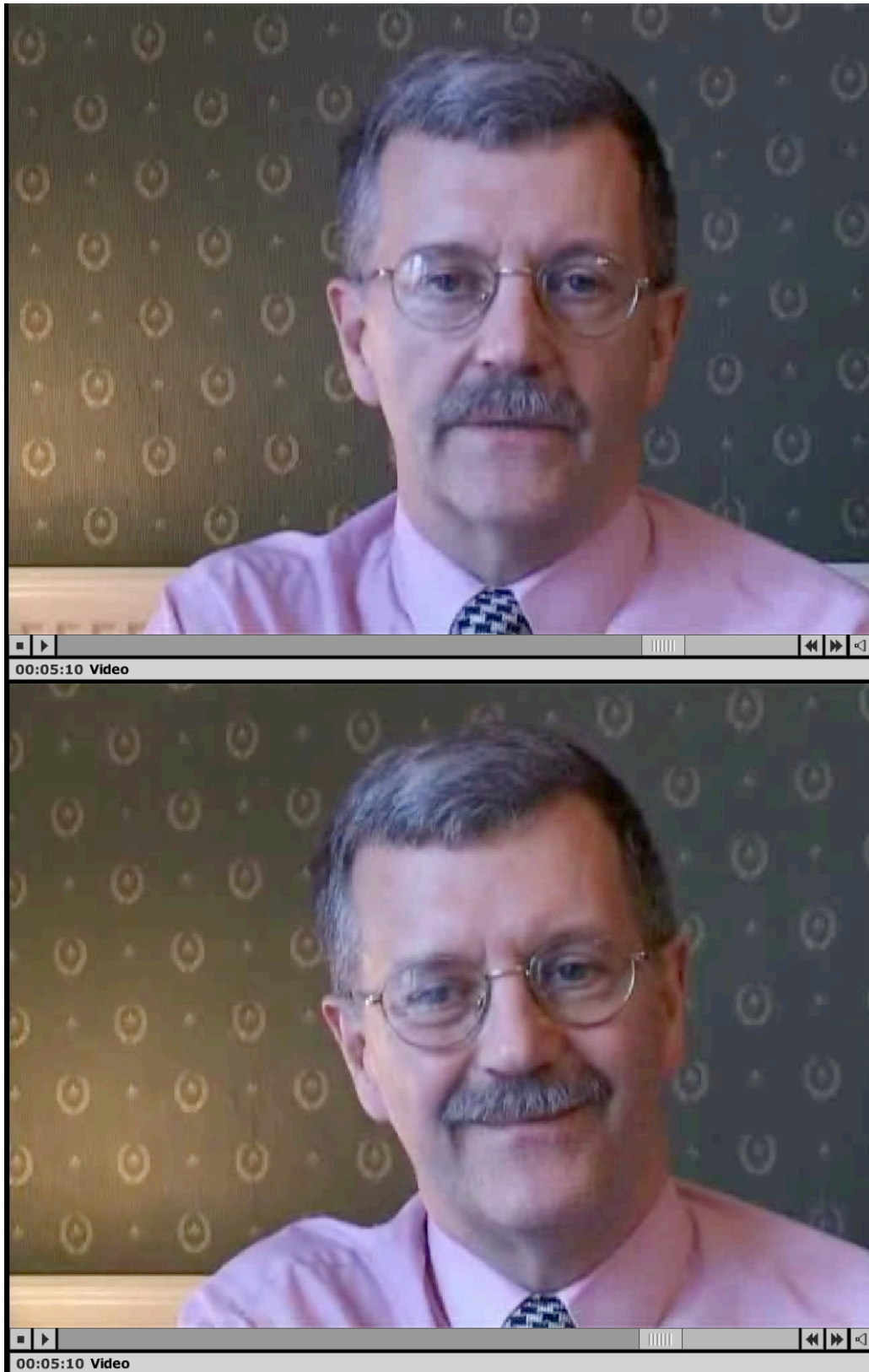
Surface acting (below) deep acting (above)

Figure 4.8 Video screenshots 2

4.8 Sampling & Survey Distribution

A goal of any experimental research design is generalisability. To make estimates that are generalisable to a wider population, it is necessary to reduce any sampling bias. In practical terms, no study can ever be free of sample bias, as experimental studies can be biased through the necessity of using volunteers (Ora, 1965). Similarly, studies that select people randomly from the street are dependent on the types of people who happen to be walking down that street on a particular day and are often subject to what is known as 'main street bias' (Coolican, 2004). Taking into account these restrictions, I believe that the following approach is likely to reduce sample bias and be a highly appropriate means of accessing an appropriate sample frame.

Several alternative approaches were considered for distribution of the survey online. One option was the use of samples from General Practice lists made available by a large London NHS trust. Although these provided excellent coverage of the population, making use of a list controlled by a public health body means that substantial restrictions are placed upon its use due to ethical and compliance requirements. For example, it was only possible to make contact through a third party sending out survey invitations through the mail. This option was discarded because of the likelihood of low response rates due to the mismatch between requiring an online response to a postal mail request and the high potential cost of reaching the necessary sample. A second option was to use a staff email list of a large London NHS trust. Although this would reach a large number of people and there was substantial demographic information available about the sample population, it was felt that this would introduce a substantial amount of bias due to the involvement of respondents in

the health sector.

The third option, and the one chosen for use in this study, was to use an approach that would align with the information seeking patterns of the consumer group in question. As previously described, it was clear from preliminary interviews with experts in this domain that the 'worried well' are a category of people who are thought of as being of significant concern to the health authorities due to their perceived susceptibility to health marketing approaches, particularly those being targeted by private healthcare firms. One theme emergent from the exploratory interviews, and from the media coverage, is that this is a group that is perceived as bypassing medical practitioners and sourcing healthcare information from the internet. Indeed, the problem has become so acute that the leading search engine company (Google) published guidance on the interpretation of search results pertaining to health problems. Selecting a sample for this study presents a challenge in identifying people who have only so far been defined by behaviour rather than demography. The Google search engine provides a system by which advertisers messages can be placed next to the search results for certain keywords or phrases. An example of this is shown in figures 4.9 and 4.10. For the search term 'health screening' the red highlight marks the section where the message is shown. The fact that many of the private health firms provide the sort of health screening services that these consumers use suggests that this is an appropriate technique.
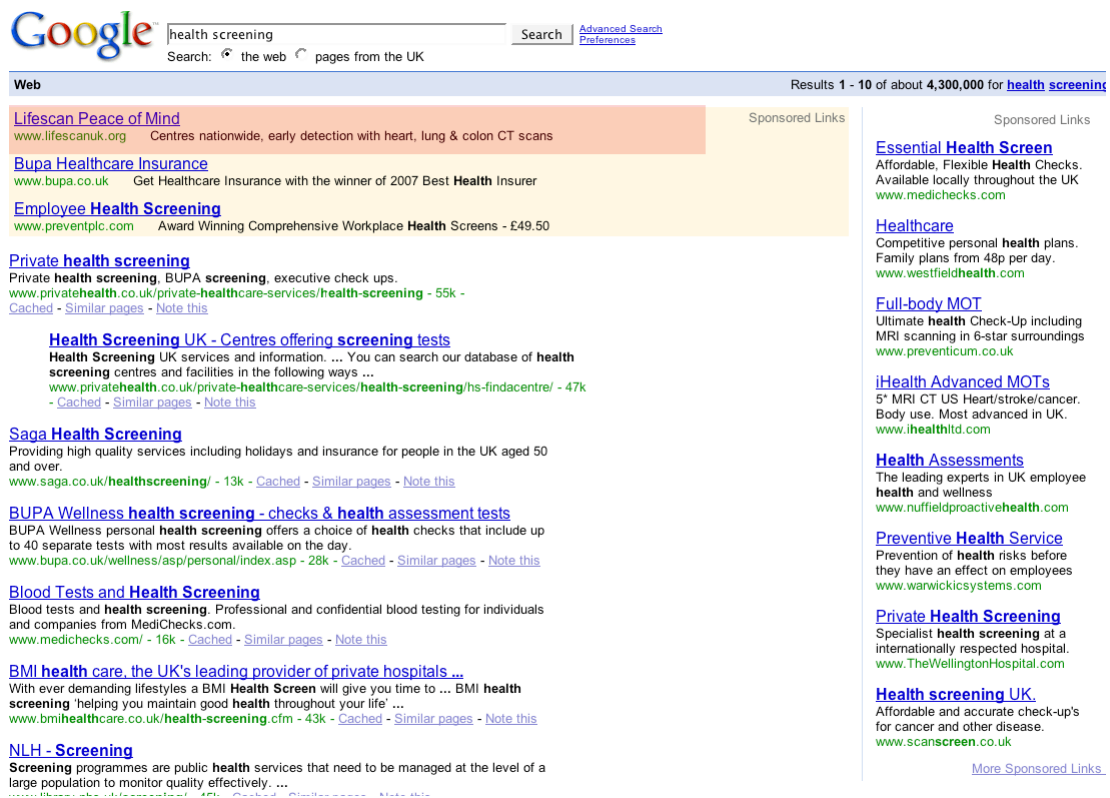
Figure 4.9 Screenshot of survey invitation message

Figure 4.10 Close up examples of adverts for health screenings

Similarly for this study, a message inviting participation in the study was shown to Internet users searching for keywords and phrases identified in the exploratory research phase. The set of keywords (search terms) was validated using Google's Keyword Optimizer Tool that shows how groups of keywords are related to each

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other in terms of clusters. Due to the informational, rather than commercial nature of the message, it was possible to manipulate the positioning of the advert to be at the top of the page for search result (full details and a list of keywords used are given in Appendix 1). Furthermore, using the Adwords system it was possible to geographically control the display of the messages and limit them to appearing to those searching within the UK.

4.9 Pretesting

Two types of testing of the survey were carried out - pretesting and pilot testing. Pretesting refers to initial testing of specific aspects of the study design, which was in this case the online survey. By contrast, a pilot study is a miniaturized walk-through of a complete study design (Babbie, 1990). As a first stage, the survey instrument was pretested online amongst an 'expert panel' comprising a group of 16 people including those interviewees who were subjects of the exploratory research and additional PhD students and faculty at Cranfield University. Previous studies have suggested that the general public is a poor judge of the quality of survey questions (Converse & Presser, 1986), so the use of experts rather than potential respondents was appropriate for the pretesting process. A number of minor technical issues were identified, as well as the need for clarification in the wording of certain phrases. For example, the sections explaining attitude to risk and perceived risk for the DOSPERT scale were not seen to be sufficiently clear. Following the suggestions of healthcare practitioners, one question asking about previous experiences with medical tests involving radiation was removed due to raising potential ethical considerations over collecting personal medical information. The most significant change resulting through the pre-testing

was the fact that previously I had incorrectly identified the PSWQ as being a context-based survey instrument rather than a trait-based one. Effectively, this meant that whilst I thought it was measuring response to a specific healthcare context, the instrument was designed to measure a more general 'background' trait-based worry that is be independent of any experimental stimuli. A key part of the pre-testing approach was also to ensure that it was possible to view the video in a sufficient quality format to recognize facial gestures.

