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What makes you tick: an investigation of the pleasure needs of different population segments

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Abstract

The RealPeople project at Loughborough University is an Arts and Humanities Research Council (AHRC) funded research programme. The main aim of the project was to address the growing need for resources/tools that support designers in understanding the emotional needs of different population demographics. The designer needs for a resource/ tool of this nature were identified through a series of interviews with practising designers; the main findings were that designers are aware of the necessity to satisfy the emotional needs of the user, but there has to be a compromise with other factors e.g. production costs. They tend to rely upon 'quick and dirty' research methods, with few aware of techniques and data that relate specifically to user pleasure. Additionally, they expressed great interest in a 'pleasure resource' that would give them access to information about specific market groups' emotional needs. Several of them suggested a greater focus on user 'lifestyle' information to promote empathy with users. The information collected resulted in the development of an interactive database that allows designers to browse intimate subjective data about specific individuals, their lifestyles and the products that they love and statistically analysed data concerning general population trends. This allows them to gain a better understanding of the emotional and aspirational needs of different market groups, giving them a greater sense of empathy with consumers for whom they are designing. The resource has received very positive reviews from the practising designers that have evaluated its content and interaction style.

Keywords: pleasure, design resource, empathy, designer needs

1. Introduction

In recent years there has been a transformation in the global market place (of developed countries) that can be termed as a shift towards an 'experience economy' (Pine and Gilmore, 1999). Company success has become increasingly dependent upon meeting the improved quality expectations of the consumer. Young, Van der Veen, Illman, and Rowley (2000) propose that in the domain of product design and manufacture, this shift in consumer needs has seen the contextual issues of products (their social/ideological context) become increasingly more important than the physical ones e.g. styling. They also argue that the physical issues have evolved to include a more emotional relevance, e.g. the semantic cues that particular physical properties may imply. As Westcott, Rutchik, and Crosby (1999) state:

'In exchange for their loyalty, customers are demanding more than good service and product satisfaction; they are seeking experiences that are educational, entertaining and motivational.'

To satisfy these evolving consumer needs, the consideration of emotional satisfaction has to be integrated into the design process. Young et al (2000) highlight three key drivers that are accelerating the necessity for this change:

- Societal change; consumers are more knowledgeable and demanding and this places a greater pressure upon retailers and manufacturers. The designer is well placed to balance the consumer demand and the manufacturing budget.
- Technology driven by human pull; consumer preference, human factors, and satisfaction will reshape the product creation process, and override the current efficiency driven system.
- Emotional bonds; it is the contextual meaning of a product that creates a higher level of interaction and strategies have to change to meet this future demand.

There is strong evidence to suggest that consumers now seek products that engage on an emotional level, products that induce delight and pleasure, rather than products that are simply usable, or merely fulfil a role

(Jordan and Servaes, 1995; Jordan, 2000; Hummels, 1999). As Hartmut Esslinger, the founder of Frog Design concludes (in Demirbilek and Sener, 2001):

‘... no matter how elegant and functional a design, it will not win a place in our lives unless it can appeal at a deeper level, to our emotions.’

Jordan has adapted Maslow’s hierarchy of human needs (1970) to form a ‘hierarchy of consumer needs’ (1997) that visually demonstrates this paradigm shift. As with Maslow’s model, the hierarchy follows the principle that once one level of needs have been met, then the consumer will seek the next, higher, level. Furthermore, the top level of the hierarchy can only be attained for a short time as other needs surface that require satisfying.

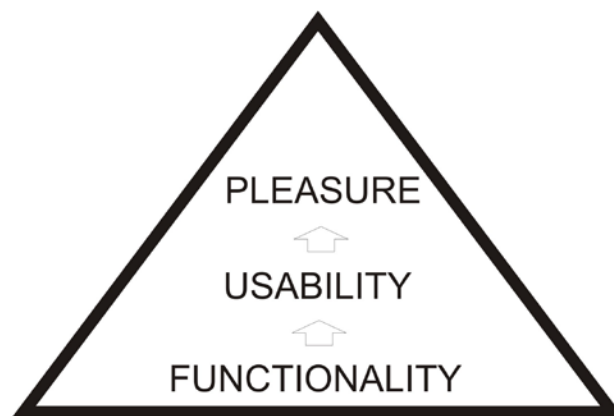


Figure X.1; Jordan’s hierarchy of consumer needs (1997)

In Jordan’s hierarchy (fig X.1) it is proposed that the primary user need is functionality; the product must fulfil the task for which it is intended. Once this has been attained, the user then seeks a product with an appropriate level of usability. Once the product has achieved the desired level of usability, the user will then demand more from the product. This leads them to the top level; pleasure. Jordan’s hierarchy provides a useful starting point from which to view this growing trend in consumer behaviour. However, a hierarchical approach may be too simplistic. The hierarchical structure of the model implies (at least to the layman, particularly those familiar with Maslow’s hierarchy) that one can only proceed further up the hierarchy once

the present level has been fully achieved. This notion is particularly true for those familiar with Maslow's original hierarchy where this concept does hold true. However, it has been shown that consumers can choose products based on pleasure, while compromising functionality and usability (Porter, Chhibber, and Porter, 2002). Despite this, the conclusion that can be drawn from Jordan's model is clear; consumers are now demanding more from the products that they buy than just adequate functionality and usability.

Jordan (1997) developed his model further by taking Tiger's conceptual framework of 'four pleasures' (1992) and adapting it to relate to product design.

Physio-pleasure

These are pleasures derived from the sensory organs such as touch and smell as well as sensual/sexual pleasure e.g. the tactile sensation from using controls or the olfactory sensation from the smell of a new car.

Socio-pleasure

This is concerned with pleasure gained from interaction with others. This may be a 'talking point' product e.g. a special ornament or painting. Alternatively, the product may be the focus of a social gathering e.g. a vending machine or coffee machine. This pleasure can also be a product that represents a social grouping e.g. a particular style of clothing that gives a person a social identity

Psycho-pleasure

This pleasure is closely related to product usability, and is the feeling of satisfaction formed when a task is successfully completed and the extent to which the product makes that task more pleasurable e.g. the interface of an ATM that is quicker and simpler to use.

Ideo-pleasure

This is the most abstract pleasure and refers to the pleasure derived from entities such as books, art and music. In terms of products, it is the values that a product embodies e.g. a product that is made of eco-friendly materials and processes that conveys a sense of environmental responsibility to the user or brand loyalty.

2. Designer needs from a resource

Clearly, the context in which designers are now designing has changed and they need the appropriate tools and resources to support their designing activity. Traditionally, designers have satisfied the emotional and aspirational needs of the consumer through intuitive techniques, with no formal methodologies. However, research has shown that providing designers with data that assists them in their awareness of the emotional needs of a target market is something that is much sought after (Chhibber et al. 2004). To ensure that the information collected is accessible to designers it was necessary to consider carefully the design of the resource itself. The input of ergonomics information into the design process is immensely valuable (Feeney & Bobjer, 2000). However, there has traditionally been a communication 'gap' between the two disciplines. Porter and Porter (1999) suggest that the differences between the two (and other related disciplines) may be due to the consequences of innate ability, education, and the real world practices of the different disciplines. Most human factors methods are quantitative or qualitative, and are essentially analytical tools; the data they provide concern people's capabilities and reactions to design variables, but do not generally lead directly to design solutions, leaving the designer frustrated (Fulton-Suri & Marsh, 2000). The data are often produced in a scientific non-prescriptive form that designers find hard to interpret (Feeney & Bobjer, 2000). This leads to human factors information frequently being left out of the design process (Burns & Vicente, 2000) or being used in an inappropriate way (Burns & Vicente, 2004).

