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The Business of Love

How to find a soul mate among millions of dates

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Abstract: *The development of the digital environment has expanded people's choice-sets in almost all product and service areas. In order to satisfy customers, online marketers and web designers need to come up with new ways of shaping online search tools and limiting customers' choice sets. This study focuses on Online Dating. The purposes of this thesis are to investigate how the large selection of mate choices online affects people's mate choice process and if the current digital environment leads people to make suboptimal mate choices. The subject is of interest since online dating companies need to adapt and manage the continuously increasing number of online daters. However, at the current date the consequences of numerous choices in the online mate search process are relatively unexplored in academic research. We have put forward four hypotheses to examine if the too-much-choice effect influences people's online mate choice behavior. In order to use the concept of triangulation, it is a combined qualitative and quantitative study. The qualitative study is partly based on focus groups with people familiar with the activity of online dating, and partly on in-depth interviews with experts within the field. The quantitative study consists of a questionnaire. The paper adds to the research of online search processes, and gives support for that mate choice processes are affected by an online context as well as that parts of the too-much-choice effect can be detected in online mate choice.*

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*”**Love** is a choice you make from moment to moment,”*

Barbara De Angelis

*“When you’re faced with a **million possibilities**, you have a much smaller chance of picking the “right” one than if you had to pick from just a few”,*

Robert Epstein

*”All our final decisions are made in a state of **mind** that is not going to last,”*

Marcel Proust

*”Love at first sight is easy to understand; it's when two people have been looking at each other for a **lifetime** that it becomes a miracle,”*

Amy Bloom

*”Him that I love, I wish to be **free** - even from me”,*

Anne Morrow Lindbergh

*”The doors we open and close each day **decide** the lives we live,”*

Flora Whittemore

*“You could be successful **online**, but it’s random,”*

Lisa Clampitt, executive director Matchmaking Institute, New York

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1. INTRODUCTION

1.1 Background

When searching for a soul mate, do you think that the more options, the better? Internet has become a natural part of everyday life and its lack of physical space limitations is facing people with unlimited choices. The number of options facing us has also exploded in perhaps the most evolutionarily important domain, the mate choice selection. Not only is the average modern society considerably larger and more integrated than ever, but modern techniques also provide us with new methods of dating and options people did not have before. Since we are developed in a social environment of limited choices, we have a tendency to prefer more options to less. This evolutionary mechanism attracts people to online dating sites where "millions of choices" are offered. Does this wealth of options makes us more satisfied with our choice than just a few ones?

Recent studies propose that tens of millions of people are using online dating services but that the satisfaction levels are low. Nevertheless, in 2001 online dating was a $40 million business; by 2011 that figure is expected to break $4 billion (The Business of Dating). Selling love over the Internet seems like the perfect business. Perhaps money cannot buy you love, but love is one of the few things people are willing to buy online. The future for online dating sites looks bright. Interest is growing rapidly, and intense competition will force rapid changes in the kinds of services that are offered. The online dating model is developing quickly. But the market is open for companies that can design an online dating site that satisfy customers better. The question is: *how* is this best done*?*

1.2 Problem background

We teamed up with the digital customer services department BINK, a part of the Swedish multi-channel media group Bonnier AB. BINK co-ordinates and manages projects, technology and advertising sales within digital media throughout Bonnier. The business division is responsible for developing existing and new business models for a digital world. The CEO of the department, Mats Lodin, and his co-worker Sergej Kotliar, suggested a subject that was relevant to Bonnier in order to better serve their customers. A recent study, conducted on people on Bonnier's customer data base evaluated people's everyday problems. The outcome showed that one of the main problems people had was to find a partner. This

resulted in that Bonnier wanted to examine if they should launch an online dating site and in that case, find out how it should be designed.

1.3 Problem area

Anecdotal evidence and market data suggest online dating sites to frequently fail meeting users' expectations. This disappointment is due in part to online dating sites' failure to assist people with the right search tools to help them finding a partner (Egan, 2003). Almost every online dating site provides members with search tools that give the user a nearly unlimited amount of choices. However, do users truly benefit from more extensive searches from a large pool of possibilities? On the one hand, a wealth of options would make it more likely for an individual to find a partner of his or her taste. On the other hand, evolutionary theories claim that our brains are not developed to choose from more than 150 individuals when searching for a mate (Dunbar, 1992). Recent studies also argue that more search options lead to less selective processing by reducing users' cognitive resources, distracting them with irrelevant information and reducing their ability to screen out inferior options. Before designing the search tool, online dating companies must understand *how* choice set size[1] influence individuals mate choice process.

1.4 Purposes

The *primary purpose* of this thesis is to come to an understanding of how the large selection of mate choices online affect people's mate choice process, and what the implications are for online dating sites.

The *secondary purpose* of this thesis is to come to an understanding of if the digital environment causes people to make suboptimal mate choices and if so, what the implications are for online dating sites.

Main problem:

How does the digital environment and large selection of mates online affect people's mate choices and what are the implications for online dating sites?

1.5 Delimitations

In this thesis we had to make sacrifices to bring it down to the scope and scale of a bachelor thesis. The research design consists of focus groups, a questionnaire and in-depth interviews.

[1] The number of mates people can choose from.

The participants used in this study are all from Sweden, a majority lives in Stockholm and they are in the age between 21 and 26. Considering it might exist cross-cultural differences in dating and mate choice between different countries, the findings are possibly only applicable on the Swedish online dating market.

Since there are several online communication challenges for dating sites, we had to delimit this thesis to focus only on the choice process on online dating sites. Moreover, we had to limit the number of variables measuring the experience of the choice process. Following variables were chosen: satisfaction, enjoyment, difficulty and regret.

1.6 Intended knowledge contribution

The aim of this thesis is to uncover the implications of online choice process in a wider context and how the virtual world affects the ability to form close relationships. The thesis will enable marketers and companies to understand and meet the online dating customers in an appropriate way in the digital environment. By determining how people perceive the choice set of possible partners, companies can in turn benefit from this thesis when deciding on a strategic design for an online dating site. By investigating if there is a tendency that peoples choose suboptimal options when they are faced with a large amount of choices, this thesis aims to help online dating companies to better optimize their mate search systems. This is not fully possible with today's research front due to lack of knowledge about whether the so called too-much-choice effect fairly can be applied on mate choices online.

1.7 Disposition

In order to give the reader a pleasant experience when reading the thesis, an intuitive and manageable structure has been applied. We have divided this thesis into five chapters. The next chapter aims at giving the reader a better understanding of the current state of theories on decision making, mate choice, unlimited choice and online dating, by looking at the most relevant findings. Then, these theories will be used to form two research questions based on the further information needed in order to fulfil the thesis' purposes. Chapter three deals with the methodology used to carry out the surveys in this study and present a review of the approach, design of the study, measures, and participants used in the research process. Clarification on the reliability and validity will finish off chapter three. The fourth chapter will present the results of the focus groups, questionnaire and interviews. To structure this, the two research questions will be used as headlines. The final chapter will discuss the results

and give indications for online dating companies. The most interesting findings will be analyzed by connecting them back to the theories presented in chapter two. The thesis will be concluded with an argumentative discussion of the results and suggestions for further studies within this field.

2. THEORETICAL BACKGROUND

With the purpose of studying the main problem, several areas of theory need to be examined. We present in the following chapter a foundation basis for the thesis research questions and hypotheses. These include theories about mate choice selection, decision strategies and the influences on choice set size. Last, the identified need of information will be presented and the research questions that will structure the empirical study will be introduced.

2.1 What are the classical mate choice theories?

In order to examine, the main problem, it is essential to understand the basic theories of mate choice. Therefore, in the following paragraph evolutionary and cognitive mate choice strategies will be examined.

Mate choice is considered to be one of the most fundamental decisions that face most people through life. From an evolutionary standpoint, the aim with the search for a mate is to eventually find a high-quality mate in order to form a joint genetic venture and spread one's genes to another generation. Darwinism theories suggest that mate choice is based on a process of physical and sexual selection with certain sexual cues[2] (Darwin, 2005). Important for the theorizing of this thesis, these fundamental evolutionary driving forces have shown to be independent of whether the mate choice is performed in an offline or online context. (Whitty & Gavin, 2001, Fiore & Donath, 2005). The mate choice can further be broken down into three interrelated tasks; 1. *Perceiving basic sexual cues that provide reliable, relevant information about potential mates*, 2. *Integrating those cues to estimate underlying trait values such as health, intelligence, fertility and social status, and further using those trait values to judge overall sexual attractiveness, 3. Searching through a series of prospects and deciding which one to court or accept, based on their attractiveness* (Miller and Todd, 1998). This process is commonly repeated before people settle down with a long-term partner. The alternatives are also processed sequentially, rather than choosing from a given number of

[2] Certain observable features of potential sexual partners, which indicate valuable information about each partner's quality. E g physical attractiveness, youth, health and parenting qualities (Miller & Todd, 1998).

defined options.