To ensure construct validity, I carried out manipulation checks as part of the pre-test rather than as part of the main experiment, as recommended by Perdue and Summers (1986). Carrying out manipulation checks during the main study, either before or after the measure of the dependent variable, presents a number of potential problems. Placing the manipulation check before the dependent variable (i.e. the measure of risk perception) can create a response bias. On the other hand, the short-term nature of any stimulus effect may mean that manipulation checks are not effective when used after the dependent variable measure. The specific manipulation check involved ensuring that the video was effective in terms of demonstrating distinguishably clear levels of affect and that the identification of professional role was done in a clear enough way. One question that did arise was over the use of a 7-point Likert scale versus a 5-point Likert scale. Whilst Likert scales were traditionally developed as 5-point instruments (Likert, 1932), the condensed DOSPERT scale was delivered as a 7-point scale. However, the pre-test identified that the simple process of fitting a 7-point scale on the screen as part of the experiment resulted in some confusion over labels due to the sheer number of options on the screen. As a result, it was decided to limit the instruments to the original 5-point scale.

4.10 Pilot Test

The findings from the pilot test are split into two sections. Firstly, I present the technical detail on how the pilot was designed and the response rates received. It is important to remember that the primary purpose of the pilot is not as a 'first guess' of the findings of the main study, but as a means of calculating the necessary statistical power required for completion of the main study. Therefore, the second part of the pilot data analysis deals with the issue of calculating the effect size and the implication on the sample size for the main study and the likelihood of achieving statistical significance from this. The pilot test for this study was carried out between 11th and 16th June 2007 and 41 responses were received. Due to a technical error with the video, the video was only partially displayed when respondents attempted to alter the volume at which the video played. This meant that 33 responses could be fully analyzed and 8 were discarded. A key part of the initial phase of the study was using an iterative approach to discover the most effective approach to entice survey response. A key factor in increasing response rates from advertising on Google can be fairly subtle variations in the wording of the call to action (Google, 2007). A built-in limitation of the Google Adwords system is that only very short messages in specific formats can be used. And so it was with this research in that several iterations of testing were required before a sufficient response rate was achieved. The details of the effectiveness of each message for the 41 responses received are displayed in table 4.1, together with the response rate that could be expected for the main study.

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Message	Number of Responses	Approximate Expected Responses per Week
What do you want to know? Cranfield University online survey. We are interested in your views. www.cranfieldreserach.org	2	3-4
Free Info on X-Ray Safety What do you want to know? Cranfield University research project. www.cranfieldresearch.org	4	8-10
Health Screening Research Key Academic Survey. Take part and you could receive an amazon voucher. www.cranfieldresearch.org	34	40-60
What do you want to know? Cranfield University experiment on X-Ray safety. Take part online. www.cranfieldresearch.org	1	2-3

Table 4.1 Response rates for individual messages from pilot study

A cash-equivalent incentive, the opportunity to win an Amazon voucher, was used as a means of encouraging respondents in some of the messages (Ryu et al., 2006). As table 4.1 demonstrates, the message offering an incentive and being context sensitive to the health-screening domain (version 3) provided the greatest number of responses. Indeed, it was only this combination of messages that would allow for completion of the research within the desired time frame. Mentioning that it was academic research and using the word 'survey' rather than 'experiment' are likely to have also increased the response rate. As part of the initial pilot test, I carried out an additional small-scale experiment with two levels of incentive, the opportunity to win a £50 voucher, and a guaranteed £5 voucher for each respondent. Whilst there was no difference in response from the message on the original Google search, it substantially increased the number of people choosing to begin completing the experiment when they were on the 'Info Page' towards 100%. This suggests that offering the £5 incentive created considerable response bias in itself over the potential chance of winning a £50 voucher. There was the additional practical issue with the cost of providing £5

vouchers to all respondents being beyond the budget allocated for this research. This was not so much due to the need to pay each respondent £5 but the reward seeking behaviour it encouraged in respondents. One of the benefits of carrying out a survey online is that it allows for the observation of the number of times an individual took to complete the survey. A feature of this survey was that it was only technically possible to fully complete a survey once from each computer, or network address. Whilst the £5 voucher experiment was only used 4 times, it encouraged 26 attempted completions, suggesting that respondents were interested in gaining as many vouchers as possible! Additionally, the average attempted completion time was 3minutes 50 seconds, as opposed to 12 minutes average for the sample in the pilot. This indicated that respondents were effectively clicking through the survey as quickly as possible in order to receive the free gift. Demographically, the respondents were well spread between different age groups and education, albeit with a slight bias towards the 18-30 age group, which represented 25% of responses. Male and female responses were almost equally represented. The full number of responses at each stage is shown in figure 4.11.
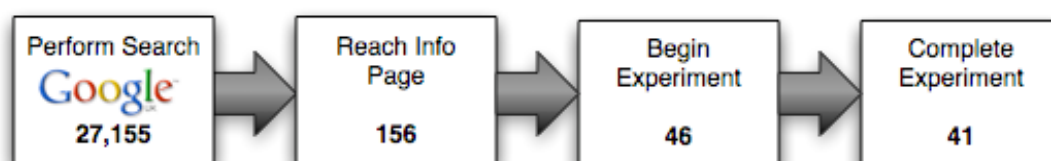
Figure 4.11 Respondent statistics for pilot study

These figures are worth further explanation, as at first glance it would appear that the response rate from performing a search to reaching the experiment information page

is very low, going from 27,155 to 156. However, this search statistic reflects all people who were performing a search for any of the search terms (see Appendix 1) and the information seeking goals of these respondents are not to complete a survey, but to find out more information on health services. This can be thought of as the equivalent of stopping people on a busy high street to complete a questionnaire, where it is only possible to gain the attention of a small proportion of people on the street at any moment in time. The advantage with this online technique is that it is possible to verify that all the people on the 'virtual street' are searching for information relevant to health screenings.

In statistical analysis, it is possible to have a situation where being statistically significant does not respond to the results being statistically important where the researcher fails to achieve a necessary effect size and the statistical power is low (Coolican, 2004). The power of a statistical test is the probability of not making a Type II error (i.e. a failure to reject the null hypothesis). Cohen's (1988) definition of effect sizes (Cohen's f) is the statistic that needs to be analyzed to determine the necessary sample size for the main study. This states that an effect size of 0.2 is small, 0.5 is medium and 0.8 is large. Cohen's f depends on a number of factors including the sample size of each group, the observed mean of each group, and the standard deviation of the dependent variable. Using the Power Analysis and Sample Size application, I found the effect size to be 0.37, which is consistent with a medium effect size. Therefore, the required sample size is n=9 in order to achieve an 80% power, using a .05 significance level. Whilst the potential sample size required for statistical significance is low, collecting a bigger sample presents greater opportunities for performing post-hoc analysis. As a result, I collected a substantially larger sample

in the main study phase; as many as could be collected within the budgetary constraints of the research.

4.11 Main Study

After taking into account the results and feedback from both the pre-test and pilot studies, the main study was carried out between 21st July and 4th August 2007. Of 1,479 people who read the invitation to complete the survey during this time, 444 responses were received that had complete data, or sufficiently complete data, which represents a response rate of 30%. As was described in the pilot study it was possible to analyze not only the responses, but the behaviour of respondents whilst they were completing the survey since it was online. Because of this, a surprisingly large number of respondents who gave complete data were excluded due to their attempts at multiple responses (45), or completing the survey in too fast a time (112). Two further responses were excluded due to responses due to failure to click through to the final page of the survey, a possible explanation being that the internet connection was disrupted whilst completing the survey. Multiple responses were surprising due to the relatively low value of the incentive offered. However, the bulk of unusable responses came from respondents who spent too little time on the experiment to have watched the video. Because of the need to ensure that sufficient time was spent reading the experimental stimulus, responses that completed the survey too quickly (i.e. in less than 8 minutes) were excluded. In fact, whilst the average of the 112 excluded respondents was to complete a survey in 6 minutes 20 seconds, typically the person spent less than 40 seconds on the key video page before skipping through to the next section. I will discuss further implications of this in the results section. This left a total

of 285 complete and usable responses that were gathered for analysis, as summarised

in figure 4.12.
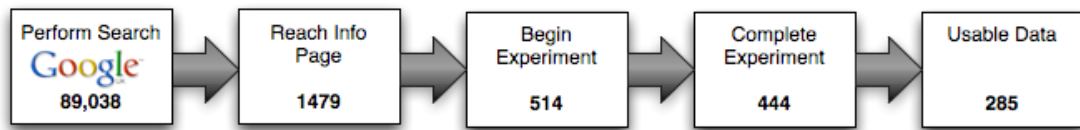
Figure 4.12 Respondent statistics for main study

5. Findings

5.1 Introduction

In this section, I analyse the seven hypotheses outlined in chapter 3 in addition to some post-hoc analyses emergent from analysis of the data collected. I present a number of descriptive statistics, both to assess the appropriateness of the sample to the overall population, and also as a means of understanding more about the population. In media coverage of 'the worried well', a number of stereotypes are made in relation to the gender and the profile of those who are part of this group. They are, therefore, lending an analytical eye to this issue to establish a more accurate profile of this group. In relation to H1, H2 and H3, ANCOVA was performed on the data using the PSWQ and DOSPERT variables as covariates. H4 was analysed using a simple comparison of means with existing published PSWQ means scores, whilst H5, H6, and H7 were analysed using ANOVA.

5.2 Descriptive Statistics

Summary descriptives of the responses based on demographic background questions are listed in table 5.1 (n=285). In terms of gender, respondents were more likely to be female (64.8%) than male (31.6%). In terms of age range, whilst the under-30 group formed a larger proportion of responses than other groups (35.4%), there was a good spread of responses from the over-30 groups. In particular, nearly 30% of respondents were in the over-50 groups, demonstrating that the sample covered a full range of age groups across the population. Education levels were stratified between those who had left school at the age of 16 or earlier (GSCE's / O-Levels), and those who had

attended University[3]. In both instances, the profile within this research diverges from the overall current profile of school leavers and university attendees within the UK. The overall proportion UK adults leaving school at 16 is currently 30% (DFES, 2006) compared with the 37.9% in this sample. However, this should be seen in the context of a sharp increase in the levels of standard of education within the UK. Indeed, in 1991, 39% of people left school at the age of 16 or earlier (DFES, 2006). Given the wide age distribution of respondents, this sample can therefore be seen as representative of the overall population pyramid. At the other end of the educational spectrum, the level of respondents with a University level education is substantially higher than the UK average of 30.8% (DFES, 2006). However, this too can be reflected in the sample having a higher proportion of younger respondents, this figure having increased substantially over 2001 when it was 25.2% (DFES, 2006). This is reflected in crosstab analysis (table5.4) that indicates that the younger the respondent group, the more likely they are to have a University level education.