Porter and Porter (1999) highlight three factors that contribute to the communication 'gap'.

- Communication of ergonomics information at an inappropriate point in the design process.
- Communication difficulties between ergonomists and designers/engineering designers caused mainly by educational and practice differences.
- Communication of ergonomics information and data in an inappropriate fashion by ergonomists.

Clearly the format of ergonomics information and its point of input into the design process are critical.

Whilst methods do exist that enable the classification and evaluation of user 'pleasure'

(www.designandemotion.org/society/knowledge_base/tools_methods.html), but little is known about what methods designers are aware of or are currently using. There was also a need to understand what types of information designers would like in a 'pleasure' resource and crucially, how they would like to access it.

Fourteen practising designers were interviewed concerning their practises and views on a 'resource' for designers (Chhibber et al, 2004) and the following conclusions were drawn.

User pleasure is of growing importance to designers but they are unaware of any tools/methods/resources that are available to them. They tend to incorporate only physio-pleasure and are less aware of other ways that they are able to bring pleasure to the user. The pleasure resource must be representative of all pleasure types and raise awareness in the designer population.

Designers are increasingly employing user centred design research methods to develop a more holistic view of the user, but methods are often 'quick and dirty' with an intuitive evaluation of data. Time is an issue for designers who are often working to very tight time constraints so tools must be quick and easy to use.

Designers would find a pleasure resource very useful but there were concerns of it being misused e.g. focusing on particular users. The resource must be designed in such a way that accessing all users is encouraged/facilitated.

The information in the resource must immerse the designer in peoples' lifestyles in a highly visual and engaging way. As much lifestyle information as practical would be appreciated. Designers also require very flexible and intuitive access to information in such a resource. They also emphasised the need for visual presentation as a means of communicating ideas in the design process.

Whilst it is crucial to satisfy designers needs, it is also important to develop mechanisms in the resource that promote inclusive design decisions, and reinforce the principle that the resource is a reference database aimed at inspiring and guiding design direction and research. It is not a replacement for user centred design and research, but a resource that can be used identify the key pleasure issues of their target demographic, earlier in the design process.

These findings were used, in conjunction with the results of a focus group (six design students and academics) to understand more about designers’ preferences in web-design to inform the development of a design resource, to guide the development of the resource in terms of its functionality, the manner in which it would operate and the type of content. A performance specification was developed (see Table X.1).

Component	Specification	Additional comment/question
Data content	The resource must contain a set of statistically valid data that shows general trends for a population.	<i>Must consider sample size required, scale of data collection i.e. where is it sourced and how it is collected. Consider ethical issues and logistics of large data collection.</i>
	- The resource must contain data about specific individuals and the pleasure they gain from products that they own.	<i>Must consider sample size, location of sample and how data will be collected. Consider ethical issues.</i>

	<ul style="list-style-type: none"> - The resource must contain data that immerses the designer in peoples' lifestyles. 	<p><i>Must consider ethical issues and the information designers would find useful.</i></p>
	<ul style="list-style-type: none"> - The resource must capture the aspirational needs of consumers e.g. brands they aspire to. 	<p><i>What questions will help designers understand peoples' aspirations for the future?</i></p>
Data format	<ul style="list-style-type: none"> - The resource must be 'hosted' in a way that does not hinder its functionality or usability 	<p><i>Issues arose concerning running a resource over the internet; stand alone DVD or CD ROM format may be less restrictive. Investigate further during technical development.</i></p>
	<ul style="list-style-type: none"> - The statistical data in the resource must be presented in a way that designers find useful and engaging. 	<p><i>Desire for this to be represented in an original way – suggestions such as icons, graphics and schematics as opposed to bar charts.</i></p>
	<ul style="list-style-type: none"> - The resource must use a limited amount of text. 	<p><i>A visual approach requires a limited use of text. Where text is used, it must be legible. Structuring the information in the resource into 'layers' may be a way of reducing the amount of text that is displayed</i></p>

		<i>at any one time, but maintaining the content level.</i>
	- The resource must present data collected about individuals in a visual manner.	<p><i>Utilisation of video clips and images were clearly sought after by designers in the interviews.</i></p> <p><i>Video clips must be of a high quality and of a reasonable size. They must be edited to be as concise as possible and play in the 'browser' as opposed to an independent media player.</i></p> <p><i>Images must be of a consistently high quality and show the interesting features of products in the resource.</i></p>
Resource interface	- The resource must have an interface that operates in an obvious manner.	<p><i>The interface must be simple and easy to use.</i></p> <p><i>The interface should where possible use conventional icons/symbols.</i></p>
	- The resource must be quick to use.	<i>Assess technical constraints that may limit speed.</i>

Interface layout must be consistent and logical.

The resource must provide the designer with a sense of location as to where they are in the resource at any one time.

Speed of navigation may be improved by the use of keyboard shortcuts and controls such as 'forwards' 'backwards' and 'home' as found on most internet browsers.

The information must be structured into 'layers' to make navigation easier and the mass of data less daunting.

Consider variable navigation styles to suit the way that the designer works, investigate whether this may compromise usability.

	<p>- The resource must be flexible in the way that designers can access information.</p>	<p><i>There was a clear desire to filter information by the characteristics of different market groups e.g. gender, as well as the ability to search for different product types.</i></p> <p><i>Searching and filtering data should be done through the use of icons and graphics wherever possible.</i></p>
	<p>- The resource must be 'pleasurable' for designers to use.</p>	<p><i>Consideration of aesthetic appeal, use of icons and the use of standard navigation features.</i></p> <p><i>Speed and ease of use are of paramount importance to the appeal of the resource.</i></p> <p><i>Consider the inclusion of 'wow' factors in a subtle way.</i></p> <p><i>Consider the balance between interactive features and sticking to more conventional methods of control e.g. method of saving search information.</i></p>

		<i>Avoid the use of ‘pop-up’ displays, use scrolling where there is too much information for a standard screen size.</i>
	- The resource should encourage inclusive design.	<i>Any interface mechanism that encourages inclusive design should be considered.</i>
Additional features	- The resource must provide a way of saving search results and reviewing data that has been collected.	<i>Assessment of technical needs that would enable this functionality. Interface for such a feature must be quick and simple to use. Consider ways of annotating or manipulating saved data e.g. portfolio toolbox.</i>

Table X.1: Resource performance specification.

3. Tools/resources to support designers

Methods have been developed that allow designers to formally address the pleasurable aspects of products in the design process e.g. Kansei engineering (Nagamachi, 1995); a method for translating feelings and impressions into product parameters. It facilitates the ‘measuring’ of feelings and reveals the relationship with certain product properties. Consequently, products can be designed to provoke a specified emotion. However these methods are statistically cumbersome, and implemented late in the design process, often after critical design decisions have already been made. More recently, methods have been developed that can be

used at an earlier stage in the design process e.g. User Compass Chart (Sperling, 2005), which involves users selecting materials/colours that match desired attributes of a product. Such methods, however, can be quite time consuming and there is the risk that less technical designers may be reluctant to use them without appropriate support (Porter and Porter, 1999).

The RealPeople project differs in several ways. The majority of designing for emotion resources tools available to the designer are product focused, assessing variations in product design and the resulting human reaction. The RealPeople resource has been developed from a human-centred perspective, looking at the products that specific people find pleasurable and also general trends across a population in terms of attitudes towards product relationship, and at specific people and their lifestyles. The resource was developed with designers' needs in mind (Chhibber et al. 2004), and is suitable for use at the beginning of the design process, to guide and focus the design direction.