The other aspect of mate choice is the possibility to be rejected. This mutual choice constraint is making the mate search much harder compared to other decision situations. These complexities are addressed in for instance game theories of "two-sided matching". However, game theory models typically assume complete information and exhaustive preferences across all options, which is not very likely in real life mate choice situations. Mutual mate choice is therefore rather often explained by assessing mate values and reproductive fitness, based on a combination of sexual and psychological cues, where a courtship effort is most likely to be reciprocated between individuals with similar mate values (Johnstone, 1997, Gigerenzer & Todd, 1999).

Research further suggests that different mate choice strategies are implemented depending on the number of mate options people face (Payne, Bettman, & Johnson, 1993). A study by Lenton and Fransesconi (2010) points out that a large number of mate options to chose from leads choosers to pay less attention to characteristics requiring more time to elicit and evaluate, for example occupational status and educational attainment, and more attention to characteristics that are quickly and easily assessed, for example height and weight. The next few sections will further discuss what implications an increased choice set size might have on people's *mate choice strategies and decisions.*

2.2 What is the too-much-choice effect and how does it affect people's choice strategies?

In order to understand the main purpose of this thesis, how a large choice set size affect people's mate choice strategies and decisions, a general understanding of large choice sets effect on decision making strategies is necessary. The theory of the too-much-choice effect and classical decision making strategies will therefore be examined in the following paragraph.

The world development, especially the globalization, improved production techniques and better customer understanding, have led humans to face more resource options than ever before. The number of alternatives available to people in many day-to-day decisions has increased explosively. Core theories in economics, psychology and marketing suggest that decision makers benefit from having more choice (Scheibehenne et al, 2009.) Yet, several studies now confirm that having many alternatives can be dysfunctional. This "over choice" effect was first demonstrated by Iyengar and Lepper (2000). Their study showed that

consumers presented with *fewer (*6) varieties of jam rather than *many* (24) lead to a substantially *higher* purchase frequency. One may instead believe that the larger choice set size would lead to more satisfied customers, as more choices are more likely to satisfy individuals' needs. In contrast, by considering the perceived benefits and costs of choice, having too many options may ultimately decrease the motivation to choose and foster dissatisfaction, regret and disappointment with the chosen option. All of this is referred to as the too-much-choice (TMC) effect, choice overload, or hyper choice. (Botti & Iyengar, 2006, Chernev, 2003, Iyengar & Lepper, 2000 Iyengar, Jiang & Huberman, 2004, Reutskaja & Hogarth, 2009, Shah & Wolford 2007, Haynes, 2009)

What are the effects then of this explosion of choices around us? The numerous choices have demonstrably caused humans to adapt their decision making strategies to fit the new conditions and environment (Payne, 1982). Basically, decision making can be regarded as the cognitive process resulting in the selection of a course of action among several alternatives. Every decision making process produces a final choice (James Reason, 1990). When confronted with numerous choices, people are often unable to evaluate *all* available alternatives. Instead, people strive to reduce the amount of cognitive effort associated with decision making (Shugan, 1980). The notion that people are willing to settle for imperfect decisions in return for a smaller effort is well supported and referred to as bounded rationality (Bettman et al. 1990, Johnson and Payne, 1985 & Simon, 1955). Payne et al (1993) argues that the trade-off between accuracy and effort is inevitably part of the human decision making in complex environments. Thus, the choice process of today requires simpler choice strategies, like heuristics[3], to be used. The theory presumes that decision makers choose options that are *satisfactory*, but would not be the optimal choices if search costs were non-existing. This is most common when the decision making alternatives are complex and cognitively demanding. These strategies reduce cognitive demand hence the choice process gets easier to run though. But the consequence is perhaps that people settle down with "good enough" and do not get the very best alternative (Bettman et al, 1990; Johnson & Payne 1985). Moreover, Payne et al (1993) suggest that when the alternatives are numerous and

[3] Heuristics are simple, efficient rules, hard-coded by evolutionary processes or learned, which have been proposed to explain how people make decisions, come to judgments, and solve problems, typically when facing complex problems or incomplete information. These rules work well under most circumstances, but in certain cases lead to systematic errors or cognitive biases (Gerd Gigerenzer, Peter M. Todd, and the ABC Research Group (1999). Simple Heuristics That Make Us Smart. Oxford, UK, Oxford University Press.)

difficult to compare, as for example in online environments, people use a two-stage process to reach their decisions presented below;

FIGURE 1: Two-stage Decision Model

In the first stage, people screen a large set of available options and identify a subset of the most promising alternatives. In the second stage, they evaluate the later in more carefully, perform relative comparisons across the options on important attributes and make a decision. With this model in mind, Häubl and Trifts (2000) discuss the decision making process in online shopping environments. They examine two decision aids, one for each step in the two-stage decision model, which cope with these environments. First, recommendation agents (RA) are used to allow customers more efficiently screen the large set of products available online. Second, a comparison matrix (CM) is used to allow customers to organize attribute information about different products and then make a comparison. The study states that by using such decision aids, the size of the consideration set can be decreased and the quality of the purchase decision is increased.

Now, when we know how the TMC effect affects people's choice strategies in general, we can further investigate how a large choice set size affects people's *mate* choice strategies.

2.3 How does too-much-choice affect people's mate choice strategies?

To be able to draw conclusions about the TMC effect in an online dating context, the authors must examine studies made on human mating and large option set sizes in traditional environments.

Most research on the TMC effect is done on the product choice domain. However, there are reasons to believe that the TMC effect exists for mate choice as well. Hutchinson (2008) demonstrates the presence of a TMC effect in a mating context, for instances for frogs and grouse. In this study, it is shown that even though the female frogs prefer greater choice in an initial phase, a bigger option set also confuse them.

Dunbar (1992) suggests that humans' neocortex[4] evolved to deal with the size of our social networks was shaped by the size of our ancestor's habitat of approximately 150 individuals. Of these, about 35 individuals were of the opposite sex in reproductive age. This implies that our brain limits the cognitive capacity to maintain too large social networks. As a result, social networks greatly exceeding this limit tend to become unstable and fall apart into smaller groups. Since the brain was evolving to deal with making decisions in an environment of limited choices, we have a tendency to prefer more options to less (Dunbar, 1992). However, this appeal to many options can have negative consequences for us. Miller and Todd (1998) suggests that when screening *fewer* individuals before deciding on a long-term partner it is more likely to chose a mate with *higher* average mate value. Loewenstein (1999) on the other hand, suggests that having many alternatives may provide advantages on a societal level. Consider for example the ability to match individual preferences. A wide sample of possible mates has always been favoured in order to better meet these preferences.

Moreover, Lenton et al (2008) studied the effect of increasing option set size in anticipated and experienced mate choice perceptions. The researchers concluded that there is a significant mismatch between what people think they will feel and what they actually feel.

In summary, a large choice set size brings both advantages and disadvantages when searching for an ideal mate. To recognize which effect that dominates, an understanding of people's mate choice strategies is fundamental.

Classical mate choice strategies suggest that one should keep on looking for a mate as long as the costs for a continuous search is exceeding the benefits from holding on to the present

[4] Neocortex is a part of the brain of mammals. It is involved in higher functions such as sensory perception, generation of motor commands, spatial reasoning, conscious thought and language.

mate. In practice, when faced with a large choice set size, this is of course impossible. Instead, it is more likely that people use a *satisficing* search strategy, in which they search until they find a prospect that exceeds a reasonable aspiration level regarding mate value (Miller & Todd, 1998). Lenton and Steward (2008) further stated that as the number of mate options increased, participants self-reported lesser use of a rational choice strategy and greater use of heuristic choice strategies. To investigate this thesis' secondary purpose, an understanding of how the mate choice process functions on online dating sites is necessary.

2.4 How does the mate-choice process function on online dating sites?

With the intention to push the research front forward, the most recent findings regarding mate choice in the digital world will be presented.

The Internet has brought many unique benefits to mate choice. As Internet now constitutes a society only exceeded in size by China and India, people tend to visit this society also with the purpose to find a mate. Due to this, numerous online dating sites have been launched. Brym and Lenton (2004) present three main underlying factors explaining the growth of online dating; (1) increasing number of singles, (2) people's lack of time and (3) increasing mobility of individuals. They moreover proved that about 10 of every 1000 Internet users log on to online dating sites, and thus simultaneously increase the available number of mate options. Moreover, every online dater is estimated to scan over 200 profiles each time they log on to their account and complete a search (Lenton et al, 2008). Thus, the Internet has expanded our social networks far beyond our cognitive limit of 150 individuals.

Frost et al (2006), identified three phases of online mate search process: (1) Searching profiles (to find potential matches) (2) contacting users (to attempt to arrange meeting with those matches), and (3) actual face-to-face encounters. Almost every online-dating site provides members with tools for finding mate options in the first phase. The most common search tool is a filtration, which allows members to seek for mates on age, gender and location. Some sites have attempted to improve the odds of finding an ideal mate by matchmaking tools. Here people's personal information is synchronized with their mate requirements to get better matches (Epstein, 2007). To have a search-oriented focus is according to Lenton et al (2008) a key component, as the ability to find the perfect match is the driver for a majority of the users.