In summary, the sample can be described as more educated, and as having a higher proportion of females than could be expected of the UK as a whole. Overwhelmingly respondents noted (82.5%) that health professionals were the most trusted source of health information (table 5.3). Despite the information searches being online, those who trusted online information sources remained a small proportion of responses. The four responses in the "other" category all referred to trusting providers of alternative medicine, such as homeopathy and herbal medicine practitioners (1.4%). In terms of

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3   The UK school education system has two levels, where pupils generally leave at 16 (the legal minimum age) and 18. The exams at age 16 are known as GSCEs and were introduced in 1988. They replaced the O-Level and CSE examinations that existed before them. The A-Level exams are taken at the age of 18 and are viewed as a precursor to University entrance.

distribution across experimental groups (table 5.2), these were approximately equal due to random allocation of responses. Note that as allocation was through the application of a random algorithm, and not sequential, the number of responses in each group would not have been expected to be exactly equal.

Variable	Characteristics	Frequencies	Percentage
Gender	Male	90	31.6%
	Female	195	68.4%
Age (Group)	18 -30	101	35.4%
	31 – 40	53	18.6%
	41 – 50	45	15.8%
	51 – 60	54	18.9%
	61 and over	32	11.2%
Education	GSCE / O-Level	108	37.9%
	A-Level	54	18.9%
	University	123	43.2%

Table 5.1 Demographic characteristics of respondents

Experimental Group	Frequencies	Percentage
Deep Acting NHS	60	21.05%
DeepActing Private	53	18.60%
SurfaceActing NHS	66	23.16%
SurfaceActing Private	55	19.30%
Control	51	17.89%

Table 5.2 Allocation to experimental groups

Information Source	Frequencies	Percentage
Health Professional	235	82.46%
Internet	28	9.82%
Books & Magazines	11	3.86%
Friends & Family	7	2.46%
Other	4	1.40%

Table 5.3 Trusted information source

Age Group	GCSE/ O-Level	A-Level	University	Grand Total
18 -30	28	24	49	101
31 – 40	20	7	26	53
41 – 50	18	12	15	45
51 – 60	25	5	24	54
61 and over	17	6	9	32
Grand Total	108	54	123	285

Table 5.4 Cross tab – age / education level

5.3 Tests of Hypotheses

5.3.1 Hypotheses 1, 2 & 3

Before analysing each hypothesis, I present the original text of each hypothesis for reference purposes.

> *H1: Deep-acted emotional labour will result in a greater reduction in consumer perception of health screening risks than surface-acted emotional labour.*

> *H2: Encounters with private sector professionals will result in a greater reduction in consumer perception of health screening risks than encounters with NHS professionals.*

> *H3. Deep-acted encounters with NHS doctors will result in a greater reduction in consumer risk perception than deep-acted encounters with a private sector doctor.*

In order to analyse the impact of the experimental manipulation for H1, H2 & H3, I performed analysis of covariance (ANCOVA) upon the experimental data collection. ANCOVA is an extension of ANOVA that allows for the inclusion of covariates. Covariates are additional continuous variables that are not part of the main experiment but may have an impact upon the dependent variable. The rationale for using ANCOVA over a technique that doesn't take account of covariates is that it allows controlling the effects on the outcome variable for any number of continuous variables that might affect them. ANCOVA has two advantages over ANOVA (Field, 2005). Firstly, it can help explain some of the unexplained error variance, and thus assess the effect of the IV more accurately. Secondly, it can help identify and eliminate confounding variables; unmeasured variables that vary in line with the experimental manipulation.

In the case of this research, this approach allows for the inclusion of both the general risk perception (DOSPERT) scores and the worry scores (PSWQ) that may have an impact on the perceived risk scores. Due to the inclusion of these continuous variables in the analysis, and the fact that there was some significance between covariates and other variables, it would have been incorrect to not perform ANCOVA. For H4, H5, H6 & H7 ANOVA, rather than ANCOVA is adopted because data relating to these hypotheses was not collected through an experimental manipulation.

The analysis that follows shows that, in general, H1 and H2 did not hold whilst H3 did. Although there were significant differences between the control group and the video groups, demonstrating that display of the video did significantly reduce risk

perception, this did not apply for the emotional labour and professional role variables in the experimental manipulation. The analysis that follows suggests that H3 holds in that the mean risk perception for the surface acting video is higher than for deep acting groups where the doctor is an NHS doctor, but the opposite case holds where the video is of a private doctor. In other words, surface acting lowers risk perception (over the deep acting state) where the doctor is a private sector doctor but when the doctor is NHS, the opposite is the case. However, this only held in the case of risk perception for x-ray and ultrasound, and not CT risk.

In terms of the analysis, separate ANCOVA was performed for each of the three categories of risk perception for the dependent variable (CT Scan, X-Ray and Ultrasound). The variables used are described as follows:

- Dependent Variable: **Perceived Risk Score** (either CT Scan, X-Ray or Ultrasound, as one ANCOVA was performed for each of these outcome variables)

- Independent Variables:

    o **Emotional Labour** (Deep Acting / Surface Acting)

    o **Professional Role** (Private Doctor / NHS Doctor)

    o **DOSPERT Likelihood of Partaking in Health Risks** (as covariate)

    o **DOSPERT Perceived Riskiness of Health Risks** (as covariate)

    o **PSWQ** (as covariate)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13.806(a)	7	1.972	3.637	.001
Intercept	2.229	1	2.229	4.112	.044
DOSPERT risk partaking	2.306	1	2.306	4.253	**.040***
DOSPERT risk perception	.170	1	.170	.314	.576
PSWQ	1.474	1	1.474	2.719	.100
Emotional Labour	.001	1	.001	.001	.972
Professional Role	.715	1	.715	1.318	.252
Emotional Labour / Role Interaction	6.524	1	6.524	12.033	**.001***
Error	150.194	277	.542		
Total	805.250	285			
Corrected Total	164.000	284			

* *The mean difference is significant at the .05 level.*
(a) R Squared = .084 (Adjusted R Squared = .061)
Table 5.5 Tests of between-subjects effects DV = ultrasound

As shown in table 5.5, the only variables that were significant at the 0.05 level were DOSPERT risk partaking scores (which had a positive significant relationship with Ultrasound scores, with p = 0.040) and the interaction between emotional labour and professional role (p = 0.001). On the other hand, the main effects of emotional labour and professional role were not significant (p = 0.972 and p = 0.252, respectively). Given that the interaction between emotional labour and professional role was significant, each possible combination was examined. In order to do this, the ANCOVA was re-estimated. The independent variables emotional labour and professional role were replaced by a single factor ("Group") with 5 levels ("Deep Acting NHS", "Deeping Acting Private", "Surface Acting NHS", "Surface Acting Private" and "Control"). Results are presented in table 5.6.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	17.514(a)	7	2.502	5.428	.000
Intercept	.978	1	.978	2.122	.147
DOSPERT Risk Partaking	5.570	1	5.570	12.084	**.001***
DOSPERT Risk Perception	1.189	1	1.189	2.580	.110
PSWQ	.854	1	.854	1.852	.175
Group	12.181	4	3.045	6.606	**.000***
Error	104.642	227	.461		
Total	624.250	235			
Corrected Total	122.155	234			

* *The mean difference is significant at the .05 level.*
(a) R Squared = .143 (Adjusted R Squared = .117)

Table 5.6 Re-estimated tests of between-subjects effects DV = ultrasound

As expected, variable "Group" was significant at the 0.05 level (p < 0.001). Post-hoc least significant difference procedures were used in order to perform pairwise comparisons across the groups (table 5.7). As can be seen from table 5.7, the control group had significantly higher ultrasound risk scores than all other groups. Surface acting private, followed by deep acting NHS, had the lowest ultrasound risk scores. Both of these were significantly lower than surface acting NHS.

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.(a)
Deep Acting NHS	Deep Acting Private	-.225	.128	.080
	Surface Acting NHS	**-.334(*)**	.121	.006
	Surface Acting Private	.124	.127	.329
	Control	**-2.247(*)**	.688	.001
Deep Acting Private	Deep Acting NHS	.225	.128	.080
	Deep Acting Private			
	Surface Acting NHS	-.109	.126	.389
	Surface Acting Private	**.350(*)**	.131	.008
	Control	**-2.021(*)**	.689	.004
Surface Acting NHS	**Deep Acting NHS**	**.334(*)**	.121	.006
	Deep Acting Private	.109	.126	.389
	Surface Acting Private	**.458(*)**	.124	.000
	Control	**-1.913(*)**	.687	.006
Surface Acting Private	Deep Acting NHS	-.124	.127	.329
	Deep Acting Private	**-.350(*)**	.131	.008
	Surface Acting NHS	**-.458(*)**	.124	.000
	Control	**-2.371(*)**	.688	.001
Control	**Deep Acting NHS**	**2.247(*)**	.688	.001
	Deep Acting Private	**2.021(*)**	.689	.004
	Surface Acting NHS	**1.913(*)**	.687	.006
	Surface Acting Private	**2.371(*)**	.688	.001

* *The mean difference is significant at the .05 level.*
(a) Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 5.7 Pairwise comparisons DV = ultrasound

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30.293(a)	7	4.328	5.265	.000
Intercept	2.033	1	2.033	2.473	.117
DOSPERT Risk Partaking	3.911	1	3.911	4.757	**.030***
DOSPERT Risk Perception	1.622	1	1.622	1.973	.161
PSWQ	1.980	1	1.980	2.408	.122
Emotional Labour	.004	1	.004	.005	.946
Professional Role	3.751	1	3.751	4.563	**.034***
Emotional Labour / Role Interaction	16.725	1	16.725	20.347	**.000***
Error	227.702	277	.822		
Total	1350.500	285			
Corrected Total	257.995	284			

* *The mean difference is significant at the .05 level.*
(a) R Squared = .117 (Adjusted R Squared = .095)

Table 5.8 Tests of between-subject effects DV = X-ray

As shown in table 5.8, the only variables that were significant at the 0.05 level were DOSPERT risk partaking scores which had a positive significant relationship with X-ray risk scores (p = 0.030), professional role (p = 0.034) and the interaction between emotional labour and professional role (p = 0.001). On the other hand, the main effect of emotional labour was not significant (p = 0.946). A post-hoc test showed that x-ray scores were higher by 0.255 when the professional role was NHS than when it was private. As in the previous case, given that the interaction between emotional labour and professional role was significant, ANCOVA was re-estimated in order to compare each possible combination (table 5.9).