4. Collecting RealPeople Data

There was clear evidence from the interviews that two different sets of data were required to satisfy the needs of designers; more intimate data about people, their lifestyles, and the products that they find pleasurable and data that shows general trends across a wider population. These data were collected in two research strands that ran concurrently during the project. Both sets of data used a quota sampling method to ensure an even spread across gender and age

4.1 Intimate data

The first activity involved the collection of richer, more intimate data from 100 people. Each participant took part in an in-depth interview in which they discussed their three most pleasurable products. Each interview took place in the participant's home or a personalised work space; showing their chosen products in, as far as

practicably possible, their natural environment. It also allowed the interview session to be conducted in as a relaxed and informal manner as possible, to facilitate the collection of such intimate data.

As well as an in-depth interview where they discuss each of their three most pleasurable products, participants completed a number of other questionnaires; the first concerned their attitudes towards product pleasure. The questionnaire was developed through several pilot studies and its content was strongly influenced by the views of practicing designers (Chhibber et al. 2004). It was subdivided into several sections, and was filled in, in part by the interviewer, and in part by the participant; allowing the process to feel more informal and relaxed; it was an attitude questionnaire where they were asked to select from a number of statements the ones which best described their feelings towards a particular aspect of product functionality, usability and each of the four pleasures; the statements are summarised in table 2., below

Product characteristic	Attitude statement
Functionality	<p>I like products that (select one from four)...</p> <ul style="list-style-type: none"> - have exactly the functionality I know I will use - have exactly the functionality I know I will use, plus some other functions that I am interested to explore and evaluate whether they will be useful - have more functionality than I will probably use - have the maximum available functionality, despite the fact that I will not use many of these functions
Usability	I like products that (select one from four)...

	<ul style="list-style-type: none"> - are simple and easy to use first time - are challenging to learn, but once learned they are easy to use - that are challenging to use even after I have owned them for a while e.g. a computer game with increasingly more challenging levels - have 'secrets' and hidden features that I have to discover over time, whilst learning to use the product
Physio-pleasure	<p>I like products that (select as many as you like)...</p> <ul style="list-style-type: none"> - the colour(s) of a product are important to me - touch and feel of a product when I interact with it are important to me - the 'right' sound of a product in use is important to me e.g. the clunk of a car door - the way materials are used in a product is important to me - the shape and form of a product is important to me
Socio-pleasure	<p>I like products that (select as many as you like)...</p> <ul style="list-style-type: none"> - demonstrate I have a discerning taste to other people - demonstrate to other people that I am successful - tell other people something about me e.g. sports watch, ethnic

	<p>clothing</p> <ul style="list-style-type: none"> - are a talking point amongst my friends and/or my family. - are a talking point amongst any group of people - allow me to socialise - that fit into any social context e.g. a wristwatch that can suit a formal or casual situation - that are understated
Psycho-pleasure	<p>I like products that (select as many as you like)...</p> <ul style="list-style-type: none"> - express an aspect of my personality - allow me to complete tasks easily - operate in a meaningful way to me e.g. desktop metaphor on a computer - have some level of personal significance to me e.g. a gift from a loved one
Ideo-pleasure	<p>I like products that (select as many as you like)...</p> <ul style="list-style-type: none"> - represent an ideology that I believe in e.g. eco-friendly, fair trade, materialism - where the overall aesthetics (the combination of form, textures, colour, etc. that create the aesthetic) of a product are important to me

	<ul style="list-style-type: none"> - from a particular brand - by a particular designer
--	---

Table 2: Standardised interview questions.

Additionally, a number of other areas were explored; these are described below:

Lifestyle; a series of open-ended questions regarding different aspects of a person’s life e.g. leisure activities, favourite music and career aspirations. The aim of including this information was to facilitate the designer in immersing the designer in each individual’s lifestyle.

Brand choice; participants list several brands that they like, aspire to, or feel reflect their personality. These data are included to satisfy the need, specified by designers, to understand the aspirations of different individuals.

Style choice; participants were presented with images showing a sample of products from four product categories: mobile phones, chairs, fonts, and wristwatches. Each category had five examples selected through a focus group with designers, to represent the style possibilities in that category i.e. 5 mobile phones that were chosen because they reflected the full breadth of the mobile phone market at that time. The participants selected which one of the five samples in each category they liked the most, and briefly explained why; this should enhance the designer’s understanding of particular users and their aesthetic preferences.

Personality assessment; each participant completed a short personality assessment. The test is based on the Big Five personality locator (Glietman et al. 2000).

4.2 General trend data

The data collection of general trend data; a street survey was conducted in 11 UK locations, including the north and the south of England. A total of 582 people were interviewed and filled in the Pleasure attitude questionnaire filled in by the 100 'intimate' data participants, described in the section above.

5. Analysis and results of RealPeople data collection

Each interview was then edited into three, 2-3 minute film clip (one for each product) that encapsulates the most pertinent reasons why each product brings pleasure to the individual. These reasons are also summarised in short text bullet points with the 'four pleasures' used as a framework

5.1 The RealPeople DVD resource

The 'intimate' data is what forms the core of the RealPeople 'resource'. It is a stand alone DVD based resource (both Mac and PC compatible) with an interactive graphic 'front end' developed in Macromedia Director MX and the collected data being stored in a database accessed via the scripting language 'lingo'. The 'look' and 'feel' of the resource have been developed through an iterative design process using team members, other colleagues and designers for evaluation.

The principal page of interaction is the 'search page' (see Figure 2). The designer is able to search the database in a flexible and intuitive way. Selecting different icons allows the designer to filter the individuals in the database by criterion such as age, gender, or income; conversely, they can filter the data by specifying different product types. For example, selecting 'mobile phones' filters out everyone except those who chose their mobile phone as one of their most pleasurable products. As the designer defines the search parameters, the array of 100 individuals (grid at bottom of Figure X.2) updates in 'real time' and fades out those individuals that have been eliminated. This highly visual feedback during the search process gives the

designer a greater sense of which individuals they may be ‘designing out’ during each search. The images of those that remain form the link that directs the designer to that individual’s data set.