The exchange process in the digital environment also provides each user with benefits impossible to replicate in a "real world" context. Despite this, the numerous users also pose challenges to online dating sites. One of them is time inefficiency. Users spend a lot of time searching through profiles and writing emails, 5.21 and 6.73 hours respectively per week, for a payoff of only 1.77 hours of offline interactions (Epstein, 2007). Another challenge is the lack of face-to-face cues (as physical presence or hearing each other's voices). This makes dating sites less natural and more cognitively demanding environment to acquire information about mate prospects. These findings show how far the present research has come. In the next section, the findings will be used to form research questions based on the further information needed in order to fulfil this thesis' purposes.

2.5 Information needed

As the theoretical foundation for this thesis now is established, it is possible to determine what sort of data is needed in order to build a theory around the purposes of this thesis.

The main problem of this thesis involves how the digital environment and large selection of mates online affect people's mate choices and what implications these have for online dating sites. The fast development of Internet, online communities and dating sites have left behavioral scientists, companies and marketers behind when it comes to understand how this development has affected the mate choice process online. In the past, humans were rarely faced with too many options to choose from. Therefore, at that time, our desire for more choices could co-exist with our cognitive limitation in managing information. The current digital development has endangered this co-existence by expanding the mate choice set size beyond our natural capacity of managing information. This presents us with a problem of choice overload that never existed for our ancestors. To understand how to tackle this problem, it is necessary to examine how people's perception of choice has changed as a consequence of an increased mate choice set size. This leads us to our first research question that is formulated to understand this thesis' primary purpose.

Research question 1:

How does the too-much-choice effect influence people's online mate choice behavior?

Four hypotheses have been put forward to examine the first research question. Each of them contains a characteristic, which different researchers have used to describe the TMC effect. The first two describes the process of mate choice. The last two describes the chosen mate option.

H1a. A large sample of mate choices is perceived as less **enjoyable** to choose from than from a small sample of mate choices.

H1b. A large sample of mate choices is perceived as more **difficult** to choose from than from a small sample of mate choices.

H2a. A large sample of mate choices generates lower **satisfaction** with the choice than a small sample of mate choices.

H2b. A large sample of mate choices generates a higher level of **regret** with the choice than a small sample of mate choices.

The second research question is formulated in order to investigate this thesis' secondary purpose; to come to an understanding if the current digital environment makes people to choose suboptimal options and if so, what implication this has for online dating sites.

Research question 2

Do the current search tools on online dating sites result in people making suboptimal mate choices?

3. METHOD

In the following section we present the method underlying this thesis. It begins with a description of the defined problem and an explanation of the chosen research design and data-collection methodology. Thereafter, the credibility of this thesis is discussed by addressing the validity and reliability of the chosen research methods.

3.1 Choice of topic

The inspiration to write about online dating was given by Mats Lodin and Sergej Kotliar. The topic was then further discussed with our tutor and professor at Stockholm School of Economics (SSE) Micael Dahlén. The discussion led to focus on the choice process when finding a partner online. After a comprehensive literature research that confirmed the need of further studies on the mate choice process, we decided with eager to examine this phenomenon.

3.2 Pre-study

When the topic of this thesis had been decided on, a careful literature study was conducted on choice strategies, mate preferences and online behavior. The thesis topic was also discussed with Mats Lodin and Sergej Kotliar throughout the idea stage. Furthermore, a pre-interview with Jesper Åström, digital director at the Swedish advertising agency Honesty, was conducted in order to learn more about the research field. At last, the main focus of the thesis and suggestions of relevant research were discussed and settled together with our tutor.

3.3 Scientific approach

The main approach of this thesis is deductive, as we formulate several hypotheses from existing theories within the research area (Bryman & Bell, 2007). A causal research design was chosen since we wanted to find causes and effects of the choice process and user experience. The intention is to enable the findings to be used as input into marketing and strategic decision making. The study also includes exploratory research elements in order to better answer the intended purposes of this thesis.

3.4 Research design

The research methods are applied in consideration of the character of the research topic. Malhotra (2004) suggests qualitative research to precede quantitative research whenever a new marketing problem is addressed. Moreover, this approach is suitable in the earlier phases of research and when the researcher does not know exactly what to examine (Marshall & Rossman, 1999). As mate choice in dating sites has only recently begun to be investigated by marketers and psychologists, qualitative research has been an important part, beside a questionnaire, in order to serve the purposes of the thesis, see further about triangulation. The qualitative method in this paper is a *direct* qualitative research method consisting of two focus groups and in-depth interviews with psychologists and experts within the research field. To secure the results in this thesis, we have used the method of *triangulation*. Triangulation applies an integration of several research methods in the study of the same social phenomena. This is particularly useful in a relatively unexplored research field, and accordingly we found this research method to best suit the purposes of this thesis. By crosschecking the output of quantitative and qualitative research methods, one can be more confident with an answer to the question if different methods lead to the same result (Bryman & Bell, 2007). Moreover, this method increases the credibility and validity of the results (Frankfort-Nachmias & Nachmias, 1996). Therefore, a quantitative research method, in form of an online

questionnaire, followed the initial qualitative approach. The questionnaire was based on the most interesting findings from the focus group discussions. In the final stage of the study, a direct qualitative approached was used again. This time, five in-depth interviews were conducted, each with people of different areas of expertise, to further understand the results from the focus groups and questionnaire.

3.4.1 The focus groups

In order to seize users' experiences of online dating sites and define potential obstacles in the search process, we found it necessary in a first step to conduct focus groups with members from online dating sites. The underlying purpose was to examine if daters perceived mainly positive or negative consequences of the large choice set in online dating environments. Thus, two focus group interviews divided by gender, with three participants each were conducted. Both of them took place at Stockholm School of Economics. The first focus group consisted of three women and was conducted at 7 pm on the 3rd of March and the second one consisted of three men and was conducted at 7 pm on the 29th of March. Each focus group lasted for approximately 1,5 hours and they were organized after Morgan Kjaer Jensen's' (1991) and Malhotra's (2004) guidelines how to plan and conduct a focus group. Both authors took the role as a moderator and had prepared discussion questions concerning online dating (Jensen, 1991, Malhotra, 2004). All discussions during the focus group sessions were recorded. The sessions started with a short presentation of the moderators and the purposes of this thesis. Thereafter, each member presented themselves and their experience of online dating in short. With the aim to answer this thesis' purposes, questions (Appendix 1) were discussed, but not strictly applied, as we wanted the discussion to go on naturally.

Participants

The choice to conduct mini-focus groups (3-6 participants) was based on the personal and sensitive character of the questions (Hoppe et al, 1995). In view of the sensitive discussion topics, we also found it necessary to divide the groups by gender to make them more homogeneous. These two measures were done in order to enable the group to develop sincerity and a deeper level of intimacy (Malhotra, 2004). The members of the focus groups were recruited via the online dating site Match.com, which is currently the largest global online dating site. Users received an email with a short message that we looked for participants to a thesis study at Stockholm School of Economics. To increase the incentives to participate, members were offered cinema vouchers of 160 SEK each. In this stage, ten

users contacted us. As we wanted to be able to define commonly appearing user issues and phenomena, we chose not to include newly registered members in the focus groups. Within the final focus groups of totally six people, all of the participants had been members on online dating sites for at least three months and on average much longer. All participants were unfamiliar to us, as we did not want personal relationships to affect the focus group sessions.

3.3.2 The questionnaire

In the next step, a quantitative survey was designed to crosscheck the findings from the focus groups in line with the concept of triangulation. In particular, we intended to examine the presence of a possible TMC effect, seen in the focus groups, when choosing from a large versus a small option set. As previously mentioned, we expected an impact of the TMC effect to appear on four general dimensions of the online mate choice process: (1) satisfaction, (2) enjoyment, (3) difficulty, and (4) regret. Prior research confirms the validity of these four variables as measures of customer experience of choice processes, and particularly for the TMC effect (Iyengar & Lepper, 2000; Lenton et al., 2008 & Sheibehenne et al., 2009).

In order to carry through a relevant study, we found it fundamental to try to replicate *a real mate choice process* as they are presented today on a large number of online dating sites. An important strength of dating sites is the possibility to in a short period of time receive a lot of information about both physical and psychological cues of a person. Based on this, we formulated *short profile descriptions* in consultation with our tutor Micael Dahlén, in order to imitate an online mate choice context. The characteristics of the profiles were described as ratings on a 10-point scale of *physical attractiveness*, *social status* and *present and future financial status*. The chosen variables were selected on the basis of several cognitive and evolutionary studies (Saad & Vongas, 2009; Darwin, 2005 ;Lenton et al, 2008, Todd et al, 2007). The choice not to include photos was a necessary limitation in order to be able to design and distribute the questionnaire in an efficient way. However, ratings of physical attractiveness have previously proven to be a satisfactory way of describing physical cues in similar surveys (Miller & Todd, 2007). As a final step, the Questionnaire Design Checklist suggested by Malhotra (2004) was used to verify the quality of the questionnaire.

Questionnaire design

The questionnaire and the pre-test were both constructed with the free survey service of

Stockholm School of Economics, qualtrics.com. To reduce the risk of questions being missed or skipped, all questions in the questionnaire were marked as mandatory. Two questionnaires were constructed with either male or female mate choices. Accordingly four questionnaires were done in total.