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	31.951(a)	7	4.564	5.865	.000
Intercept	1.382	1	1.382	1.776	.184
DOSPERT Risk Partaking	8.732	1	8.732	11.219	**.001***
DOSPERT Risk Perception	1.931	1	1.931	2.481	.117
PSWQ	.583	1	.583	.749	.388
Group	24.530	4	6.132	7.879	**.000***
Error	176.673	227	.778		
Total	1066.500	235			
Corrected Total	208.623	234			

* *The mean difference is significant at the .05 level.*

(a) R Squared = .153 (Adjusted R Squared = .127)

Table 5.9 Re-estimated tests of between-subjects effects DV = X-ray

Analysis in table 5.10 shows that the control group had higher x-ray scores than all other groups; however, it was significantly higher than the surface acting private and deep acting NHS groups only. No significant differences between the control, surface acting NHS and deep acting private groups were found. As in the case of ultrasound, surface acting private, followed by deep acting NHS, had the lowest x-ray risk perception scores.

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.(a)
Deep Acting NHS	Deep Acting Private	-.280	.166	.094
	Surface Acting NHS	**-.529(*)**	.158	.001
	Surface Acting Private	.277	.165	.095
	Control	**-1.857(*)**	.894	.039
Deep Acting Private	Deep Acting NHS	.280	.166	.094
	Surface Acting NHS	-.249	.163	.129
	Surface Acting Private	**.557(*)**	.171	.001
	Control	-1.577	.895	.080
Surface Acting NHS	**Deep Acting NHS**	**.529(*)**	.158	.001
	Deep Acting Private	.249	.163	.129
	Surface Acting NHS			
	Surface Acting Private	**.806(*)**	.161	.000
	Control	-1.328	.893	.138
Surface Acting Private	Deep Acting NHS	-.277	.165	.095
	Deep Acting Private	**-.557(*)**	.171	.001
	Surface Acting NHS	**-.806(*)**	.161	.000
	Surface Acting Private			
	Control	**-2.134(*)**	.895	.018
Control	**Deep Acting NHS**	**1.857(*)**	.894	.039
	Deep Acting Private	1.577	.895	.080
	Surface Acting NHS	1.328	.893	.138
	Surface Acting Private	**2.134(*)**	.895	.018
	Control			

Based on estimated marginal means

* *The mean difference is significant at the .05 level.*

(a) Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 5.10 Pairwise comparisons DV = X-ray

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13.668(a)	7	1.953	2.372	.023
Intercept	1.363	1	1.363	1.656	.199
DOSPERT Risk Partaking	3.965	1	3.965	4.817	**.029***
DOSPERT Risk Perception	1.003	1	1.003	1.219	.271
PSWQ	8.136	1	8.136	9.885	**.002***
Emotional Labour	.096	1	.096	.116	.734
NHS	.418	1	.418	.508	.477
Emotional Labour / Role Interaction	1.050	1	1.050	1.276	.260
Error	228.011	277	.823		
Total	1363.750	285			
Corrected Total	241.679	284			

* *The mean difference is significant at the .05 level.*

(a) R Squared = .057 (Adjusted R Squared = .033)

Table 5.11 Test of between-subjects effects DV = CT scan

As can be seen from table 5.11, for CT scan risk perception, the only variables that were significant at the 0.05 level were DOSPERT risk partaking scores which had a positive significant relationship with CT scan risk (p = 0.029) and PSWQ which also had a positive significant relationship with CT scan scores (p = 0.002). On the other hand, neither the main effects of emotional labour or professional role had a significant effect on CT Scan scores.

5.3.3 Hypotheses 4, 5 & 6

H4: Health service consumers demonstrate levels of worry associated with a general anxiety disorder.

H5: Levels of worry will be higher amongst women than men.

H6. Levels of worry will be positively associated with education level.

In order to analyse H4, H5 and H6, ANOVA was performed on the PSWQ measure of pathological worry and the relevant demographic variables. Table 5.12 indicates that the levels of worry were significantly higher for female respondents than male respondents. However, there was no significant difference based on level of education (table 5.13), indicating that levels of worry are not positively associated with education.

Gender	Worry Mean	Significance
Male	39.29	**0.001**
Female	45.2	

Note: sig. 2-tailed values less than 0.05 indicate significant difference.

Table 5.12 Pathological worry and gender

Education level	Worry Mean	Significance
GSCE	44.18	0.531
A-level	44.06	
University	42.28	

Note: sig. 2-tailed values less than 0.05 indicate significant difference.

Table 5.13 Pathological worry and education Level

5.3.4 Hypothesis 7

H7: The greater the perception of health risks the lower the likelihood of partaking in activities that increase risk to health.

In order to analyse H7, ANOVA was carried out on the DOSPERT risk taking and risk perception variables. Table 5.14 indicates a significant difference between the perception of health risks and the likelihood of partaking in these risks. Specifically, the analysis suggests that the greater the perception of health risks, the lower the likelihood of partaking in these findings. H7 was, therefore, found to hold.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.711	4	8.428	19.692	**.000**
Within Groups	119.833	280	.428		
Total	153.544	284			

Note: significance values less than 0.05 indicate significant difference.

Table 5.14 DOSPERT risk perception and risk taking

6. Discussion

6.1 Introduction

In this section, I discuss the various findings from the research. I start with a discussion of the findings from the method, particularly relating to the potential for bias due to the nature of respondent exclusions from the sample. Following this, I review the profile of the health service consumers who were respondents, looking at both demographic profiles and their attitudes to risk. I then move on to discuss the findings in terms of the link between risk taking and risk perception, and the implications of the experimental manipulation on emotional labour and risk perception in terms of the interactions effect found. Finally, I move to consider the more general issue of the role of marketing and consumerism in health service delivery within the UK.

6.2 Bias and Web Survey Methods

A substantive finding of this research was the extremely large number of unusable responses. Of 444 completed responses, 112 were excluded for completing the survey too quickly and 45 for attempting multiple responses. Increasing numbers of researchers are relying on web-based survey research (Morrel-Samuels, 2003), and therefore understanding any limitations with web based data collection is important. The increasing adoption of web-based surveys has been put down to greater flexibility in design, faster response time, lower non-response rates and, perhaps most significantly for researchers, the ability to gather a larger number of responses at a

lower cost (Rosenzweig et al., 2003). Done effectively, web-based surveys allow for the elimination of data processing error, such as errors introduced by manual transcription of quantitative data. Despite the potentially large influence of data processing errors, which can be as high as 20% for some types of variables (Biemer & Lyberg, 2003), this is an area that has received relatively little coverage in the literature. Web-based surveys can reduce these types of errors by enabling the automatic transfer of information into statistical analysis software, whilst also providing a means to validate respondents' data entries. For example, they can be used to prompt the respondent to complete questions that may have been missed or to allow automatically question branching based on previous responses. One area that hasn't featured in the literature on survey completion to-date is the ability to collect variables on respondent behaviour whilst completing a web-based survey or experiment. In this case, the key variable was the amount of time spent completing each section (and page) of the survey. In particular, the amount of time spent viewing the video page related to the experimental manipulation. As identified in section 4.11, for the 112 responses who completed too quickly, the mean time spent completing the survey page was 40 seconds. Put simply, respondents were completing the survey more quickly than was expected were they to have correctly viewed the experimental manipulation. Yet, this was not a simple case of non-response bias, as all but two of the respondents who began the full survey itself (that is, got through the initial welcome screens) completed the survey. Of course, non-response bias only occurs when there is a measurable bias, specifically a significant difference in the characteristics of the response and non-response groups (Biemer & Lyberg, 2003). As indicated in section 5.4, based on the demographic data gathered for each respondent, there were no significant differences between those who completed the survey in the

correct time versus those who did not. Therefore, this was not a specific case of non-response bias, yet the large number of responses that were not received from these groups suggests that there is potential for some kind of bias. Because of the specificity of the sampling approach, one potential explanation is that the source of the bias was too granular, and was not captured by the basic demographic survey questions used in this research. Another potential issue is that of incentive bias, in that the offering of an incentive may induce a higher than expected response rate from respondents motivated by the thought of receiving an incentive.

Yet, various theories of survey participation through incentives do not make it clear as to why this would be the case. Research has indicated that promised incentives are far less likely to influence respondents than prepaid incentives, such as including a $5 payment in a survey mailout (Berk et al., 1987). Similarly, it seems unlikely that very subtle differences in respondent profiles would produce such a high level of variance in responses. The answer to this issue can be judged to be a combination of the psychological factors that previous researchers have found to influence survey response rates (Cialdini, 1984). Specifically, I believe it is a combination of reciprocation, social validation and authority that has resulted in the large number of respondents feeling that they need to complete the survey but without engaging with the content of the survey. Reciprocity can be effective when the respondent feels that the survey is important to a group of which the respondent is a member (Biemer & Lyberg, 2003). In this case, having already identified themselves as being interested in a particular health issue through performing an Internet search, it is likely that the content of the survey would appeal as being relevant. Secondly, social validation implies that people will respond to a survey if they feel that others in their position are

also responding to it. That invitations to complete the survey appeared high on Google searches may have served to create this effect. Finally, there is the role of authority where compliance with a request to fill in a survey is more likely if it comes from an appropriate source of authority. As the survey invitation used the phrase "key academic research" and the survey was identified with both Cranfield University and the Health Protection Agency, this is likely to have had an impact in inducing responses.

However, none of these factors serve to explain the reasons why so large a number or responses were found to be invalid. The findings suggest that whilst authority and reciprocity have an effect on response rates, they do not have a sufficient impact on an individual's need to actually engage with the survey. Perhaps people feel obliged to respond and complete the survey once they have begun entering a response. But having made the decision to respond the self-complete nature of web-based surveys means that that there is no penalty for low quality responses. This finding has some significant implications for those seeking to carry out web-based research in that, even when the survey appeal is strong as in this case, the quality of the responses may be low. One alternative explanation is that the low cost of completing web-based surveys in terms of respondent effort and time means that even when an incentive is of comparatively low value, there will still be the potential for incentive related bias. This makes it imperative that researchers consider these response variables when carrying out any research using online surveys.