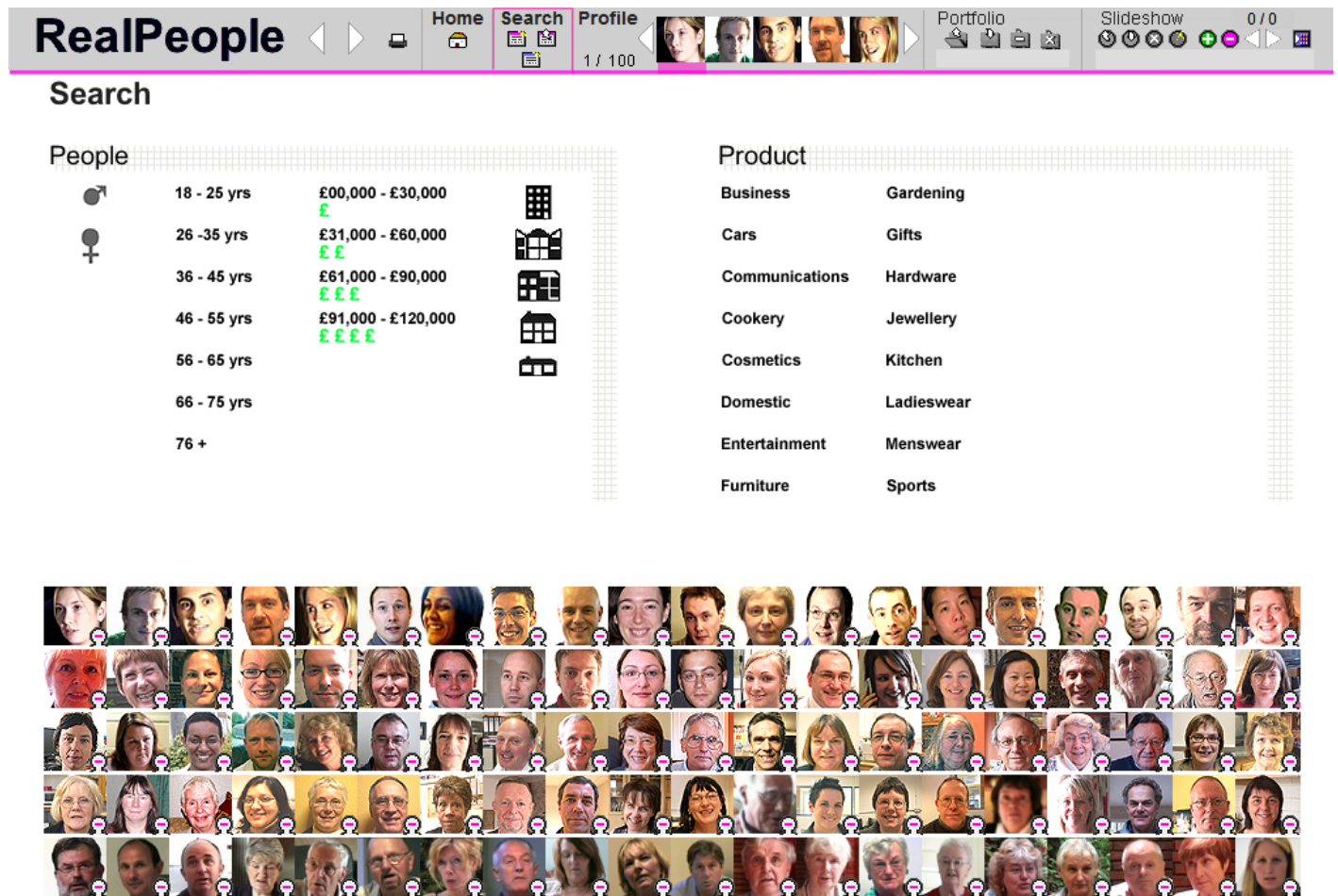


Figure X.2: search page showing selection categories and photographs of 100 individuals in the database.

Figures X.3-7 illustrate the different subsets of information available for each of the participants. Each person has in essence, their own individual homepage that remains consistent on the left hand side of the screen (aiding navigation). Access to each different data set for that individual is done through interacting with this homepage, the right window updating to show that data set in full.

As a default, each individual’s page appears with the three product video clips on display in the right window (as these are part of the search criterion). Each video clip is highly immersive, thought provoking, and is

selected to encourage empathy between the designer and each individual in the database. In addition to this, a table of bullet points of the most pertinent reasons why the product brings them pleasure, analysed and presented with respect to the four pleasure framework, is provided as a quick reference for the designer.

RealPeople Home Search Profile 6 / 8 Portfolio Slideshow 0 / 0

Charlie

Notes [click to add notes]

About Me 26 -35 yrs ££

Product Choice

Style Choice ABC DEF ghi jkl

Brand Choice H&M Audi Nando's

Personality
Curious, liberal, impractical, likes novelty. Moderately spontaneous, fun-loving, experimental, and unorganised. Moderately assertive, sociable, warm, and optimistic. Moderately trusting, humble, altruistic, and a team player. Moderately secure, unflappable, unresponsive, and guilt-free.

Product Choice

iPod Mini
More

Pimon Handbag
More

New Look Shoes
More

Figure X.3: individual 'home' page and product videos

RealPeople Home Search Profile Portfolio Slideshow 0/0

Charlie 6 / 8

Charlie

Notes [click to add notes]

About Me 26 -35 yrs ££

Product Choice

Style Choice ABC DEF ghi jkl

Brand Choice H&M Audi Nando's

Personality
Curious, liberal, impractical, likes novelty. Moderately spontaneous, fun-loving, experimental, and unorganised. Moderately assertive, sociable, warm, and optimistic. Moderately trusting, humble, altruistic, and a team player. Moderately secure, unflappable, unresponsive, and guilt-free.

Product Choice

Pimon Handbag
Gift - Yes
Price bought - £20 - £30
Price now - £NK
Owned - 8 months
Uses - every day

Physio-pleasure - She loves the unusual colour and the feel of calf leather - so soft and nice to touch.
Socio-pleasure - Friends grab it and say it is soft. It was a gift from her friend - and it reminds her of her.
Psycho-pleasure - 'Mary Poppins bag which has millions of things in' - contains an immense amount of stuff. Pockets inside to help organisation. Originally gained pleasure from the aesthetics of the product, but has since appreciated the practicality of

Figure X.4: individual 'home' page and more product information

RealPeople Home Search Profile Portfolio Slideshow 0/0

Charlie 6 / 8

Charlie

Notes [click to add notes]

About Me 26 -35 yrs ££

Product Choice

Style Choice ABC DEF ghi jkl

Brand Choice H&M Audi Nando's

Personality
Curious, liberal, impractical, likes novelty. Moderately spontaneous, fun-loving, experimental, and unorganised. Moderately assertive, sociable, warm, and optimistic. Moderately trusting, humble, altruistic, and a team player. Moderately secure, unflappable, unresponsive, and guilt-free.

About Me "I am from the NorthWest UK"

We are from the North West - Cumbria and I have one sister. I am a research assistant - researching drinking practices.

I am not that interested in sport. I do go to the gym occasionally. I like watching football.

I tend to go out for meals or drinks with my partner or friends.

I read a massive amount. I like classic and contemporary fiction, historical and biographies. Catch 22 is my favourite book.

I like films to be what they are - action lots of action - thrillers and 'clever' films.

I like Mediterranean food and Nigerian because of my partner. I drink water and herbal tea. I like wine and spirits with a mixer.

I have been to South Africa, North America and most of Western Europe. South Africa was amazing - I went backpacking - great food etc.

I have an eclectic taste from Nina Simone to Kaiser Chiefs. I like rock and R'n'B.

I watch TV because it is there. I like Channel 4 eg. Shameless, Desperate Housewives.

Figure X.5: individual 'home' page and lifestyle information

RealPeople Home Search Profile 6 / 8 Charlie Style Choice Portfolio Slideshow 0 / 0

Charlie Notes [click to add notes]

About Me ♀ 26 -35 yrs ££

Product Choice

Style Choice ABC DEF ghi jkl

Brand Choice

Personality
Curious, liberal, impractical, likes novelty. Moderately spontaneous, fun-loving, experimental, and unorganised. Moderately assertive, sociable, warm, and optimistic. Moderately trusting, humble, altruistic, and a team player. Moderately secure, unflappable, unresponsive, and guilt-free.

Style Choice Data:

- Don't like the others.
- Looks like it has useful features -eg. diary, mp3 player, camera.
- Don't like others.

Brand Choice Data:

- ABC DEF ghi jkl
- ABC DEF ghi jkl
- Simple and clear.