The main manipulation consisted of letting respondents be randomly assigned to either a relatively small choice set of 4 options or a relatively large choice set of 20 options. The smaller choice set of 4 was decided on as it is the smallest of set sizes where a true choice is possible, and 20 choices is an approximation of where a TMC effect may appear (Iyengar & Lepper, 2000; Miller & Todd, 2007). In order to answer the purposes of this thesis the respondents were asked to imagine they had signed up to an online dating site with the goal of selecting the one individual with whom they would most prefer to make contact (adapted to correspond to the gender of the respondent). The respondents could choose between profiles with varying ratings on the three characteristics mentioned above; however the total sum of all ratings were the same for all profiles to ensure no alternative to be superior. A typical profile description was;

Christopher is 27 years old. He is a fairly attractive man and has a moderate social network. He is an employee at a lawyer's office and is becoming a junior partner. On a scale, he is rated: Physical attractiveness: 5. Social status: 6. Present and future financial status: 9

After the choice was made, the participants were asked to rate their choice of potential mate, using 7-point Likert-type scales. The questions were designed with bipolar extremities where the respondents were asked to rate their experience or to what extent they agreed on the posed statement. This technique is well renowned and particularly established for market research (Malhotra, 2004). The choice process experience was measured along the dimensions of their perceived ***enjoyment*** of the selection process, on a scale from 1 ("very unpleasant") to 7 (very enjoyable); the experienced ***difficulty*** of making a selection from the set, ranging on a scale from 1 ("very difficult") to 7 ("very easy"), and their perceived ***satisfaction*** with the chosen profile ranging from 1 ("very dissatisfied") to 7 (very satisfied"). Finally, the experienced level of ***regret*** the respondents felt about their choice from the set was measured, ranging from 1 ("not at all") to 7 ("very much").

Questionnaire distribution

A pre-test of the online questionnaire was distributed to a small sample of respondents with the purpose of improving the questionnaire by identifying and correcting potential problems. After some modifications the original questionnaire (Appendix 2) was distributed via email and online social networks to friends and families. Moreover, eight respondents were asked to do the questionnaire twice with two weeks in between. The respondents in the final questionnaire, were sampled through a convenience sample and not a random sample from the Swedish population, which according to Malhotra (2004) might be considered as negative as the sample does not reflect an average of the population as a whole. Of the total 297 respondents, data from 261 respondents was included in the final analysis. 36 respondents were subsequently excluded, due to unfinished questionnaires. Of these, 127 respondents answered the questionnaire with *many* alternatives and 134 respondents the questionnaire with *few* alternatives (Appendix 3). The results reported are based on heterosexual partner choices but are applied on all users regardless of their sexual orientation, as there is no reason to expect bi-/homosexual set size preferences would be different from those of their same sex counterparts (Muscarella et al., 2001).

3.3.3 In-depth interviews

Subsequently, to interpret and more deeply understand the findings from the focus groups and the questionnaire, several semi-structured in-depth interviews were performed. The semi-structured interview distinguishes from the unstructured interview as the interviewer has a list of several specific topics to cover, rather than letting the respondent answer and associate freely (Bryman & Bell, 2007). The people chosen for interviews were selected because of their expertise in marketing strategy, online dating or in behavioral psychology. First, a pre-interview was held with Jesper Åström, digital director at Honesty. Åström was chosen because of his profound experience within web strategy and particularly online dating site strategy. At this early stage, the main purpose was to get an insight to the online dating environment. Secondly, an interview was conducted with Simon Sundén, digital director at Honesty, who has a deep knowledge about digital environment and social media. Thirdly, an interview was held with Zara Aram, certified psychologist at KBT-gruppen in Stockholm and an acknowledged couple's therapist. Thereafter, another interview with Jesper Åström was conducted. This time we could ask more detailed questions as the purposes of the thesis now was settled. Finally, Johan Landgren, founder of the Swedish online dating site, Shakemyworld.se was interviewed. One semi-constructed email interview was also carried

out with Helena Ehnbom, former marketing director at match.com Nordic and CEO of the advertising firm Only People, which focuses on the digital marketing environment. As Helena Ehnbom was not in Stockholm during this thesis study, a face-to-face interview was not possible to conduct. Before the interviews we thoroughly studied how to conduct in-depth interviews and prepared several open questions for each interview about online choice processes (Appendix 5). All of the interviews lasted for approximately 1.5 -2 hours and were conducted on either Stockholm School of Economics or at the respondent's work offices.

3.5. Validity and reliability

Validity and reliability are parameters used in order to evaluate the precision and applicability of the recorded results. These measures have different applications on whether quantitative or qualitative analysis is used (Bryman & Bell, 2007).

3.5.1 Validity

Validity estimates if and how close the research results approach correct measures the concept. The validity of the study depends both on *external* and *internal* validity. As these two parameters often come into conflict, a continuous trade-off is necessary. The internal validity deals with the degree of causal relationship, or in other words if the study measures what is intended to measure. The external validity concerns whether the results can be held true for other cases; that is to say, if the results present can be further generalized (Bryman & Bell, 2007, Malhotra 2004).

3.5.1.2 Qualitative validity

Internal validity: In qualitative research, the internal validity deals with theoretical, interpretive and communicative validity. *Theoretical* validity is estimated by the degree a theory or theoretical explanation developed from a research study fits the data. In other words, it estimates to what extent the same result is produced also when using different measurement methods. As mentioned earlier, this thesis uses the concept of triangulation to cross-examine research results, to be more confident with the given results and in order to achieve high theoretical validity. *Interpretative* validity, which estimates the degree to which the researchers correctly depict the opinions given by participants, was achieved by letting the interview participants read through citations and documentations of the interviews to ensure no misinterpretations have been done. *Communicative* validity concerns how well the researcher communicates the process to the reader and how the research process itself might

have affected the legitimacy. In order to secure this, a detailed description of data collection, research and analysis process are attached (Widerberg, 2006). Overall, we assess accordingly that the qualitative validity to be of an adequate level.

External validity: As findings of qualitative studies not intend to be used for generalization, the reader can estimate in which context or how the findings are relevant and useful to transfer to other cases (Widerberg, 2006).

3.5.1.1 Quantitative validity

Internal validity: In order to ensure high internal validity and to achieve causal relationships between the choice process and the effects on users' experiences, the influence of external variables during the experiment must be minimized. To assume similar influence, we collected answers from all respondents within a period of time of two weeks for the external conditions to be as similar as possible for all respondents. Furthermore, the respondents received identical information regarding the study and we also carefully controlled for respondents who were already active on online dating sites. This was particularly important as previous experience of online dating sites was anticipated to affect the choice process experience. The respondents were also randomly assigned to the questionnaire of either many or few alternatives, which also reduce the effect of external effects (Malhotra, 2004). However, we have not been able to control when or where the questionnaire was filled in and this have possibly affected the results. Nevertheless, we estimate the taken measures to control the influence of external factors on a satisfying level. Moreover, as the questions in the questionnaire were based on acknowledged academic research studies (Iyengar & Lepper, 2000, Miller & Todd, 2007, Sheibehenne et al., 2009) a high *content validity* was achieved, which means the content in questions and answer alternatives represent the theoretical variables in a good way. Also, the usage of previously secured measurement variables affects the *construct validity* positively, measuring how the observed results relate to the theoretical variable at hand (Söderlund, 2005). Furthermore, the authors have also assured the validity by paying regard to the relative order of the questions (Malhotra 2004). Although constructed question-sets also affect construct and content validity positively, we wanted to create a questionnaire as short as possible given a satisfying level of validity and reliability, as respondents tend to choose overly indifferent answer alternatives in longer questionnaires (Söderlund, 2005).

External validity: By examining the causality in an actual online environment, the external validity is positively affected. As the respondents replied to the questionnaire in a fairly similar setting to that of on online dating sites, we suggest the results to provide a realistic picture of the users' choice experience. This is also estimated to increase the ability to generalize the result (Malhotra, 2004). Given the discussion above, we consider the overall validity of the questionnaire to be of a satisfying level.

3.5.2 Reliability

The reliability refers to the level of consistency in the study, consequently if similar results of that sample can be expected for another sample of respondents (Bryman & Bell, 2007.)

3.5.2.1 Qualitative reliability

Widerberg (2006) suggests that qualitative reliability can be estimated by evaluating the quality of methods to collect data and of the researchers. To ensure qualitative reliability, all the interview and dialogues in this thesis were recorded and transcribed afterwards. The interviews were also thoroughly prepared by the authors, writing interview guides and researching on theoretical interview guidelines.