6.3 Health Service Consumers

This research provides insights into the profile of health service consumers. The findings from this research supports some of the existing characterisations of the 'worried well', in that those searching for information on private health services are more likely to be female (Randerson, 2006), and more likely to be University educated (Aitkenhead, 1995). Although there was no question in this research about respondent income, numerous studies have indicated that a University education is positively related to income. It is, therefore, reasonable to expect a relationship between higher incomes to be able to afford private health services. Yet, two findings standout in respect to this research. Firstly, whilst most respondents were female, nearly a third were male. Likewise, responses were distributed across age groups, with a particular focus on the young - the group least likely to suffer from chronic illness. The interpretation that can be put on this data is that, whilst certain groups may be more representative than others, health service searches using the Internet are carried out by every segment of the population. Secondly, there is the extent to which the phrase 'worried well' should be applied to these health service consumers. Levels of worry on the PSWQ measure were found to be significantly higher for women than men which matches media images of the 'worried well' being predominately women (Randerson, 2006). However, the overall levels of worry are still well below the levels accepted to describe a generalised anxiety disorder. The mean scores of mean (39.3) and woman (45.2) are both substantially lower than the cut-off point for a generalised anxiety disorder of 62 (Behar et al., 2003). The phrase 'worried well' comes with connotations of a level of worry that is above and beyond that which is normal. The respondents in this study have what can be described as a normal level of worry. One interpretation might be that the sample didn't represent the behaviour of a typical

group of health consumers. Yet, the sort of behaviour demonstrated by searching for health information online is precisely the activity identified by writing on the phenomena of the 'worried well'. The conclusion I reach is that, in fact, the 'worried well' are no more worried than the rest of the population. However, there is not the longitudinal data to allow the comparison of health consumer today from a time, say, 10 or 15 years ago to test whether there is any difference in these worry states. However, if there is an increase, it would seem to be likely related to the wider societal trends of an increase in expectations of the quality of health services, and concern and knowledge about personal health.

If the 'worried well' as a group effectively do not exist, then it raises the question as to why the label is so widely used. One of the challenges faced by professionals is the validity of information used by health consumers. For example, Internet searches for health information are often biased by the information providers being organisations that will benefit financially from. Analysis of over 400 randomly chosen health-related internet sites found that only 48% were published by credible sources, such as medical bodies or government departments (Hogg et al., 2002). By accessing potentially inaccurate information, health service consumers may develop moderate levels of worry about a much wider range of areas than would previously be the case. In turn, this increases professional frustration (Pontious, 2002); a frustration sourced at the consumer's inability to take full notice of information provided by the health professional. This raises an additional challenge within the UK since the provision of health services usually occurs on a local basis, the access to health information through the Internet is a global phenomenon. This means that consumers are facing many competing sources of professional information. Health service professionals

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need to understand the various sources of health information available to consumers and be able to explain to help guide consumers on how to best understand these potentially competing sources of information.

6.4 Risk Perception and Risk Taking

In this study, risk taking and risk perception were found to be significantly different. This implies that meaning the more risky people found a health risk-taking activity the less likely they were to partake in it. This suggests that for those seeking health information from online sources, risk-taking behaviour is linked to their perceptions of those risks. Previous research has questioned the link between health risk perception and engaging in a behaviour that is risky to health (Alaszewski, A. & Horlick-Jones, 2003). Yet, in this example, the respondents' perceptions of risks were related to the likelihood of partaking in these risks. The directionality of this is not clear from the way that they data was collected. To pick one example from the DOSPERT scale, does taking up smoking lead people to believe smoking is less dangerous, or is it a perception that smoking is not so dangerous that makes people more likely to smoke? In terms of the risks of the health screening tests the data suggests that for the sort of consumers who search for health information online, behaviour and perception are linked. The implication is that it is a worthwhile goal for health professionals to ensure that health consumers have a correct understanding of the specific risks involved with health screening. In turn, this helps to answer the question as to whether health service consumers are in a position to appropriately understand the sort of risks involved with health screening. Provided these

consumers are able to understand the risks, they appear likely to take the appropriate behaviour. This leads me onto the next section of the findings and the impact that the variables under examination in this research had on consumer risk perception.

6.5 Emotional Labour and Risk Perception

The key experimental findings of this study relate to the relationships between emotional labour and risk perception in the context of a professional service encounter. The main hypotheses related to this, that the level of emotion in a service encounter would alter the service outcome, were not supported. Neither was the hypothesis that altering professional role in itself would influence the service encounter. This went against many findings of routine service encounters where emotional labour was found to alter service satisfaction or a customer's emotional state. However, here the difference is that the outcome from the encounter is key to a professional service encounter; it is important that the consumer understands the information transmitted through the service encounter and is able to judge the risks involved. The interpretation of this is that varying emotional labour states is not enough to significantly influence the perception of risk in the service encounter. It is not simply a case of an additional variable having a greater weighting, as the professional role on its own did not significantly influence the perception of risk. However, the interpretation becomes more complex when we consider the data relating to interactions between the risk perception and emotional labour variables. A significant interaction effect was found whereby the impact of emotional labour varies depending on the role of the professional. To recap, the findings show that deep acting lowers risk perceptions over the surface acting state but only when the doctor is a

private sector doctor. However, when the doctor is an NHS doctor, the opposite is the case. Additionally, this only holds in the case of risk perception for x-ray and ultrasound and not CT risk.

This suggests a number of significant findings. Firstly, emotional labour is a truly dyadic construct in that it depends not just on the behaviour of the service agent but also the role that is adopted by the consumer. The concept of 'service with a smile' is so common as to be taken for granted in the literature on managing services (Grandey et al., 2005). Yet, the literature on emotional labour in professions, both private sector and public sector, has largely focused on the benefits of emotion management from the service providers' perspective. Here, emotional labour helps professionals to manage the stress related to spending large amounts of time dealing with customers, whether or not 'customer' is the label given by the profession. Whilst the variable under question in this research is professional role, it should be noted that altering the professional role in any dyadic interaction also has an impact on the role adopted by the consumer. The consumer role adopted in this research can be described as a *rational actor* in the case of the private doctor, and a *social actor* in the case of the NHS. The rational actor approach reflects the market-based operation of the private health sector, whilst the social actor approach reflects the shared values and beliefs that exist between the actor and the NHS service provider. (Taylor-Gooby, 2008). Viewing my findings through the lens of these consumer 'actors', the findings suggest that the rational actor responds affective displays that may be more associated with a consumer centred service model, whilst the social actor responds to more authentic emotional displays. When the health service consumer believes that they are indeed a consumer, in the sense that they would be a consumer of many normal private sector

services, the role of appropriate display becomes more important. However, when they are in the role of a social actor and co-creating within a system that they feel part of, and not simply a passive consumer of the health service, the importance of superficial displays in determining service outcome diminishes.

It is also important to note that the findings here relate to risk perception and not consumer satisfaction measures. It is possible that surface acting does have a more positive impact on consumer satisfaction in the NHS context than deep acting. However, in terms of the perception of risk, it is the more authentic emotional display that has the greatest impact. In terms of impact, it should be remembered that the directionality of the impact was significantly lower than the control group in all cases. Regardless of the impact of the specific emotional display, having a professional communicate the information through visual means very significantly lowered the perceived risk over that when reading the same information from the leaflet. As highlighted in the data tables in chapter 5, the control group had significantly higher risk perception levels in all experimental groups at the 0.05 level, and in most situations significance was at the 0.001 level. Indeed, the mean differences were sometimes extremely large. For example, mean risk perception for the control group over the *surface acting private doctor* group for ultrasound tests was 2.371 on a five-point scale. This underscores the importance of face-to-face service encounters between health professionals in enabling consumers to correctly understand risk perceptions, even where there was no opportunity for interaction.

The additional finding relating to CT risk suggests that there is a limit to consumer

understanding of any technical treatment. Specifically, consumers are unable to correctly judge the risk of CT scans from the information given, even though that information is the official information sanctioned by the UK Health Protection Agency. CT scans were the most technically complex of the three types of test for which risk perception data was gathered and also the service which consumers are least likely to be familiar with. This should be of concern to public health professionals in the UK, as many of the health screening services that could be found through the type of searches being performed by consumers here involved CT scans. This finding suggests that health service consumers do not just rely on information given by a professional to make judgments on the risk of a particular screening, but they also use background information which they have gathered as a heuristic by which to judge the quality of information passed on to them by health professionals. This suggests that, regardless of the desire for greater consumer involvement and choice in health services, there are still limits to 'consumer-driven' decision making. The ever-increasing, technical complexity of many types of health services means that there remain situations where consumers can unintentionally put themselves at risk if they ignore the advice of a professional.

My findings have implications not only for research into emotional labour but also the role of consumerism in the NHS. For research into emotional labour it suggests that the position of the consumer needs to be taken into account and the importance of superficial emotional displays may diminish as the level of involvement and co-creation opportunities with the service increased. For the NHS, it raises a number of potential downsides to the move towards a consumer-centred NHS. Consumers who adopt a rational actor model towards health service delivery develop higher levels of

expectations that cannot be met by the rationed NHS system that relies largely on compliance and co-operation from its customer base.

This creates a great paradox in the discourse on the NHS, whereby moving to a more consumer-centred health service may perversely serve to weaken the ties that bind the current system together. In reviewing the literature for this research, I suggest that the professional role created a kind of third-logic, with a group of employees displaying loyalties more oriented towards professional goals than consumer or organizational goals. It is, I argue, this logic that will prevent the health professionals operating within the NHS from adopting and responding to the rational-actor model of consumer. The implications of this is that health service consumers within the NHS are less likely to rely on gathering risk information from their NHS doctor and more likely to seek secondary treatment outside the NHS. However, this is not simply a case of consumers choosing between a public and private service provider. The dominant role of the NHS limits the scope for an effective private sector equivalent to exist in many parts of the UK. Rather I believe this is likely to lead to a larger role for an an emerging grey market in healthcare. Consumers will seek certain aspects of treatment, such as a range of diagnostic tests, through private sector providers in order to give them the reassurance they may not receive from the more streamlined and rationed NHS.

6.6 The Role of Marketing in UK Health Service Delivery

In this research, I have considered the issues of health from a marketing perspective. The universal theme running through recent literature on managing health services is

the scale of the challenge facing those wishing to deliver health services. Whether in Europe, North American, Japan, or developing countries - the story is the same (Maynard, 2005). Increasing technological advances are increasing the cost of health treatments whilst increasing consumer expectations and incomes are increasing demands for health services. It should also be noted that in many countries, poor lifestyles are also increasing demand for health treatments. As Tom Peters so passionately argues (Peters, 2008), the problem with health care is the mindset of health care itself as health care is disintermediated from the sort of health behaviours that increase the requirements for health care services. In this respect he paraphrases Kenneth Arrow (1963) who is at pains to point out that what is normally referred to as the 'health care industry' is in fact really just the medical care industry. Health itself has a much wider remit, and many of the aspects that determine health are unrelated to the medical care industry.