Figure X.6: 'home' page and style choice data

RealPeople Home Search Profile 6 / 8 Charlie Brand Choice Portfolio Slideshow 0 / 0

Charlie Notes [click to add notes]

About Me ♀ 26 -35 yrs ££

Product Choice

Style Choice ABC DEF ghi jkl

Brand Choice

Personality
Curious, liberal, impractical, likes novelty. Moderately spontaneous, fun-loving, experimental, and unorganised. Moderately assertive, sociable, warm, and optimistic. Moderately trusting, humble, altruistic, and a team player. Moderately secure, unflappable, unresponsive, and guilt-free.

Brand Choice Data:

- Cheap but fashionable
- Kind of rich, but not as ostentatious as Mercedes or BMW.
- Reminds me of time with friends and food is good.

Figure X.7: 'home' page and brand choice data

5.2 Population wide trends

The χ^2 was used as a test of fit; showing a number of significant trends across the entire sample population. The data provided by the 100 'intimate' data participants were combined with the data from the 582 respondents to the trend data survey; they were entered into the statistics package SPSS and analysed to identify any trends. A non-parametric χ^2 test was employed in two ways; as a test of fit, and as a test of independence, to identify trends across the entire sample population and trends across gender and age. A number of trends were identified at $p < 0.05$ but only those that reached a significance of $p < 0.01$ are presented. A more complete discussion of the trends can be found in Chhibber (2007).

5.2.1 Consumer attitudes towards product functionality

Functionality attitude	χ^2 across whole sample	χ^2 across gender	χ^2 across age
Preference for one of four levels of functionality	306.75**	5.45	63.83**

Table X.3: Chi-square results for functionality (* indicates significance of $p < 0.05$, ** indicates significance of $p < 0.01$).

A number of significant trends are shown in Table X.3. Participants were required to choose from four statements concerning functionality (see Table X.2). The sample showed a significant preference towards products that have either the exact functionality required (39%), or slightly higher levels of functionality that can be explored (44%). There was a low appreciation of products with more functionality than will be used (9%), or maximum functionality (8%). The literature indicates that functionality is now seen as a prerequisite for products; Jordan's (1997) adaptation of Maslow's hierarchy of needs shows functionality as

the base level of consumer satisfaction. However, the pleasure capacity of functionality should not be underestimated and as the results show, the level of functionality that brings pleasure must not be misjudged. The work of Burns and Evans (2000) focuses on automotive interiors and proves an interesting case in point; they found that interior functions fell into three categories: expected features, wanted features and unexpected features. In essence, customer delight was found to be at its highest when features (regardless of how much the customer wanted them) were 'executed' to a high level. It is interesting to note that 'expected' functionality when well executed, was a source of pleasure to the consumers in their study, indicating that apparently basic functionality can also bring pleasure to consumers.

Increasingly older age groups preferring products that display exact functionality (36-45 yrs, 48.3%; 46-55 yrs, 48.1%; and 56+ yrs, 53%). This finding is mirrored by a higher proportion of younger age groups preferring products, with more functionality, which they are able to explore (18-25 yrs, 57.3%; 26-35 yrs, 51.1%). This is probably explained by the fact that younger age groups tend to expect more from the products they buy and are essentially more comfortable with technology and exploring the functionality of products. The opposite is true for older users, who appear to seek products that are fit to the task and do not have additional functionality. This may indicate that in order to design more 'pleasurable' and acceptable technology for the elder user, a better understanding of their attitudes and understanding of technology is needed

Whilst the survey results indicate lower levels of technology acceptance with an increase in consumer age, it is important to note that the stereotype of the techno-phobic older consumer may be in decline. Quigley and Tweed (2000) cite a survey performed by computer manufacturer Packard Bell in the 1990's as evidence of older generations becoming more comfortable with technology. Between the 1995 and 1998, the percentage of elderly users of home PCs in the US rose from 29% to 40%. Older users may be becoming more comfortable with new technology; Quigley and Tweed (2000) also propose that a person's level of education,

favourability to new technology and income, affected their acceptance of PCs. It is also fair to predict that as current ‘technology aware’ younger generations age they will carry with them their more open attitudes towards technology and its uses; potentially leading to a shift in time towards an appreciation of more functionality in products across all age ranges.

5.2.2 Consumer attitudes towards product usability

Usability attitude	χ^2 across whole sample	χ^2 across gender	χ^2 across age
Preference for one of four levels of usability	512.19**	7.61	56.21**

Table X.4. Chi-square results for usability (**indicates significance of $p < 0.01$).

Participants were required to choose from four statements concerning usability (see Table X.2). Table X.4 shows a number of significant trends. Further examination of the data showed that there was a preference across the sample population for products that are simple and easy to use (60%). 27% of the sample population preferred products that are initially challenging to use but then easy, with the remaining 13% of the sample split across the remaining two categories. It is natural to assume that people want products to be simple and easy to use. Jordan (2000) proposes that adequate usability is now inherent in consumer products and that it is no longer a consumer satisfier, i.e. usability is a pre-requisite and if it is poor the consumer is dissatisfied. It is thus possible to conclude that the majority of the sample population will prefer products that are simple and easy to use, as it has become a central tenet to that which consumers perceive as good design

There is an age effect concerning consumer attitudes towards usability. The results for the entire sample indicated that 60% of the participants preferred products that are simple and easy to use; a high proportion of these are from the older age groups e.g. 78% of the 56+ age group, compared to a much lower percentage in

the younger age groups e.g. 41.3% of the 18-25 year old age group, 51.9% of the 26-35 year old age group. 27% of the entire sample preferred products that were initially challenging to use, but after some ownership were easy to use. A relatively higher proportion of that 27% are from the younger age groups e.g. 18-25 yrs, 33.5%, 26-35 yrs, 34.5%, indicating that younger age groups were more willing to use products that require a level of learning or are a challenge to use. The percentage of the 56+ yrs age range seeking a similar level of usability was markedly less; 18.9%. This adds weight to the premise that younger age ranges tend to be more comfortable with technology and with learning how to use it.

The desire from older age groups to have usable and simple products is highlighted by the low percentage selecting either one of the final categories of usability; only 6.1% of 46-55 year olds and 2.3% of 56+ year olds wanted products that were always a challenge to use. This pattern is repeated for the final category of products with hidden features that need to be discovered over time; 5.3% of 46-55 year olds and 0.8% of 56+ year olds selecting this level of usability. Usability testing of products has often showed marked differences in performance and user age (Freudenthal and Mook, 2003) and it is evident from the results gained here that there is a link between the two. Freudenthal and Mook (2003) account for the disparity in usability results between generations, by the technology that they encounter in their ‘formative years’; noting that older users are less familiar with iconic displays and the use of metaphor in interaction with products when compared to younger users. As these results also draw parallels with the findings reported for consumer attitudes towards product functionality. As current generations age, it is logical to propose that the more technologically able younger generations will carry this greater desire for challenging and engaging products into their older age.

5.2.3 Consumer attitudes towards Physio-pleasure

Q	Statement	χ^2 across whole	χ^2 across	χ^2 across age
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		sample	gender	
A	The colour(s) of a product is important to me	36.60**	26.03**	123.20**
B	The touch and feel of a product when I interact with it are important to me	47.51**	0.69	9.58*
C	The 'right' sound of a product in use is important to me e.g. the clunk of a car door	26.33**	10.40 **	4.21
D	The way materials are used in a product is important to me	0.29	0.81	10.28*
E	The shape and form of a product is important to me	90.18**	2.17	7.55

Table X.5, Chi-square results for Physio-pleasure. (* indicates significance of $p < 0.05$, ** indicates significance of $p < 0.01$)

Table X.5 shows a number of significant trends. The colour of a product is significantly important to the sample, with 61.6% stating that they valued this product characteristic, There is no doubt that colour is an important component of the emotional appeal of products, as Baker (2004) states:

‘... colour is a fast track to emotion: a hotline to instinct. It is powerful, evocative and mood changing...’