3.5.2.2 Quantitative reliability

Malhotra (2004) proposes three ways of testing quantitative reliability; (1) Test-Retest Reliability, (2) Alternative-Forms Reliability and (3) Internal Consistency Reliability. The reliability of this thesis' questionnaire was approximated by the test-retest method. The questionnaire was tested on eight people twice, two weeks apart, and a comparison between the results could then verify the reliability through Spearman's rank correlation test (Satisfaction: $r = 0.78$, Enjoyment: $r = 0.98$, Difficulty: $r=0.96$, Regret: $r = 0.88$) (Appendix 4). Also, by using only verified measurement variables of the concepts, known from several previous studies (mentioned above) to contain a satisfying level of reliability, we have secured the reliability and the internal consistency of the study. (Söderlund, 2005; Malhotra, 2004)

3.6 Instruments and methods of analysis

To analyze the data given from the questionnaire, SPSS 16.0 was used in order to perform mean comparisons (Independent t-tests), correlations and frequencies. The instruments used in the qualitative studies were a recorder and also Morgan Kjaer Jensen's- and Malhotra's interview preparation guidelines.

4. RESULTS

In this chapter, the outcome from the empirical study will be presented. The research questions, from chapter two, are used to structure this section.

4.1 How does the too-much-choice effect influence people's online mate choice behavior?

The first research question includes hypotheses 1a-4a and deals with the TMC effect and its' expected effects on *enjoyment*, *difficulty*, *satisfaction*, and *regret* with mate choice. Three different methods, focus groups, questionnaire and in-depth interviews, are used to examine each of the hypothesis separately in the given order above. First, the findings from the focus groups will give some implications about the accuracy of each hypothesis. Second, the results from the questionnaire will give a more straightforward answer to the question. Third, insights from the interviews will be displayed in order to confirm and explain the results further. Finally, to evaluate the credibility of each hypothesis the results from the different methods will be compared in the end of this section. When deciding on rejecting or accepting a hypothesis the questionnaire will be predominant among the three methods.

The questionnaire results will be analyses in help of independent t-tests. Here, a comparison between mean values in the two different groups, few and many, is performed. The questionnaire results will reject a hypothesis if the significance level exceeds five percent and/or if the mean values, between the groups, significantly differ in the opposite way than what is stated in the hypothesis. If the findings in the focus groups or interviews points in an opposite direction from the questionnaire results, we cannot draw strong conclusion. Thus, the hypotheses can neither be accepted nor rejected.

4.1.1 Enjoyment

H1a. A large sample of mate choices is perceived as less enjoyable to choose from than from a small sample of mate choices

Focus groups

According to the participants in the focus groups, the large selection of mate choices is one of the clear upsides with online dating. Most of them found their own circle of acquaintances to be too small. Therefore, the positive attitude towards online dating did not come as a surprise.

"I don't think I ever will settle down with just one man. There are so many options out there and dating is so exciting." Woman, 35

"There is no shortage of men online. If you are looking around, you can find whatever you want!" Woman, 29

Questionnaire

The results from the questionnaire indicate that a large choice set (M=4.24) compared to a small choice set (M=3.90) lead to a *higher* level of enjoyment, which goes against what was expected in the hypotheses. The difference is significant at a 4.4 percent level of significance.

	Many	Few	Difference	Significance
Enjoyment	**4.24**	**3.90**	**0.34**	**0.044***

In-depth Interview - Johan Landgren, founder of Shakemyworld.se

Landgren claims a key success factor for an online dating site to have a large number of registered users. This will further increase the possibility of getting new members to sign up. He also recognizes a tendency for popular events to become even more popular as more members sign on. He explains the phenomenon to be based upon the belief that if you are, for instance, looking for a tall brunette who plays golf, you will rather meet the ideal one at a golf competition where 300 brunettes participate than at another golf competition with only 30 participants. Landgren acknowledges mass-dating to be an upcoming trend as it enables people to quickly scan through several mates *and* simultaneously be able to recognize if there exists any personal chemistry with any of them (Johan Landgren, 2010-05-12).

4.1.2 Difficulty

H1b. A large sample of mate choices is perceived as more difficult to choose from than from a small sample of mate choices

Focus groups

In the focus groups, the majority of the participants found it difficult to find an ideal mate due to the vast selection of possible mates. Women's problem seems to be to choose among all inquires they receive, while men are rather dealing with the issue of establishing contacts and receiving answers to emails they have sent.

"There are too many girls and too much information, I can't choose!" Man, 34

"When I am doing a search I often gets over 500 hits, am I suppose to go through all of the profiles?" Man, 28

"Before, I got countless of emails. I didn't even have time to read all of them. To get rid of the problem I decided to change my profile picture to a less attractive one." Woman, 25

"*Last week I sent emails to more than 50 girls and I got 6 answers, what am I doing wrong?"* Man, 26

Questionnaire

The questionnaire results from independent t-tests indicated that, in line with what was expected, there is a *higher* level of difficulty when choosing among larger choice sets (M=3.04) than from a smaller set (M=3.57). The difference is significant at a 0.60 percent level of significance.

	Many	**Few**	**Difference**	**Significance**
Difficulty	**3,04**	**3,57**	**0,53**	**0.006****

Zara Aram - Certified psychologist and couples therapist at the KBT group

Aram acknowledges a general trend towards fewer active choices in the society. She says that concerning partner choice, it is allowed to "play around" longer and settle down much later in life than it used to be in the past. She claims online dating sites to be an ideal playground for this because they facilitate and encourage this behavior, and also makes it more difficult to settle down. Aram believes the picture mediated by the online dating sites, of countless number of choices and unlimited possibilities, makes people stay too long in their make-believe world. A search engine hit list on an online dating site could easily provide a user with 500 potential mates. It is impossible for people to carefully go through all of them. Therefore, the mate choices today are very likely to be randomly picked and the level of difficulty has clearly increased. Aram finishes off by comparing the mate choice process today with the process a hundred years ago and she concludes that people do not need countless of choices to find a suitable partner. In the past, people only had a few partners to choose from, but most people found a partner anyway. Due to the choice overload today, people are looking too much for "*the instant love feeling*" and to find "*Mr./Mrs. Right"* (Zara Aram, 2010-05-07).

4.1.3 Satisfaction

H2a. A large sample of mate choices generates lower satisfaction with the choice than a small sample of mate choices.

Focus groups

In general, the participants in the focus groups reported dissatisfaction with their dates they had met online. None of them reported that they had found true love through the Internet yet.

"Online dating has really given me the opportunity to meet a huge amount of girls but to be honest, I haven't been attracted to any of them." Man, 34

"I have found several friends through online dating and that is NOT what I am looking for, something got to be wrong." Man, 26

"I don't think I will ever meet him online. I have been a member for over a year now and I've had new dates almost every week but either the guys have been freaks or just not that interesting." Woman, 35

Questionnaire

The questionnaire results showed, in opposite to what was expected, that the respondents exposed to a large option set (M=4.64) compared to a small option set (M=4.28) reported a *higher* level of satisfaction. The difference is significant at a 4.00 percent level of significance.

	Many	Few	Difference	Significance
Satisfaction	**4,64**	**4,28**	**0,36**	**0.040***

Johan Landgren - founder of Shakemyworld.se

Landgren suggests that people perceive their partner choice to be better if they have seen many alternatives before choosing, and this is the primary drive for people to sign up to online dating sites. The possibility of finding a person that meets all your individual preferences and criteria is so much easier when you can screen thousands of people on the website by using filter tools or at large events for singles. He also believes that it is more likely online, among all alternatives, to feel having picked the right one (Johan Landgren, 2010-05-12).

Zara Aram - Certified psychologist and couples therapist at the KBT group

Aram argues that mate choices today are very likely to be randomly picked due to the choice overload on online dating sites. People's internal values are not as detectable online compared to offline and if they are, people do not have time to observe these values in a correct way. Therefore, online users choose more on people's superficial characteristics such as looks and social status. A relationship based on such characteristics may work in the beginning but to make a relationship to last it is essential to share basic values. Consequently, it is almost impossible for people to become satisfied with dates they have found online (Zara Aram, 2010-05-07).

4.1.4 Regret

H2b. A large sample of mate choices generates a higher level of regret with the choice than a small sample of mate choices.

Focus groups

In the focus groups, a general pattern was that the participants did not settle down with one person in a serious relationship. Nonetheless, if they did settle down, they did not stop looking for other mates and therefore returned to the dating sites.

"Although I found a boyfriend at match.com, I didn't really want to eliminate my profile – I kind of got used getting compliments from different guys all the time." Woman, 25

"Even when I am getting more serious with a girl I can't stop myself to sometimes log on to the dating site, just to explore the market a bit." Man, 28

"I don't do relationships because I hate the feeling of being stuck with one person. I mean, perhaps I miss out the really good ones out there." Man, 26

Questionnaire

The questionnaire results indicated that, in line with what was expected, there is a *higher* level of regret with the choice when choosing from a large choice set (M=2.93) than from a small set (M=2.52). The difference is significant at a 2.20 percent level of significance.

	Many	Few	Difference	Significance
Regret	**2.93**	**2.52**	**0.41**	**0.022***

Zara Aram - Certified psychologist and couples therapist at the KBT group

Aram firmly believes that online dating sites provide people with an unrealistic view of love. This results in people swapping between different partners and never become pleased. Instead, she means that people must make a choice and then set off time to actually get to know this person. She finishes of by saying that out of the 500 mates offered on an online dating site, every user probably fit with a majority of them. People just have to give each other a proper chance and understand that the grass is not always greener on the other side (Zara Aram, 2010-05-07).