This research highlights the challenges in delivering health services to consumers in an environment where health service consumers have much greater access to information. It is my argument that in many countries around the world, the problems facing health service delivery are marketing problems, yet this is rarely acknowledged during any process attributing blame for health service failure. Any such blame can surely not be put at the door of clinical practice as, whilst there is inevitable room for improvements, the technical quality of health services has increased immeasurably over the last 50 years. A second source of blame lies at the door of organisational structure. Health services are often viewed as being inefficient and poorly managed due to government interference (such as in the UK) or a lack of government interference (such as in the US). No doubt there are organisational improvements that

can be made, as with any industry, but even consultants such as McKinsey acknowledge that efficiency improvements in themselves will not being sufficient to close the gap between supply and demand (Ghatak et al., 2008). The challenge of health service delivery is, therefore, not one of clinical management but one of consumer expectations and behaviour. Consumer expectations of the level of service they should receive from public or insurance provided health services are not in line with the lifestyles and behaviours that influence a large proportion of health service costs.

Yet, it is also necessary to acknowledge the limitations of marketing practice when applied to health services. Health services are not like other services or even other professional services. Whilst greater transparency in the delivery of health services will provide great benefits in terms of consumer choice, the basic problem remains that consumption of health services can pose a danger to individuals (Berry & Bendapudi, 2007). When people are given the freedom to choose their own health services, such as through tax-exempt savings plans for medical costs in the US, the market serves to punish those who are most in need of health services (Noah, 2007). As a former editor of a leading medical journal (Relman, 2005) writes:

> "Healthy, young families would choose the least expensive plans with the highest allowable deductible, and those with health problems would be forced to choose plans with the lowest allowable deductible but high premiums. The premiums... would spiral upwards because of the greater use of services by sicker beneficiaries."

Trends towards consumer-directed health services also fail to deliver on a cost basis

because they ignore one of the key problems of health services, that costs are unevenly distributed towards expensive, and unexpected life threatening illnesses. In the NHS, as with other health services, it is not GP visits that drain resources, rather it is treatments such as coronary bypass operations, dialysis, and chemotherapy (Krugman & Wells, 2006). As to the role of the market in health services, being rich may still be the best way to guarantee receiving excellent health services. Yet, the reality of health service provision in most countries is a mix of private and public services. Whilst systems vary between countries, there are a number of unifying themes that can summarise the challenges that health systems face, namely expenditure, efficiency and equity (Maynard, 2005). Arguments for and against market-based health systems tend to follow ideological routes (Williams, 2005) yet in reality, the need to meet requirements from expenditure, efficiency and equity means that effective health service delivery systems need to mix both elements of public and private systems. For example, the most effective aspect of the US healthcare system, providing both the lowest cost per patient for treatment, and the highest ratings for service quality (Longman, 2007) is the 'VA'; the health system run by the Department of Veterans Affairs for veterans and their families. This is a socialized system and the largest provider of health services in the US, operating nationally and facing much of the same budget constraints as the NHS (Longman, 2007). Even in free markets, healthcare is never free of regulation as can be seen in the regulations covering the training and licensing of doctors, the regulation of pharmaceutical markets, and the regulation of various aspects of hospital safety and funding (Maynard, 2005).

So if the role of the market, in a conventional sense, is contested in health services what is the role of marketing in health service delivery? Ultimately, health service

failure is as certain as mortality. Despite the advances in medical technology, much of this technology is focused on the fairly incremental improvements in life expectancy and must face the limits of the human body. As this research demonstrates, consumers find health information difficult to evaluate and the role and position of a professional can be highly influential in determining perceptions of risk. Yet, social factors such as globalization, greater consumer empowerment, greater access to information, and an increase in health expectations can neither be ignored nor rolled back.

I believe that marketing can contribute towards improving health services in three ways. Firstly, there is the opportunity to encourage co-creation between consumers and health professionals. Many of the problems associated with the consumption of health services can be put down to consumers lack of engagement with the biomedical model of health delivery dominant in western countries (Annandale, 1998). A doctor is someone you see when you are sick, not someone who helps you stop being sick in the first place. Consumer choice within health services needs to be redefined as encouraging people to choose lifestyles that would be better able to enhance future health, rather than an pseudo-choice over certain elements of emergency care. Secondly, it is a fact that consumers have more information than ever on health treatments yet as has been demonstrated in this research they are also often in a poor position to judge the accuracy or relevance of this information to themselves. It may be the case that some level of information asymmetry is always inevitable in a complex and emotive service such as health. Yet, rather than restricting access to information by treating health professionals as gatekeepers, health service providers should give health consumers the information they need and, perhaps, work to allow consumers to own information held about themselves. Health consumers are still

reliant on stores of information held by a myriad of health providers that it is difficult for them to access or interpret. Plans by organisations such as Google to move control and ownership of health records to consumers (Mayer, 2008) have been met with some concern from associations of medical professionals. However, providing consumers with access to information held about them could be a major step in reducing the underlying information asymmetry that lies behind the incorrect evaluation of risks identified in this research.

Thirdly, there is the issue of the future role of the health professional. Much has been written about the demise of doctors professional status (Le Fanu, 1999) although, as Friedson (2001) notes, the strength of a professional grouping is often reflected in internal debate about its future. The nature of healthcare is such that the key role of the medical professional and the healthcare service encounter is likely to remain. As shown in this research, even people searching for alternatives to the NHS on the Internet overwhelming trust health professionals. And it is this trust that forms the basis of effective decision making by health consumers.

7. Conclusions and Future Directions

7.1 Conclusion

The results of this study support the concept that emotional labour has an impact on consumer perceptions of risk, but that this impact is dependent on the role of the professional. When the health service professional had an NHS role, only deep acting resulted in a reduction in risk perception. In contrast, when the health service professional had a private sector role, only surface acting resulted in a significant reduction in risk perception. This suggests that from a consumer perspective, emotional labour is a dyadic construct where the impact of emotional displays depends both on the actions of the health professional and the role of the consumer. However, where the risks are highly complex, as is the case for CT Scans, respondents perceptions of risks do not appear to be influenced by the experimental manipulation. This suggests that in situations where the decision making process is highly complex, the level of information asymmetry remains too high for the consumer to be in a position to make an effective decision about the type or level of health services required.

Levels of worry were found to be significantly, and positively, related to education level and gender, where female respondents had a higher level of risk perception than male respondents. Overall, consumers were found to have levels of worry that were not consistent with a general anxiety disorder or a specific

worry-related illness. This suggests that consumers who search for health information online do not have a level of worry above normal, and applying the term 'worried well' to them would be an inappropriate reflection of their behaviour. More likely, the search for health information is due to a desire to reduce the information asymmetry existing between health professionals and consumers. The response from health professionals in terms of using the label 'worried well' is related to the perceived threat to professional power and norms from independent information searches by consumers. Risk perception of specific health risks is found to be significantly but inversely related to the likelihood of partaking in these risks, suggesting that there is a link between behaviour and risk perception.

7.2 Reflections

Reflecting on this research, there are two areas that proved most challenging. Firstly, there was the decision I took to follow a quantitative approach for the purposes of researching emotional labour, a construct that had previously been dominated by interpretive research and approached from the perspective of the employee rather than the consumer. It seemed obvious to me that in the case of dyadic service encounters, the consumer side of the dyad must be taken into account when emotional labour is used. However, the scarcity of papers on the topic led to substantial amounts of time and effort in developing a methodological approach and frame that could have been avoided if I had taken the more familiar path. Secondly, the contextual focus of health services initially raised a number of challenges. Indeed, I was warned by wiser heads from diverging from my original plan of considering professional service encounters

in another professional service context more familiar to the world of marketing. This was a concern I shared, particularly in carrying out research in the UK where the literature on applying marketing to health services is easily outweighed by papers questioning the value of marketing in a health service context. It was with some relief, therefore, to read Berry & Bendapudi's (2007) call for service researchers to focus on healthcare. The decision to go down this path was helped by the specification of Cranfield University of the purpose of a PhD being not just about making a contribution to knowledge but making a *useful* contribution to knowledge.

There are a number of personal observations I would make having completed this research. Firstly is the importance of the web as a survey or experimental research tool. Browsing through recent issues of leading marketing journals, I remain surprised at how infrequently web-based research techniques are used, and when they are used I am struck by the apparent lack of sophistication applied to them. This also applies to doctoral research colloquia, where I have seen a high preponderance of researchers relying on student samples in circumstances where student samples were not appropriate for the type of research being undertaken. For example, one study used student samples to investigate the business use of cell phones. As I have demonstrated in this research, the use of the web together with the application of some creativity, allows researchers on limited budgets to more easily and accurately capture data from relevant samples. My second observation is on the role and potential of marketing in the health service domain. It was not difficult to get the attention of health professionals and to persuade them of the potential for marketing within the health service domain. Indeed, it is fair to say that I have merely scratched the surface of what might be possible to achieve when researching the marketing of health services.

The effective provision of increasingly expensive and complex health services to an ageing and more demanding consumer base is one of the key challenges facing governments throughout the world. The field of health service research is dominated by clinicians and economists; reflecting that the traditional challenges of bringing in new clinical practice and effectively funding the large infrastructure costs required to setup these practices publically and privately. Yet the involvement of consumers and the role of consumer behaviour in health services, suggests that marketing scholars can also make a contribution; a contribution that, based on my experiences in this research, would be welcome.

7.3 Limitations

As with any piece of research, trade-offs have been made in selecting a research design, both as a function of that research design and pragmatically in getting the research implemented. Limitations of this research can be found in aspects of the experimental design and in the sampling technique. Firstly, the service encounter in this research is simulated, rather than forming part of an actual service encounter. As the encounter has been simulated through a video there is no mechanism for the consumer to provide feedback, as would be the case for a truly dyadic service encounter. It is possible to build this step into the method, as Yao (2005) did using a video rental store for a study and staffing it with actors to create 'real' service interactions. It could be argued that, in such circumstances, the realism of having the face-to-face encounter is weakened by having the encounter prearranged. For the professional service encounter in general, this limitation is hard to overcome.