Baker suggests that the field of product semantics includes aspects such as texture, scale, form and line, but it is often colour that makes the first, most memorable and lasting impact upon the consumer. Much work has been done on defining colour and related emotional responses, especially in the field of psychology (Sato, Kajiwara, et al., 2000). However, there are problems with the current state of research in this area; the vast majority of work has focused on emotional responses to single colours; something that we rarely encounter in day to day life and something that a designer is rarely going to use; much less work has been conducted into emotional responses to colour combinations (Ou and Luo, 2004). More often, designers utilise combinations of colours, whose relationship will evoke emotional reactions.

63.2% of the sample population valued the tactile characteristics of products, significant to $p < 0.01$. There has been some research into emotional reactions to differing materials and textures and the findings that the emotional response to the texture of a shampoo bottle may elicit another response when placed on a coffee jar (Sedgwick, Henson, et al., 2003). The development of techniques such as Skin 2.0 (Saakes and Keller, 2005) do provide the designer with a means of beginning to present and understand tactile properties within the context of the form and styling of the product. Such methods and techniques are clearly beneficial to designers, as the findings reported here clearly indicate that an appealing ‘touch and feel’ to a product is something that consumers often find pleasurable.

The auditory qualities of a product were valued by 40.18% of the sample population, significant to $p < 0.01$; this would appear to indicate that the 'right' sound of a product in use is not as important to the sample population as other physio-pleasure qualities. The question used in the standardised interview provided the example of the sound of a car door when closing; the characteristics of this sound have implications upon the consumer's perception of the car, perhaps its build quality or the sense of safety that it gives. In contrast to this, there may be situations where a well designed product needs to emit very little sound at all, for example, a person may find pleasure in the quietness of a computer printer. In this instance the 'right' sound that the question refers to no sound at all; however, it is also plausible that it may be reassuring to the consumer that a printer does emit some sound, so they know their printing is occurring.

The shape and form of a product was also important to 68.2% of the sample population, which was significant to $p < 0.01$. It was also the most valued of all of the physio-pleasure characteristics.

The form of a product may contribute to its success in several ways; to differentiate the product in a cluttered market place, to communicate product attributes to the consumer and to develop corporate and brand identities (Bloch, 1995).

Each of the physio-pleasure attributes has been evaluated individually in order to highlight trends specific to that characteristic. However, it is important to remember that the physical properties of a product interact with each other; we perceive products as complete entities, rather than as a group of individual characteristics. Research by McLoone (2003) highlights the inter-relationships that exist between the physical characteristics of products; he highlighted a number the close inter-relationships that the physio-pleasure properties of a product can have.

There were two physio-pleasure characteristics that had a significant gender effect. There was a significant gender effect present (to $p < 0.01$) regarding the importance of colour, with 70.7% of the female sample

valuing this characteristic compared to just 51.7% of the male population. This would appear to show that females place a greater emphasis on the colour of products than males. Research by Hetzel (1999) concurs; he found that females tended to be more sensitive to the subjective aspects of cars, such as colour. It is plausible that this greater sensitivity to colour is applicable to females' preferences in other products.

There was also a significant gender effect (to $p < 0.01$) related to the 'right' sound of a product. Although this characteristic was not valued particularly highly across the entire population (40.2% stated that this was an important feature to them), the data does display a gender effect. 46.5% of the males in the sample population valued this characteristic compared to just 34.4% of the females. It is possible that the close association between sound and perceived performance may be more important to males, as they are often value products from a goal and performance orientated perspective (Csikszentmihalyi and Rochberg-Halton, 1981).

There is an age effect in relation to pleasure gained from product colour, significant to $p < 0.01$; younger age groups valued the colour of products to a greater extent than older age groups, e.g. 74.8 % of 18-25 year olds compared to just 47.7% of the 56+ category. It may be the case that this age trend is related to the markets within which each of the different generations has developed. It is only in recent times that products have begun to be produced in such a vast array of colours and it is perhaps only recently, that colour has become a major differentiator to the consumer; hence older generations may place less emphasis on it than the younger generations, as they grew up in a market where colour choice was more restricted.

There is also an age effect regarding pleasure gained from the touch and feel of a product, which was significant to $p < 0.05$; with younger age groups valuing the tactile sensations of product use more than the older age groups e.g. 73.7% of 26-35 year olds compared to 56.1% of 56+ year olds. This trend may also be related to the generational issue outlined for the previous trend. Again this is likely to be because the older

generations formed the purchasing ideas at a time when finish and materials choice was more restricted. As the younger generations grow older things are likely to be different.

5.2.4 Consumer attitudes towards socio-pleasure

Q	Statement	χ^2 across whole sample	χ^2 across gender	χ^2 across age
A	I like products that demonstrate I have a discerning taste to other people	80.29 **	9.21**	12.95*
B	I like products that demonstrate to other people that I am successful	291.67 **	0.48	13.52**
C	I like products that tell other people something about me e.g. sports watch, ethnic clothing	190.03 **	1.51	36.99**
D	I like products that are a talking point amongst my friends and/or family	81.67**	2.12	32.08 **

E	I like products that are a talking point amongst any group of people	236.96 **	0.86	30.12**
F	I like products that allow me to socialise e.g. picnic hamper	27.12**	9.69 **	21.40**
G	I like products that can fit into any social context e.g. a wristwatch that can suit a formal or casual situation	47.51 **	6.19*	9.97
H	I like products that are understated	13.51**	1.34	13.95 **

Table X.6: Chi-square results for Socio-pleasure. (* indicates significance of $p < 0.05$, ** indicates significance of $p < 0.01$)

It is clear from Table X.6 that all of the socio-pleasure characteristics showed a significant trend when viewed across the entire sample population; there were a number of statistically valid trends (to $p < 0.01$) that indicate several socio-pleasure attributes are not of great value to the sample population as a whole. In particular, statements, B (I like products that demonstrate that I am successful) and E (I like products that are a talking point amongst any group of people), received a very low rating; B, 17% and E, 21%. There was also a low appreciation of products that demonstrate a discerning taste to other people (33%), are a talking point amongst friends and family (33%) and that tell people something about the owner (24%).

However, each of these statements perhaps needs reflection; are these characteristics that participants would be readily willing to admit about themselves to an interviewer? These five socio-pleasure characteristics all relate to products that may be a status symbol of sorts, or attract attention to the owner. It may be possible that the low positive response rate to these questions is due to 'social desirability bias'. In certain situations, a participant may be tempted to give the socially desirable response rather than describe what they actually think, believe or do. Typically, this has been associated with the person's general strength of need for approval and the demands of the situation they are in (Phillips and Clancy, 1972). The question has to be raised as to whether a participant would have been comfortable admitting that they liked products that demonstrated success, discerning taste or drew attention from others.

57% of the sample liked products that were understated; both of these trends were significant to $p < 0.01$. The positive response to statement H is the corollary of statements A to F, as these concern products that are designed or purchased to attract attention. Furthermore, it is possible that products that fit any social context (statement I) have similar attributes to those that are understated, as they are neutral enough to fit a number of different contexts.

It is evident that males (38.5%) showed a greater preference for products that demonstrate a discerning taste, than females did (27.6%). Across the whole sample this product characteristic did not provide a great deal of pleasure (33% of sample population responded positively), but gender did have a significant effect ($p < 0.01$).