Jesper Åström - Digital director at the advertising agency Honesty

Åström believes that the online context makes people perceive their choice of partner similar to any other choice they make online, for example when buying clothes or books. He also believes that the partner choice process in that way has been commoditized. The barriers to contact someone online are lower due to the smooth ways of initiating contact and the feeling of being rejected in case of a non-response is reduced. This carelessness leads people to choose wrongly and therefore they often regret their choices. He suggests this general movement in behavior also tend to make people more aware of the possibilities of contacting new, interesting people all the time (Jesper Åström, 2010-05-07)

Helena Ehnbom - CEO of Onlypeople and former market director of match.com

Ehnbom suggests that the large selection of singles online makes people pickier and to use very detailed search criteria in order to find the perfect mate. This large selection also possesses a risk in that some people become mass-daters. These persons are constantly looking for someone better and therefore never settle down with one person (Helena Ehnbom, 2010-05-13).

4.1.5 Result summary

We are able to draw conclusions about hypotheses H1a, H1b and H2b, as it stands clear that the results from the different methods point in the same direction for these hypotheses. However, we cannot draw conclusions about hypothesis H2a as the results from the different methods points in opposite directions for hypothesis. The findings in the focus groups indicate what was expected in the hypotheses. Conversely, the results of the questionnaire showed instead that a large sample of mate choices generates *higher* satisfaction with the choice. Also, fragmented findings could also be seen among the interviews; Aram supported

the focus group findings whereas Landgren supported the questionnaire results. Thus, the following results were obtained;

H1a. A large sample of mate choices is perceived as less **enjoyable** to choose from than from a small sample of mate choices. ***REJECTED***

H1b. A large sample of mate choices is perceived as more **difficult** to choose from than from a small sample of mate choices. ***ACCEPTED***

H2a. A large sample of mate choices generates lower **satisfaction** with the choice than a small sample of mate choices. ***NOT ENOUGH EVIDENCE***

H2b. A large sample of mate choices generates a higher level of **regret** with the choice than a small sample of mate choices. ***ACCEPTED***

4.2 Do the current search tools on online dating sites result in people making poor mate choices?

The second research question of this thesis investigates how the search tools on online dating sites affect people's mate choices and it is answered by a qualitative approach in form focus groups and insights from the interviews. The purpose is to form an understanding for mate search behavior and the fundamental reasons to use online dating sites.

4.2.1 Focus groups

Mainly three tendencies regarding this question could be viewed from the results from the focus groups. First, the participants felt that the main benefits of online dating are time-efficiency and the possibility of a large selection of potential mates.

"When I am not studying I am working or exercising. I don't have time to meet my friends and family, and go out flirting even less. Thanks to online dating, I now have the possibility to keep in touch with several girls." Man, 26

"When doing online dating it feels like Friday- and Saturday night all the time. You don't need to search for appropriate venues like smoky bars, single's clubs or boring parties to meet other singles." Man, 28

"There is no shortage of men online. If you are looking carefully, you can find whatever you want!" Woman, 29

Second, the participants found the search tools on online dating sites to perform badly and the matchmaking functions to be useless. Consequently, they did not feel they were able to benefit or handle the enormous amount of potential mates online.

"Matching tools are worthless. I don't even know myself what characteristics I'm looking for, how should a computer ever be able to know that?" Woman, 29

"I would never use the matchmaking tools. The last thing I want is someone who is exactly like I am." Man, 28

"The search process takes ages and I never find what I am looking for." Man, 26

Third, the participants argued that they are using different strategies when choosing a mate online than in real life due to the enormous selection of possible mates. All of them began their search process by looking at profile photos.

"Due to the huge amount of women, I find it most easy to look through a lot of profile pictures first. Thereafter, I inspect the most gorgeous girls' profiles more carefully. Last, I send messages to some of them and hopefully get a reply." Man, 34

"Photos are easier to take in than text. Because of the huge amount of men, the only way of doing it is to check out photos." Woman, 25

Next, insights from the interviews will be displayed in order to further examine the question.

4.2.2 In-depth interviews

This second research question has been discussed with four persons, all with different perspective on online dating.

Jesper Åström - Digital director at the advertising agency Honesty

Åström rejects the search engine of online dating sites as they are designed today. He speculates that a search engine should rather be built upon free search, where all words in a presentation could be "tagged" and found by the search engine and thereafter coming up with suggestions. He believes the way of finding people on online dating sites is not adjusted to the surrounding development of the digital environment; that is, the increased usage of interactive and social media (Jesper Åström, 2010-05-07).

Simon Sundén - Digital director at the advertising agency Honesty

Sundén suggests that people, before they want to do an explicit search, they first want to see the full range of options available. He believes that when designing online mate search tools, dating sites should be inspired by Google searches, where people usually start to type in one word followed by people adding more words to get fewer options and a more accurate search. He points out that the search instruments on most dating sites today are not search tools but

instead filter tools. He argues that filter tools can be used in a first search stage but thereafter dating sites must develop more advanced search instruments (Simon Sundén, 2010-04-28).

Zara Aram - Certified psychologist and couples therapist at the KBT group

Aram emphasizes the importance for online dating sites in offering a better matching function in order to actually match-make people. Today, all questions on the biggest online dating sites touch only upon shallow questions as preferred eye color, political standpoint and educational level. According to Aram, the biggest challenge for online dating sites is to form questions that really tell something about people's values and personality. She claims that online dating sites and their users still rely on filtering potential mates on for example age span and areas of living (Zara Aram, 2010-05-07).

Helena Ehnbom - CEO of Onlypeople and former market director of match.com

A prerequisite for using the Internet effectively, given the amount of information available, is to be able to formulate excellent searches. But how is it possible to know if the most relevant result is shown among the first options? Perhaps the best option is on page 20 of the hit list. Moreover, the search process on online dating sites requires, in order to generate good results, an extremely high level of self-knowledge. This causes another problem because when it comes to dating the searcher seldom knows exactly what to search for. Ehnbom further argues that anyone who has found "the right" probably can agree on that this person did not meet all criteria stated before. The ability to search on the exact length, hair color, occupation, location, interests, etc is consequently both fantastic and very risky at the same time. Moreover, Ehnbom supports well-developed personality tests. She also thinks that more sophisticated text search tools should be developed since they would better use people's profile texts and thus make it easier for people to find good matches (Helena Ehnbom, 2010-05-13).

5. DISCUSSION

In this section we will reflect upon the results of the focus group, the questionnaire and the in-depth interviews, and relate the findings to relevant theory. The analysis begins with a general discussion about mate choice in the digital environment and related challenges. Thereafter, the consequences for online companies regarding these challenges will be

considered and possible solutions will be suggested. Also, recommendations for further studies will be proposed.

Main problem:

How does the digital environment and large selection of mates online affect people's mate choices, and what are the implications for online dating sites?

5.1 Discussion and critics of the results in the study

The results presented above strongly supports a certain degree of TMC effect in online mate choice process that is different from the corresponding offline mate choice process. Before we proceed and analyze conclusions and implications of these findings, we firstly would like to discuss whether these results have originated from an actual TMC effect or if other factors might have affect the results as well. Also, if the in-depth interviews and focus groups participants have contributed to provide a truthful picture of the online mate choice process.

Firstly, the picture of the choice process provided by the focus groups might not be representative for all online daters since the participants were all recruited from the same dating website, Match.com. However, Match.com is the largest and most commonly used online dating service today, why we argue their experience to be valid for a majority of the online daters. Moreover, they all claimed to be looking for a serious partner to settle down with, and therefore it is likely that other users with other intentions use other choice processes. However, we do believe that we were able to adjust the picture when conducting in-depth interviews with different areas of expertise, providing an external view of different users' strategies. Further, when reflecting on the questionnaire, we would have liked to include the possibility of choosing none or several of the profile alternatives instead of forcing them to choose exactly one alternative. By using this measure, the TMC effect could possibly have been shown more clearly, if the choice process would have lead to deferred choices. Even more alternatives in the larger option might also have amplified the effect. The differences in profile presentations and lack of photos found on real online dating sites might further have influenced the results. There is a risk that the choice process in the questionnaire might have been perceived as easier and to have produced a lower level of satisfaction, enjoyment and regret than an actual mate choice would have done. However, these aspects were carefully weighed up against the possibility of distributing the questionnaire to as many respondents as possible, given a level of satisfying similarity to the online mate choice. Finally, we also would like to emphasize the fact that we have used a rather small sample of 261 respondents and also that this sample mainly represents people in the ages 20-30, living

in large cities. Despite these facts, it is worth noticing that the questionnaire produced significant results, which nevertheless implies the strength of the findings.