Ethically and legally, it simply would not be acceptable to create a 'fake' medical facility and staff it with actors serving a group of consumers that already have a heightened state of concern about their health. Carrying out qualitative research by observing service encounters would have been another feasible approach. However, in a healthcare context, this would not have been possible due to having a negative result in terms of maintaining patient confidentiality. Whilst there are limitations to the approach I have taken, I believe that the fact that the method allows me to reach this under-researched group is itself a significant contribution. Furthermore, this online approach allows for significant control of the variables in the study, which enables the production of statistically generalisable results. A second potential limitation might be in the way that the sampling frame was developed. Whilst the sample was random and thus suitable for statistical inferences, it was also based on a specific frame of those searching the web for certain types of health information. As with any voluntary survey, there are going to be members of the sample frame who choose not to complete the experiment. Whilst the characteristics of respondents can be compared with those who only partially completed the survey, the online design makes it impossible to assess certain aspects of non-response bias. For example, what were the characteristics of the people who didn't respond to the survey? It should be stressed that this is not simply an issue with an online survey but with all forms of survey data collection, and the online technique had the advantage of enabling the collection of a number of additional variables on respondent behaviour whilst completing the survey to help assess the presence of bias. This is linked to issues of the large number of responses being excluded due to multiple attempts, or not paying full attention to the experiment. However, as I highlight in the findings, I do not believe this issue is limited to this study. Rather, the greater analytical capabilities of carrying out an

online study have made the issues more visible than they would have otherwise been.

7.4 Contribution

This study contributes towards research in health services marketing in a number of ways. Firstly, it provides evidence of the way consumers perceive emotional labour in a service encounter. Whilst previous research has predominantly focused on the influence of emotional labour on employees (Price et al., 1995), this research provides evidence that consumer outcomes in the service encounter can influenced by the use of emotional labour. Furthermore, by shifting the focus from the outcome of routine service encounters to the professional service encounter, I provide evidence of a linkage between the specific professional role and the effectiveness of emotional labour. This research meets the calls for researchers to perform experimental studies to identify causal relationships in face-to-face service encounters (Bono & Vey, 2005:228).

Secondly, findings from this research support some of the existing conceptualisations of consumers who search for information online, in terms of gender and education levels (Randerson, 2006; Aitkenhead, 1995). However, by the same token, this research may suggest the mislabelling of the group referred to as the 'worried well'. Whilst there are many who suffer from genuine worry disorders with regards to health issues, this research suggests that applying this label to a broader group of health service consumers searching for information online misses the real reason for their information searches; the desire to reduce the information asymmetry that exists between consumer and professional. The study also demonstrated a link between

perceptions of health risks and a reduced likelihood of partaking in such health risks. This indicates that, unlike in previous studies (Alaszewski, & Horlick-Jones, 2003), the development of a correct understanding of risks through the service encounter is linked to positive behavioural patterns.

Thirdly, there is the contribution from the method and sampling approach. In this study, I have demonstrated a viable way to access health service consumers that is both cost effective and able to meet the strict ethical demands of health service research. As information searching by consumers moves away from traditional media and towards the Internet (Josefsson, 2006), I would argue that *failing* to take account of these types of information searches is likely to introduce bias. As Internet advertising models become increasingly targeted towards specific demographics, it presents an opportunity for researchers to target very specific demographic niches. For example, whilst the search engine technique used in this study allowed targeting by search term and geography, social networking sites such as Facebook allow targeting by age, gender, education levels, and even specific hobbies or interests. Potential respondents are jaded by requests to fill in long surveys or partaking in face-to-face interviews. This is even more acute in health service environments where access to the service setting, as well as consumers, is difficult. The method highlighted in this research demonstrates an effective way for researchers to target and access respondents, not just in health but also in any hard-to-reach sample.

Fourthly, this study presented extensive behavioural data on how people respond to experiments and, specifically, their level of involvement. Statistical techniques cannot

address the basic problem of whether respondents are really paying attention to, or engaged with, the experiment or survey to give responses that are accurate or meaningful. After all, the popularity of consumer market research techniques means that consumers are likely to be familiar with Likert scales, and other formats of survey question. This research demonstrates that with the appropriate incentive, however unintentional, respondents can be persuaded to complete a survey, but there is no guarantee over the quality of their response.

Finally, the research presents data that identifies some of the limits of consumer understanding of health risks. Specifically, the current documentation used to explain the risks of CT scans to consumers does not provide sufficient information for them to correctly judge the risks involved. Again, existing research has tended to select absolutes in consumer risk perception whilst this study suggests that a more nuanced approach should be taken. There are many situations where consumers are able to judge risks but there remain situations where the technical complexity of the risks involved is such that consumers are unable to make correct judgments. The goal of health professionals should be to help reduce the information asymmetry for consumers searching out health information rather than reinforce it. The better consumers understand health risks, the more likely they are to take the correct health relevant information to avoid health risky behaviour.

7.5 Further Research

The findings in this research suggest a number of avenues for further research. Firstly, I recognize that by situating this research in a UK context, the generalisability of my findings outside the UK is limited. Although the consumers search for health may

have similarities wherever you are in the world, particularly within English speaking countries, the role of the NHS in terms of health service delivery in the UK is so dominant that it is considered an extreme example of the public type of healthcare provision. This then raises the question of how consumers evaluate heath services outside the UK, in countries where the structural make-up of the health care system is markedly different from the UK. Searching a more global perspective on health services, further research could be directed at the role of healthcare in countries that have not previously been serviced by large public sector health services. For example, recent research (Ghatak et al., 2008) indicates that many health systems in developing countries are dominated by private sector firms, that operate on a purely market-oriented basis. This raises the intriguing question of what the developed world could learn about health service delivery from the developing world.

Secondly, there is the question of the potential impact of carrying out more longitudinal research. Research has indicated that consumer perceptions may not be stable over time (O'Neill& Palmer, 2001). In the case of perceptions of risk, further research could investigate how risk evaluations alter over time. Additionally, there is the question of how consumer perceptions alter as a result of multiple service encounters with professionals that form the basis of the typical ongoing relationship with doctors.

Secondly, there is the status of health consumers within society. The phrase 'worried well' remains in use within the media as well as in specialist health publications (Pontious, 2002). The questions raised in this research as to whether health consumers

deserve this label can perhaps be seen in the context of the wider tension between professionals and consumers where professional hegemony is being challenged. Clearly, there are people with clinically diagnosed illnesses related to hypochondriasis that make them worry excessively about their health (Murphy, 2007). Yet, on this issue, there appears to be a paradox in that much of the purpose of public health communication is to create concern about specific health issues, from smoking to diet. We should not be surprised that consumers are confused if the message from the health profession is 'be worried about health, but not too worried'. Given what has already been discussed in this research with regards to the psychological properties of the 'worry' construct, I would go further and state that it is incongruent for people to be less worried about being well in an environment of greater access to information. Better health for society therefore relies upon co-creation of health services between consumers and heath professionals. Future research should examine ways in which co-creation can be encouraged in health services, particularly in public health services, so as to make the persona of 'worried well' a relic of the past.

Finally, there is the question of the role of professional service encounters and the importance of emotional labour in these encounters. Future research should focus on exploring the role of emotional labour amongst consumers in a wider range of professional service encounters. For example, within health services, there are a wide range of professional role types outside of the traditional confines of doctors and nurses (Health Professions Council, 2008). Future research could investigate how emotional labour influences risks in each of these professional settings. Additionally, whilst risk has been the key outcome variable looked at in this research, there are many other potentially important variables in a service encounter, not least of which is

the behaviour of health consumers after the service encounter. In this respect, further longitudinal research would be particularly valuable. Outside of the health service encounter, there remain many examples of professional service encounters; for example, in law (Pierce, 1999) and education (Ogbonna & Harris, 2004), where the use of emotional labour is widespread amongst professionals but the impact on consumers remains largely under researched.

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Appendix 1. Search Terms

The following list contains the search keywords used in the sampling stage of this research. Use of "" indicates a search for those words in a specific order. Use of [ ] indicates a search for the term as an exact phrase.

cancer screening
cardiac health screening
company health screening
consumer health information
corporate health screening
ct screening
ct screens
doctor checkup
doctors info
employee health screening
executive health screening
free health advice
free health information
free health screening
full body screening
health advice
health care advice
health care information
health check
health exam
health examination
health fair screening
health forum
health guide
health information
health information site
health issues
health mot
health problems
health question
health questions
health screen
health screening
health screening companies
health screening questionnaire
health screening questionnaires
health screening report

health screening service
health screening services
health screening uk
health screenings
health screens
health service information
health services information
health test
health website
health websites
healthcare screening
healthcare testing
in preventive healthcare
information on health
medical checkup
medical screening
medical screening services
medical test
medical testing
mobile health screening
mobile health screening unit
mobile health screening units
occupational health screening
of preventive healthcare
online health advice
preventative health assessment
preventative health screen
preventative health screening
preventative healthcare
preventive health assessment
preventive health assessment and
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private doctor
private doctor london
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private gp
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private health screening in
private health test
private physician
private screening
"ct screening"
"full body screening"

"health advice"
"health mot"
"health screening"
"medical checkup"
"medical test"
"private doctor"
"private gp"
"private health screening"
[health advice]
[private doctor]
[private gp]

Appendix 2. Survey Questions

Section A: Some information about you

First, please give us some details about yourself (all information gathered is completely anonymous).

1. What is your age group?
18 - 30
31-40
41-50
51-60
61 and over

2. Are you male or female?
Male
Female

3. What level of education do you have?
GSCE / O-Level or equivalent
A-level or equivalent
University degree or equivalent

4. When looking for medical information, which of the following sources would you trust most?
A Doctor, or other medical specialist
The Internet
Books or Magazines
Friends or Family
Other

Section B: What risks would you take?

For each of the following statements, please indicate the likelihood that you would engage in that activity if you were to find yourself in that situation. Rate each statement from Very Unlikely to engage in that activity to Very Likely to engage in that activity.

Response Options:
1. Very Unlikely
2. Moderately Unlikely
3. Not Sure
4. Moderately Likely
5. Very Likely

- Drinking heavily at a social function.

- Smoking 30 cigarettes a day.
- Sunbathing without sunscreen.
- Riding a motorcycle without a helmet.
- Driving a car without wearing a seat belt.
- Walking home alone at night in an unsafe area of town.

Section C: Your gut level assessment of risk

Riskiness is a very personal and intuitive notion, and we are interested in your gut level assessment of how risky each situation or behaviour is. For each of the following statements, please indicate how risky you perceive each situation to be. Provide a rating from Not at all Risky to Extremely Risky.

Response Options:
1. Not risky at all
2. Somewhat risky
3. Not Sure
4. Risky
5. Extremely Risky

- Drinking heavily at a social function.
- Sunbathing without sunscreen.
- Smoking 30 cigarettes a day.
- Driving a car without wearing a seat belt.
- Riding a motorcycle without a helmet.
- Walking home alone at night in an unsafe area of town.

Section D: How You Feel About Worry

The following short questionnaire asks how you feel about worry. For each statement selected the option that best describes how typical or characteristic each item is of you, from Not at all typical of me to Very typical of me.