A substantially greater percentage of females (47%) found pleasure from products that facilitate social interaction, in contrast to males (33.9%); this was significant to $p < 0.01$. It is apparent that female consumers place a greater emphasis on the social aspects of products and the way in which they can develop or maintain relationships.

The final significant trend showed that females had a greater appreciation for products that can fit into any social context (65.6%) as compared to males (58.9), which was significant to $p < 0.05$. It was suggested earlier that this characteristic was essentially the opposite of a number of the other socio-pleasure characteristics that related to products as status symbols or as a means of attracting attention.

These trends are all supported by the work of Hetzel (1999), of Csikszentmihalyi and Rochberg-Halton (1981) and Dittmar (1992) who note that males place a greater emphasis on the appearance and often see products as symbols of personal achievement and representing a goal that they aimed to achieve. Equally, Females favour the values of sharing and friendliness; causing increased feminisation in the automotive industry in terms of styling and design and they tend to treasure possessions that are associated more with inter-personal relationships and representative of their social lives.

There were a number of age trends. The first was significant to $p < 0.05$; the younger age showed a slight preference for products demonstrating a discerning taste to other people over the older age groups in the sample e.g. 34.3% of 18-25 yr olds and 43.6% of 26-35 yr olds, compared to 27.3% of 36-45 yr olds, 34.4% of 46-55 yr olds and only 25% of the 56+ yr olds. They also showed a preference for products that demonstrate success to other people, significant to $p < 0.01$ e.g. 18-25 yr olds, 25.2%; 26-35 yr olds, 20.3%; 36-45 yr olds, 17.5%; 46-55 yr olds, 10.7%; and 56+ yr olds, 12.1%. It is also clear that younger age groups found pleasure from products that tell people something about the owner, e.g. 39.9% of the 18-25 yr olds compared to only 12.9% of the 56+ yr olds; significant to $p < 0.01$.

These trends all illustrate how younger age groups appear to be more image conscious and more aware of how the products that they buy and use, can reflect them as a person and can demonstrate status to others. It also highlights how younger age groups can view products as showing an identity e.g. product shows them as part of a particular social group, whereas older age groups value this attribute less; it also shows clear

evidence of a preference in younger age groups for products that are a talking point amongst the owner's friends and family. Additionally, there was also an age effect regarding pleasure gained from products that are a talking point amongst any group of people; younger age groups found this aspect more appealing than older ones, e.g. 18-25 yr olds, 35.7%; 26-35 yr olds, 21.8%; compared to 46-55 yr olds, 14.5%; 56+yr olds,

All of these age trends relate to the use of products to reflect status to other people and to give the owner a sense of identity, discussed above.

There was also an age effect concerning products that facilitated social interaction, with younger age groups showing a greater affinity for this characteristic than older age groups, e.g. 18-25 yr olds, 51%; 26-35 yr olds, 45.1%; compared to 46-55 yr olds, 40.5%; 56+ yr olds, 25%. Again these results are reflected in the work of Csikszentmihalyi and Rochberg-Halton (1981), Dittmar (1992) and Kamptner's (1991).

There is also shows an age effect concerning pleasure gained from a product being understated, with the middle age groups showing a preference for this characteristic over the old or young age groups e.g. 36-45 year olds, 65.7%; compared to 18-25 year old, 48.3%; 56+ year olds, 49.2%. This may again relate to products being used to reflect personality or identity by younger consumers, understated products may appeal more to older age groups as they already have an established identity (Dittmar, 1992) and do not seek to use products in this way. The reason for a low level of interest in this characteristic for the eldest age group however remains unclear.

5.2.5 Consumer attitudes towards Psycho-pleasure

Q	Statement	χ^2 across whole sample	χ^2 across gender	χ^2 across age

A	I like products that express an aspect of my personality	1.32	8.78**	74.53**
B	I like products that allow me to complete tasks easily	315.68 **	1.99	16.11**
C	I like products that operate in a meaningful way to me e.g. desktop metaphor on a computer	3.97*	3.42	7.01
D	I like products that have some level of personal significance to me e.g. gift from a loved one	140.91**	10.49 **	10.76*

Table X.7: Chi-square results for Psycho-pleasure. (* indicates significance of $p < 0.05$, ** indicates significance of $p < 0.01$)

Table X.7 shows a number of significant trends. It is clear from an examination of the results for statement B (I like products that allow me to complete tasks easily) correspond closely with the results for the level of usability consumers sought; however this psycho-pleasure attribute relates more to the sense of satisfaction from task completion and the ability to achieve this easily. It is evident that there was a marked preference towards products that display this characteristic; 84% of the sample. These results correspond with evidence in the literature that usability and ease of task completion is still a valued commodity by the consumer and can bring pleasure (Jordan, 2000).

There is also a slight trend evident that pleasure gained from products operating in a meaningful way to the consumer; 54% of the sample found this appealing, which is significant to $p < 0.05$. This characteristic relates closely to the ease of use of a product or interface; specifically, the product operating in an intuitive manner that the consumer finds logical and easy to understand. The positive result for this characteristic matches those for usability and for the previous psycho-pleasure characteristic.

The sample population found products with personal significance to them to be appealing; 73% responding positively. There is however some ambiguity concerning how each participant interpreted the idea of 'personal significance'. The question that was used in the survey offered the example of a 'gift from a loved one' and in this context the results would seem logical. Dittmar (1992) provides anecdotal examples of how people view photographs as 'reminders of relationships with family members or friends' and how 'sentimental nicknacks' can be used as good luck charms, as evidence of the manner in which products can have personal significance to the owner

There are two significant gender effects present for the psycho-pleasure characteristics that were assessed. The first concerned pleasure gained from products representing an aspect of the consumer's personality. 53.2% of females liked this product characteristic compared to 41.9% of males. These results are supported

by the work of Hetzel, who found that 33% of females, compared to 24% of males felt that their car expressed their personality.

The second significant gender effect relates to products that have a level of personal significance to the consumer e.g. a gift from a loved one. 78% of females valued this characteristic, compared to only 67% of males. These findings again draw a parallel with Dittmar's (1992) views on females' greater concern with the symbolic and relational aspect of products, as opposed to the male focus upon the functional, activity related and self-orientated aspects. Csikszentmihalyi and Rochberg-Halton (1981) also found that females were more attached to products that symbolised relationships; favoured products amongst women in one of their studies included photos, sculptures and textiles. This is in stark contrast to the more egocentric and goal orientated reasons given for the choice of, televisions, stereos and sports equipment by males.

A number of significant age effects were present. It appears that younger age groups tend to find greater pleasure from products that express their personality than older age groups e.g. 18-25 year olds, 74.8%; 26-35 year olds, 55.6%; 36-45 year olds, 39.2%; 46-55 year olds, 40.5%; 56+ year olds, 27.3%. Again, this is in line with the work of Dittmar (1992) and Kamptner (1989, 1991a) as discussed previously. And it is clear that younger designers need an understanding of the different concerns that the different age demographics have, to facilitate successful design.

4.2.6 Consumer attitudes towards ideo-pleasure

Q	Statement	χ^2 across whole sample	χ^2 across gender	χ^2 across age

A	I like products that represent an ideology that I believe in e.g. eco-friendly, fair trade, materialism	35.68**	11.89 **	9.25
B	The overall aesthetics (the overall look of a product, the combination of form, textures, colour, etc. that combine to form the aesthetic) of a product are important to me	175.54 **	3.46	14.63**
C	I like products by a particular brand	55.19**	2.56	5.91
D	I like products by a particular designer	271.11 **	0.45	25.10**

Table X.8.: Chi-square results for Psycho-pleasure. (* indicates significance of $p < 0.05$, ** indicates significance of $p < 0.01$)

As table X.8 shows, all of the characteristics proved to have a significant trend when viewed across the entire sample population and there were also a number of significant gender and age effects present.