5.2 Conclusion of results

The starting point for our study was to examine in what way the mate choice process is affected by the choice abundance in an online environment. In the light of the TMC effect, which is proved to hold true for particularly consumer product choices, the main purpose was to decide on how the vast selection of mate choices online affect the mate choice process. In terms of users' experiences, we intended in particular to examine the effects on perceived level of *enjoyment*, *difficulty*, *satisfaction* and *regret* when choosing between numerous mate options. We are now able to conclude that the TMC effect clearly exist considering the perceived level of *difficulty* and *regret* in the choice process. However, the experienced *satisfaction* and *enjoyment* proved to produce more ambiguous results. An explanation and further discussion concerning these four variables will be presented below. The online mate choice process also proved to be different from that in an offline context, and obviously affected by the choice overload. We find these results to be both interesting and fascinating as the findings question the currently applied search tools on dating sites as well as the advantages of the development of the digital environment regarding mate choice. Below, we will present the effects on the online mate choice process in order to provide answers to the purposes of this thesis.

5.2.1 Mate choice in the digital environment

5.2.1.1 Online mate choice in a choice- and evolutionary theory perspective

The theoretical foundation of this thesis was provided by classical choice and mate choice theories, where a main part of the reasoning was based upon the theories on decision models in cognitively demanding environments and mate choice described as step-wise decision processes (Payne et al, 1993, Miller & Todd 1998). The results of this study strongly imply that today's mate choice processes are influenced by both the large online mate selection and the traditional mate choice theories. Particularly, we can conclude the mate choice *screening* and *evaluation* are influenced and precipitated by an online context compared to in an offline environment. For instance, online daters use less time for perceiving sexual cues and they also tend to evaluate people's underlying traits more hastily than offline daters. This study shows that users of online dating sites demand time-efficiency. All these aspects are worth stressing since the online context therefore seems to amplify the usage of heuristics and to

make people choose satisficing alternatives that only are "good enough". Taken together, these findings point towards Payne's two-stage decision making model, used in complex environments, to be applicable also in online mate choice. In addition to this, the findings from the focus groups support the application of the three-step mate choice presented by Miller and Todd (1998) to be highly relevant. Based on the results, we assume a mix of the two strategies mentioned along with the aspect of mutual choice, to be the most appropriate explanation of online mate choice process. Accordingly, we are therefore able to widen the usage of the classical theories to also include the online mate choice process. Below a model of the online mate choice process is presented;

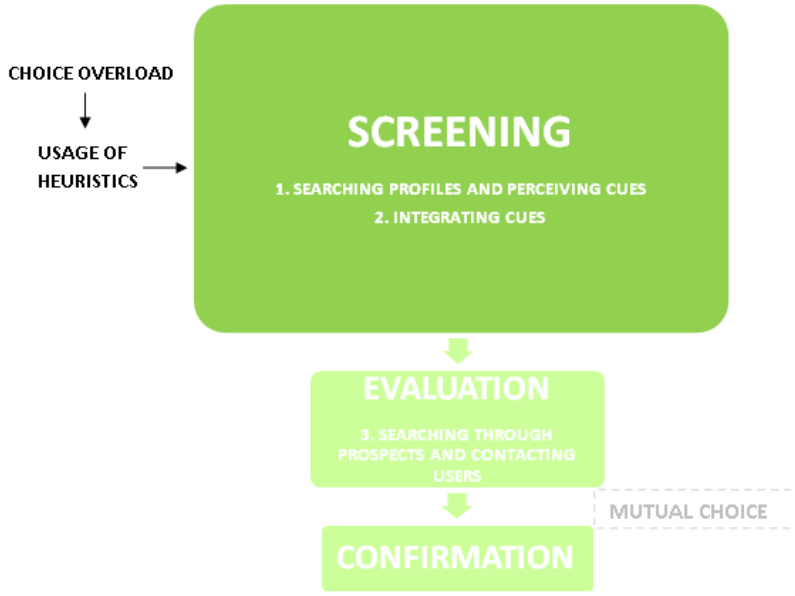

FIGURE 2: Current Online Mate Choice Process (authors own construction)

The first stage, *Screening,* consists of scanning through a multiple number of pictures and is at most filtered on city of residence and age. Here, online daters use mainly profile photos as heuristics to make a decision. At the same time, people identify a subset of the most promising alternatives integrating cues and pictures to estimate underlying traits to judge overall attractiveness. Thus, the perception of cues online is different from the perception of cues offline. In offline environments, people can observe several different cues to judge overall attractiveness. However, in online environments only physical cues, like profile photos, can be used as heuristics to estimate underlying traits and to judge overall attractiveness. This has implications for the next step, *Evaluation*. In this second step, people are supposed to evaluate the profiles in more depth and perform relative comparisons across the options in order to be able to decide which profiles to contact. Due to the unsatisfying consideration set quality that follows from the inadequate Screening stage in online

environments, we argue that the online choice strategy is less of a rational process compared to in an offline context. Thus, this often results in people contacting, for them, suboptimal profiles. The third step, *Confirmation,* deals with the mutual choice aspect. Here, the choice made is either confirmed or rejected by the opposite party. In this stage, the opposite party evaluates the inquiry in competition with other inquires and with the person's own searches. In case of acceptance, this is the first contact between the two parts. Moreover, the acceptance result in the initiator part also receives more information about the confirming part and hence being able to further evaluate the person. We would like to emphasize that online daters perceive this confirmation phase as a critical part of the online mate choice process. The reason is that in an offline environment it is possible to recognize mutual choice and hence this confirmation procedure between the parts happens naturally. In contrast, recognition of mutual choice is not feasible on online dating sites due to the fact that these sites use one-way communication. This forces users to spend a lot of time emailing potential mates that possibly are not interested at all. This became obvious in the focus group discussions where the participants, especially the women, complained about the time ineffectiveness due to the many emails they received.

5.2.1.2 Online mate choice in perspective of the too-much-choice effect

The main purpose consisted further of deciding on whether the TMC effect influences the online mate choice. The hypotheses in this study were therefore formulated in accordance with the characteristics of the TMC effect. The results from the questionnaire, insights from in-depth interviews and findings from focus groups all confirmed that the existing online mate choice abundance is resulting in a certain TMC effect. However, not all characteristics of the TMC effect could be verified, as the *enjoyment* parameter were rather positively affected by the larger choice set and the *satisfaction* parameter demonstrated vague answers.

The focus groups confirmed a general pattern of higher frustration due to the large sample of mate choices online, and an anxiety of missing out on someone while in contact with another person. The quantitative survey showed that people felt *more regret* and simultaneously found the choice process to be *more difficult* when choosing from a large choice set. All together, the findings therefore conclude some of the TMC effect to be present also in an online mate context.

Conversely, the *questionnaire* produced results contradicting the TMC effect. The parameters *satisfaction* and *enjoyment* were, unexpectedly, *higher* when choosing from a large set size of mates, instead of *less satisfaction* and *enjoyment* as predicted from theories on the TMC effect. These results might appear conspicuous as previous studies show a clear tendency for larger choice sets to produce lower *satisfaction* and *enjoyment* of the choice process (Iyengar & Lepper, 2000). Moreover, both the in-depth interviews and focus group discussions showed a tendency of people feeling *higher level of enjoyment* when choosing from a large choice set. Regarding the *satisfaction* parameter, the in-depth interviews and focus group discussions showed mixed results. The focus groups reported *less satisfaction* when choosing from a large choice set. The in-depth interview with the psychologist, Aram, also pointed in this direction. For instance, Aram argued that a large choice set did not improve people's mate choice but instead made people confused and less able to make a choice. In opposition, the in-depth interview with the online dating site founder, Landgren, supported a large choice set.

These mixed answers can be explained by the stated difference between what people anticipate that they will feel about a choice and what they actually feel (Lenton et al., 2008). We argue that the questionnaire results and the interview with the online dating site founder reflect what people anticipate they will feel about their choice while the focus group discussions and the interview with the psychologist, in contrast reflect people's actual experiences. In order to understand the main problem of this thesis, it is more important to recognize people's actual experiences from a given choice. Therefore, we believe that the satisfaction parameter is most likely to be in accordance with the TMC effect and as a result also follow our predicted hypothesis. Although, based on the results from this study, we do not have evidence enough to make conclusions about this in an appropriate way.

In summary, the findings from the study show on the one hand that people found the choice process *more enjoyable* and possibly also *more satisfactory* when choosing from a larger supply of mate options. On the other hand, a larger choice set lead people to feel *more regret* about their decision and also find the decision process to be *more difficult*. Thus, people have both positive and negative attitudes towards larger choice sets. This ambivalence could be spotted in the focus groups too. From the focus group discussions we understood that there are mainly two reasons to do online dating: The first reason is that it offers *a large selection*

of potential mates and the second reason is that it is *time-efficient*. Comparing this to the interviews dialogues and other research it is clear that these two reasons are contradictory. These paradoxical relationships will in the next section be explained in evolutionary terms.