Response Options:
   1. **Not at all typical of me**
   2. **Not very typical of me**
   3. **Somewhat typical of me**
   4. **Fairly typical of me**
   5. **Very much typical of me**

- My worries overwhelm me
- If I do not have enough time to do everything I do not worry about it
- As soon as I finish one task I start to worry about everything else I have to do
- Many situations make me worry
- I know I should not worry about things, but I just cannot help it
- When I am under pressure I worry a lot
- I have been a worrier all my life
- I find it easy to dismiss worrisome thoughts
- I am always worrying about something
- I never worry about anything

- When there is nothing more I can do about a concern I do not worry about it any more
- I do not tend to worry about things
- I notice that I have been worrying about things
- I worry all the time
- I worry about projects until they are all done
- Once I start worrying, I cannot stop

Section E: X-rays: how safe are they?

(Video Section)

Did you find the video clear and easy to understand?
Yes, the information was clear
No, the information was not clear

Section F: Your gut level assessment of risk of X-Rays

We are interested in your gut level assessment of how risky you feel each of the following scenarios is. For each of the following statements, please indicate how risky you perceive each to be. Provide a rating from Not at all Risky to Extremely Risky.

Response Options:
1. Not risky at all
2. Somewhat Risky
3. Not Sure
4. Risky
5. Extremely Risky

- A heavy smoker having a CT Scan as part of a regular health check-up.
- A pregnant women having an ultrasound as part of a regular check-up.
- A 40-a-day smoker having a regular X-Ray (radiography) as part of a regular health check-up.
- A 60 year old having having a CT Scan after reporting breathing difficulties.
- Having a regular X-ray (radiography) to check for a suspected broken finger.
- An ultrasound to check abdominal pain after a cycling accident.

Finally, for the following two statements, please indicate the extent to which you agree or disagree with each one. Provide a rating from Strongly disagree to Strongly agree.

Response Options:
- **The doctor in the video was acting sincerely**
- **I trust the opinion of the doctor in the video**

Appendix 3. Video Script

The following is a copy of the script given to respondents completing the survey

Line breaks = pause. Bold = emphasis.

Paragraph 1.
X-Rays - How safe are they?

Thirty years ago, X-rays were the only way to see what was going on inside your body. Now other methods of medical imaging are available, some using different types of radiation from X-rays. People are sometimes concerned about the possible harmful effects of radiation, so I will to explain the risks and to put them into perspective.

Paragraph 2.
There are a number of imaging methods which use X-rays

Firstly, Radiography

This is the familiar X-ray which most of us will have had at some time during our lives, usually for looking at broken bones or at the chest or teeth. A machine directs a beam of X-rays through the part of your body that is being examined and on to a special film. A picture is produced on the film of the structures the X-rays have passed through in your body. Simple radiographs such as these involve extremely low amounts of radiation.

Paragraph 3.
Secondly, Fluoroscopy

This is sometimes called 'screening'. After passing through your body, the X-ray beam is viewed by a special camera which produces a moving picture on a TV screen. The radiologist or radiographer performing the examination can take snapshots of any important findings, or record the whole thing on video. Fluoroscopy is often used to look at the gut. For example, in a 'barium meal' you will be asked to swallow a drink of barium, which is shown up well by X-rays, to give moving pictures of your stomach and intestine. Fluoroscopic examinations usually involve higher radiation doses than simple radiography.

Paragraph 4.
Thirdly, a computed tomography (CT) scan

This is a more sophisticated way of using X-rays. You lie on a narrow table which passes through a circular hole in the middle of the machine. A fan-shaped beam of X-rays passes through a slice of your body on to a bank of detectors. The X-ray source

and the detectors rotate around inside the machine. An image of the slice is formed by a computer and displayed on a TV screen. You are moved slowly through the hole to take pictures of different slices of your body and sometimes to produce 3D pictures. If many slices are imaged, the radiation dose can be as high or higher than that for fluoroscopy.

There is also imaging that uses radioactivity, known as nuclear medicine or an isotope scan

This is another way of using radiation to produce pictures. Instead of using an X-ray machine, a small amount of radioactive material (isotope) is injected into a vein (occasionally it is swallowed or inhaled). The radioactive material concentrates in a particular organ or tissue, for example in the skeleton for a bone scan. It emits gamma rays, which are a type of radiation that behaves like X-rays. A special camera detects the gamma rays coming out of your body and builds up a picture of what is happening inside you.The radioactivity in your body falls to insignificant levels in a few days. The total radiation dose you receive while it is there will be similar to or less than that from fluoroscopy.

Finally, there are Ultrasound and magnetic resonance imaging, known as MRI.

These are two of the most exciting advances in medical imaging of the past thirty years. They do not use X-rays or gamma rays and, so far, no ill-effects have been seen from ultrasound or from the high magnetic fields used in MRI examinations.So why not use them for all pictures, then there will be no concern about possible radiation risks and this leaflet wouldn't be necessary? The answer is that, although they can give beautifully detailed pictures of some parts of the body, they are unable to provide useful pictures to replace all types of X-ray examination. Also, MRI scanners, being very expensive, are not always available and they cannot be used on some patients who have pieces of metal in their body. So, although these new methods are used wherever possible, X-rays and gamma rays will be with us for a long time yet.

So let's put X-ray doses in perspective.

We are all exposed to natural background radiation every day of our lives. This comes from the ground and building materials around us, the air we breathe, the food we eat and even from outer space (cosmic rays). In most of the UK the largest contribution is from radon gas which seeps out of the ground and accumulates in our houses.

Each medical X-ray or nuclear medicine examination gives us a small additional dose on top of this natural background radiation. The level of dose varies with the type of examination, ranging from the equivalent of a few days of natural background radiation to a few years. The most common X-ray examinations are those of the teeth, the chest and the limbs. These involve exceedingly small doses that are equivalent to only a few days of natural background radiation. Examinations involving many X-ray pictures and fluoroscopy, CT scans of the body or bone isotope scans, involve higher doses.Even these represent only a fraction of our lifetime dose from natural radiation.

You will be glad to know that the radiation doses used for X-ray examinations or isotope scans are many thousands of times too low to produce immediate harmful effects, such as skin burns or radiation sickness. The only effect on the patient that is known to be possible at these low doses is a very slight increase in the chance of cancer occurring many years or even decades after the exposure.

Also, it's important not to forget the benefits

All the methods of medical imaging can bring very real benefits to patients. The overriding concern of doctors and the hospital radiology department is to ensure that when radiation is used, the benefits from making the right diagnosis, and consequently giving you the right treatment, outweigh any small risk involved.

For more information on this topic a more detailed version of the information in this video is available as a leaflet and is available to download at the end of this survey.

Appendix 4. HPA Leaflet Copy

The following is a copy of the written information displayed to the control group, based on the material shown in Appendix 4.

X-Rays - How safe are they?

Thirty years ago, X-rays were the only way to see what was going on inside your body. Now other methods of medical imaging are available, some using different types of radiation from X-rays. People are sometimes concerned about the possible harmful effects of radiation, so this information will to explain the risks and to put them into perspective.

Methods which use X-rays

Radiography This is the familiar X-ray which most of us will have had at some time during our lives, usually for looking at broken bones or at the chest or teeth. A machine directs a beam of X-rays through the part of your body that is being examined and on to a special film. A picture is produced on the film of the structures the X-rays have passed through in your body. Simple radiographs such as these involve extremely low amounts of radiation.	
Fluoroscopy This is sometimes called 'screening'. After passing through your body, the X-ray beam is viewed by a special camera which produces a moving picture on a TV screen. The radiologist or radiographer performing the examination can take snapshots of any important findings, or record the whole thing on video. Fluoroscopy is often used to look at the gut. For example, in a 'barium meal' you will be asked to swallow a drink of barium, which is shown up well by X-rays, to give moving pictures of your stomach and intestine. Fluoroscopic examinations usually involve higher radiation doses than simple radiography.	

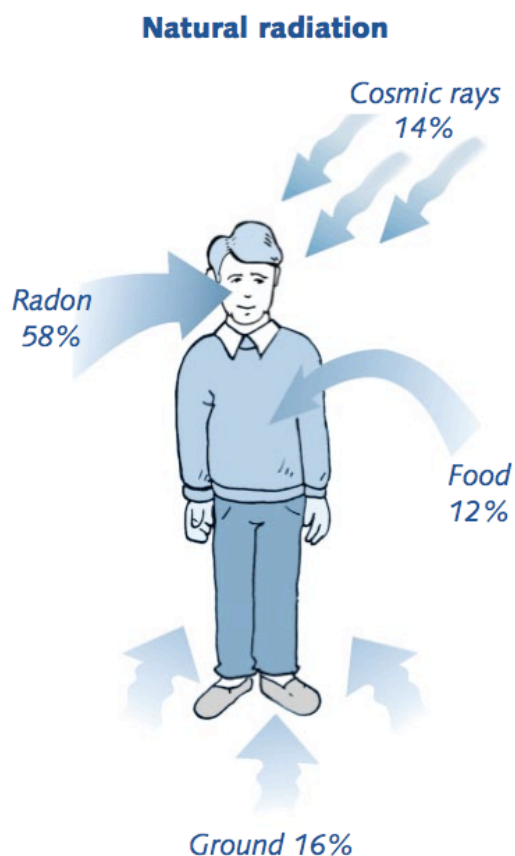|	
Computed Tomography (CT) scans This is a more sophisticated way of using X-rays. You lie on a narrow table which passes through a circular hole in the middle of the machine. A fan-shaped beam of X-rays passes through a slice of your body on to a bank of detectors. The X-ray source and the detectors rotate around inside the machine. An image of the slice is formed by a computer and displayed on a TV screen. You are moved slowly through the hole to take pictures of different slices of your body and sometimes to produce 3D pictures. If many slices are imaged, the radiation dose can be as high or higher than that for fluoroscopy.	
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X-ray doses in perspective

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You will be glad to know that the radiation doses used for X-ray examinations or isotope scans are many thousands of times too low to produce immediate harmful effects, such as skin burns or radiation sickness. The only effect on the patient that is known to be possible at these low doses is a very slight increase in the chance of cancer occurring many years or even decades after the exposure.

Natural radiation

Cosmic rays 14%

Radon 58%

Food 12%

Ground 16%

Don't forget the benefits

All the methods of medical imaging can bring very real benefits to patients. The overriding concern of doctors and the hospital radiology department is to ensure that when radiation is used, the benefits from making the right diagnosis, and consequently giving you the right treatment, outweigh any small risk involved.

For more information on this topic a more detailed version of the information in this video is available as a leaflet and is available to download at the end of this survey.