Products that represent an ideology that a consumer believes in was an important factor to the sample population; 61% responding positively. Dittmar (1992) suggests that products have a self-expressive function for the individual and can be used to express 'their attitudes, values and personal qualities'; these

results indicate that this is of value to consumers with 75% responding positively. Bloch (1995) proposes that, 'In modern societies, aesthetic sensibilities (aesthetics being used to mean the combination of all of the factors that form the overall character of the product) are relevant to all products, regardless of their function' and that the use of 'beautifully designed' products brings pleasure and improves the quality of our lives. Bloch's beliefs support the positive response for this characteristic that products by particular brands do not seem to be a great source of pleasure for the sample population, only 36% of the sample stated it was important to them.

Additionally, products designed by a particular designer do not appear to elicit a great deal of pleasure for the sample population; 18% found this characteristic to be pleasurable. The results for 'designer' and 'branded' products are surprising; brands have been shown to play a pivotal role in a consumer's expression of self (Belk, 1988) or of certain specific dimensions of themselves (Kleine, Kleine et al., 1993) and people often form quite strong relationships with particular brands (Fournier, 1998). The low appreciation of such characteristics may again be due to social desirability bias, as participants may not have wanted to admit to placing emphasis on an attribute that is so closely linked to other factors such as status and taste. Conversely, some consumers genuinely may not care about branded or designer products and may in fact, deliberately seek products that do not display these characteristics.

There is one significant gender effect concerning products that represent an ideology that the consumer believes in; it shows that 67.6% of females liked this characteristic compared to 54.7% of males.

In the study by Dittmar (1992) found that females often related more to the symbolic properties of the products that they own, compared to the more activity and functional related perspective of males. Hence, females' greater emphasis on the symbolism that may be inherent to a product may be reflected in this trend as they seek to express their beliefs and attitudes through the products that they own. This is not to say that

beliefs and attitudes are not relevant to males, but that they seek to express them through the products they buy to a lesser extent.

There are two significant age trends in relation to the ideo-pleasure characteristics of products. The first concerns appreciation of the overall aesthetics of a product; there is a steadily reducing appreciation of this characteristic as the age groups get older e.g. 18-25 year olds, 84.6%; 26-35 year olds, 77.4%; 36-45 year olds, 75.5%; 46-55 year olds, 73.3%; 56+ year olds, 65.2%. This greater emphasis on aesthetics in the younger generations may, again, be as a consequence of the different 'markets' in which the age groups developed their purchasing preferences; the greater diversity of today's market means that the consumer can more easily express aesthetic tastes, and as such, younger consumers are more focused on the aesthetic qualities of products than the older generations.


The other significant age effect concerning pleasure gained from products that have been designed by a particular designer. Younger age groups seem to gain more pleasure from products by a particular designer than older age groups, for example, 28% of 18-25 year olds compared to 9.1% of 56+ year olds. The reasons for this trend are unclear, however it could be argued that particular designers carry a certain level of status and portray a certain image. It is almost certain that 'designer' clothing and products and the status of certain designers and brands plays a critical role in the sense of identity consumers wish to portray; the younger consumer appear to place more value in such commodities.

What is clear from all of the trends that are described above is that the relationship with product is complex and varies tremendously across gender and age groups. The more the designer understands of these variations the more likely they are to be able to successfully design for a demographic. It is also important to acknowledge those consumers views and attitudes are 'fixed' in their formative years and evidence suggests that they remain with them throughout their purchasing life.

5.2.7 Data representation

In keeping with the desire of the designers, for the resource to be visually driven, the trend data is represented in a visual manner as shown below in Figure X.9. The detail of the significant trend is given i.e. 'The shape and form of a product are important to the sample population'. This is then illustrated using photographs of some of the products where participants highlighted the pleasure that was elicited by the shape and form.

RealPeople

Return to Home 

Data Source Text

The data in the trends section of the RealPeople resource is based upon a survey conducted by the research team across the UK with a sample size of approximately 700 people. In all 11 locations were surveyed across the UK, including cities such as London, Edinburgh, Cardiff, and Nottingham. There was an even spread of participants across both age and gender.





Each participant filled in a quick 3 minute questionnaire that assessed their attitudes towards the products that they buy, with a focus on functionality, usability, and each of the four pleasures. The trend results that are presented all proved significant in statistical analysis to a level of $p < 0.05$ at the relevant degrees of freedom.

Below each statement is a selection of images. These images relate to videos in the database that reflect the trend that was found. When looking at the trends, click on the images to go to the associated video clips. Click on the links below to look at the different trends.





Cross Population Trends | **Gender trends** | **Age trends**

Gender trends

Physio-pleasure
The colour(s) of a product was more important to females than males.



The 'right' sound of a product in use was more important to males than females.



Socio-pleasure
Products that demonstrated a discerning taste to other people were more important to males than females.

Figure X.9. RealPeople page showing gender trends

6. Functionality

The RealPeople resource also has several functional features that are intended to enable them to use the resource more effectively, allowing it to fit in with the manner in which designers work. These are outlined below:

Notes – each database individual has a text window in which designers can add and save notes about that person, either for personal use, or to be viewed by subsequent users.

Slideshow – the designer can create basic slideshows containing information from the database. These can be saved and then shown as a presentation.

View all videos – the designer can enter search criterion, then activate a ‘play all video’ function. This automatically plays all of the video clips relevant to that search, consecutively, allowing the designer to take a more passive role and absorb the information at leisure.

Portfolio – the designer can save relevant search results in individual project portfolios; these will be editable and also be able to be shown as slideshows. It is envisaged that the designer may develop multiple portfolios as several projects may be running consecutively, each with its own relevant search criterion.

History – allows the designer to view previous searches, similar to contemporary web browsers.

Export – the ability to export notes and portfolios for use on other machines that have the RealPeople database installed, potentially allowing sharing of information across global design teams.

7. Feedback and future work

Once enough data were available, a fully functioning prototype was developed and evaluations conducted by fourteen designers in the first instance to ensure the robustness of the basic functionality and a second time, once all of the functionality was working.

Testing involved a brief demonstration of the resource and its functionality. Each designer then carried out several tasks (e.g. searching, creating a portfolio) that allowed them to fully experience the method of

interaction and the functionality that was on offer. They were then asked to comment on different aspects of the resource, ranging from the quality of the data and its format, to the overall visual appeal.

The feedback from designers was very positive. The evaluation assessed a number of different aspects of the resource and the main conclusions were:

- The designers liked the aesthetic style of the resource.
- The designers liked the level of functionality that was on offer; in particular the feedback from the search interface was seen as valuable.
- The designers found the resource easy to use and speculated that it would not take long to become familiar with the full functionality on offer.
- The designers were happy with the type of data that was available in the resource and the manner in which they were presented.
- The designers felt that the data was of a high quality, with the video clips, brand data, style choice and lifestyle information, in particular appealing to them.
- The designers felt that the resource would be of great value to designers, particularly in the opening stages of a project to inspire and guide concept generation and initiate research. They also suggested that other disciplines, e.g. marketing, might be interested in using it.
- The designers all felt that the resource would promote a greater sense of empathy with the consumers.

The informal task analysis that was conducted highlighted a number of minor issues that were addressed during further refinement of the resource, as the final data sets were added. Crucially, there were no major issues that required restructuring of the resource or major re-development. The resource is currently in the final stages of production.

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