5.2.1.3 The conflict between wanting too much and choice overload

We argue that the larger option users have to search through, the *more difficult* it becomes to overlook irrelevant information in member profiles and not be distracted to aspects that were not originally relevant to the initial search. These new aspects make people to spend longer time searching than they would if the choice set was much smaller to begin with. In conclusion, the *large online selection of potential mates* with profiles containing a lot of inadequate information confuses people, and this leads to a reduction in the *time-efficiency* parameter. Accordingly, the two reasons, reported from the focus groups as most important, are creating a clash of interests. This form of TMC effect is obvious; having more choices takes more time to sort through. But what is not so apparent is that we have limited brain resources and limited time to expend in social activities (Dunbar, 1992). In line with the evolutionary instinct to seek variety (Darwin, 2006), we have a tendency to prefer more options to less, and as a consequence reducing *time efficiency*. This explains why people choosing from a *large* choice set valued *enjoyment* parameters higher than people that chose from the *small* choice set. Another reason to why it is so difficult to persuade users that more is not always better is because users might not easily recognize the disadvantages of choice overload. For example, as previously mentioned, the negative effect of *regret* reported when choosing from a large choice set is a future consequence appearing when the choice is already made.

Therefore, we conclude that humans are adapted to always strive for more options but in the context of the unlimited choice that exists today this adaption have created a *conflict* for humans between wanting too much and at the same time, not wanting to obtain the negative aspects of choice overload. This explains why people reported higher *enjoyment* but at the same time felt more *regret* and found it more *difficult* when choosing from the larger choice set size.

5.2.1.4 The effect on choice quality

Our secondary purpose was to examine whether the current online search tools lead people to make wrong choices, or in other words, to choose suboptimal mate options and miss out the best mate choice alternatives. Given the results discussed above, we are able to conclude that the search tools are, in most cases, not resulting in the most optimal choice alternatives. As the search hit list is a filter presenting what members believe is the "true" selection of mates, the filter criteria is of outmost importance. An obvious consequence of insufficient search criteria is that the search will produce a non-relevant and incorrect hit list of potential mates. The findings state that online dating search tools confront users with fundamental and extremely difficult questions; what are the most essential criteria for your partner-to-be? These questions require an extremely high level of self-knowledge, which not is necessary in an offline context where people recognize mutual choice and reciprocation immediately. Regarding the final choice, we therefore argue today's design of online mate search tools to contribute strongly to making users choose randomly among many *saticificing* alternatives instead of from actual good matches. This produce high search costs for the users and increase the total time spent on searching.

5.2.2 Final discussion

Online, people choose mates quickly, selective and with a certain feeling of toss-up. At first, in the Screening stage, people expand their alternatives as much as possible only to thereafter find the choosing to be awfully difficult. Second, in the Evaluation stage, when a number of proposals are selected, people do not "have time" to rationally evaluate the options so all of them are selected and proceeds to the third stage. In the third Confirmation stage, where the choice become "mutual" and "two may become one", the approval typically is made too carelessly and often both partners have a feeling of perhaps being able to find something better in the future. Alternatively, there is no Confirmation stage at all due to a preceding inadequate screening and evaluation process. Bearing the high costs of the TMC effect in mind, the designers of online dating sites have to simplify the choice process in order to create an instant connection between users to create a bridge between online and offline context. Therefore, suggestions and practical implication for designer and marketers of online dating sites will be discussed below in section 5.3.

5.2.3 Suggestions for further research

As the research field of the online dating choice process is rather unexplored, this study might be a valuable starting point for further research and there are multiple ways of proceeding and digging more deeply into the subject. Previously mentioned in the critics of this study, an appropriate continuation of research results would be to explore the TMC effect using larger mate choice selections and also a possibility to choose several or none of the mate choice alternatives. Another valuable contribution in the understanding of the TMC effect would be to present respondent to very similar or very different mate choice alternatives and thereafter compare the result when also using different sizes of choice sets. These measures would extend the possibilities to generalize the results of the TMC effect.

5.3 Practical implications

The results from this thesis bring interesting and valuable implication for designers and marketers of online dating sites. This is further discussed below.

5.3.1 Online Mate Choice Challenge: The problem with consumer wanting too much and providing an appropriate number of choices

Online dating sites should try to satisfy people's paradoxical desire for more options but equally important, to make it easier narrowing down large choice sets. At present, some sites do the opposite: when a search results yields fewer than 50 profiles, the site encourages users to broaden their search criteria. Instead, if people should be able to make sensible choices, online dating sites must take the time-cost of too much choice into consideration. However, as users are attracted to large choice sets of mates, companies must keep the number of users relatively high. To be able to simultaneously narrow down the consideration set, we suggest online dating sites to develop decision aids. We previously stated that people use a three-stage model when choosing a mate in an online dating context. Below, we will propose decision aids for each stage in this model.

5.3.1.1 Moderating the mate choice conflict stage 1: Mate-Matchers

In the first stage, we advise online companies to recruit Mate-Matchers (MM). The MM is suggested to consist of behavioral psychologists, designing a question set that deeply examines the individual's set of values, personality and opinions. As the study has recognized users to experience the selection process to be impersonal and random, this is an effective way of approaching and also receiving more information about the users of the site. The

personalized list provided by MM will show recommended mate options describing shared values and characteristics. These recommendations will be based on three types of parameters: relative attribute importance, minimum acceptable mate characteristics levels and similar mate value, as courtship effort is most likely to be reciprocated between individuals with similar mate values (Johnston, 1997, Gigerenzer & Todd, 1999). At last, the MM will impose a limit on number of mates, based on the cognitive maximum of possible social connections, to be included in the list. Thus, the dilemma of wanting to be able to compare between all alternatives and yet only find the very best mate options can be solved through such Mate-Matchers.

5.3.1.2 Moderating the mate choice conflict stage 2: Mate-Comparison

In the second stage, we suggest using a Mate-Comparison (MC) that allows consumers to organize attribute information about different mates and then make a comparison. To make it possible to use such a MC on online dating sites the information presented in the profiles must be limited to a set of only the most important characteristics. Very basic forms of this type of decision aid are a "shopping basket" or a drop-cart, where users can save interesting profiles while screening alternatives. This can in a later stage be used for side-by-side comparisons in terms of their characteristics and values. This MC matrix can be refined by for instance allowing members to rate the politeness of their dates, as well as the accuracy of their dates' profile presentation. This is the new "community" approach to online matching enabling people, in a time-efficient and accurate way, to compare attributes about different mates. The MC is implemented as an interactive display format in which mate option information is presented in an alternatives (rows) x characteristics (columns) matrix. While viewing profiles at the online dating sites, the user can chose to have profiles added to his/hers personal drop-cart.

5.3.1.3 Moderating the mate choice conflict stage 3: Confirmation before communication

In the third stage, the initiators interest will be communicated to the profile in question. In turn, this person must confirm a mutual interest before the initiator can be able to further contact the chosen person. Thus, in this way, the inability to recognize mutual choice and problems of receiving too many emails will be solved. The usage of this decision aid should

result in a shift in emphasis on random and superficial mate choices to instead actually matching people.

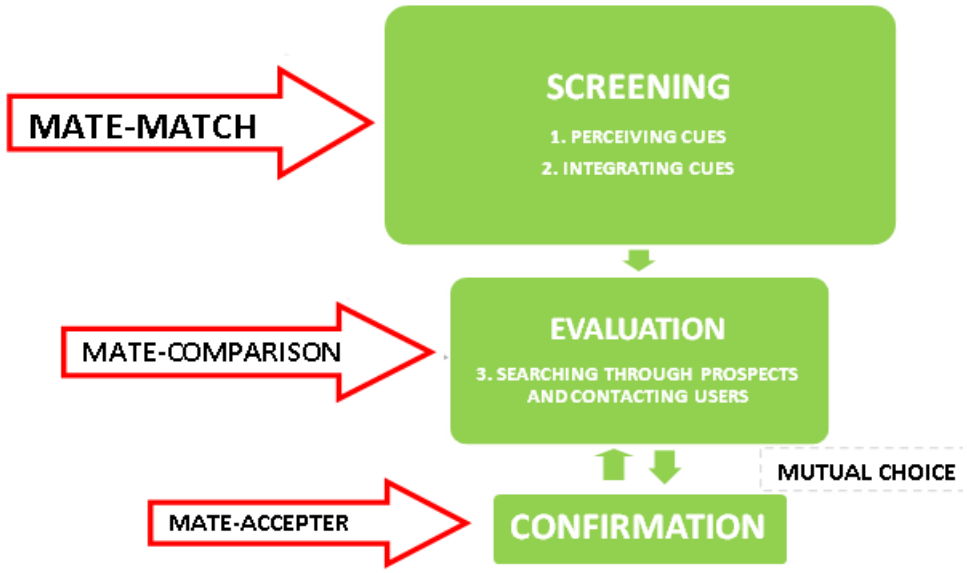

FIGURE 3: Online Mate Choice Process With Decision Aids (authors own construction)

5.3.1.4 Conclusions on the online dating sites' challenge regarding choice process and the advantages of using decision aids

In summary, we argue that decision aids may have highly desirable advantages for the mate choice process. The time spent on searching for information will be reduced, the size and quality of the users' consideration sets will be enhanced and also the quality of users' final decisions will be improved. Basically, the decision aids will allow users to make much better decisions while expending substantially less effort. Such tools will also allow people to more easily detect mates that not meet their preferences, thus reduce the number of unsatisfied online daters and increase the chances of mutual choice to occur.

Further, the study suggests many positive consequences to come out from interactivity, spontaneity and immediacy on online dating sites. Therefore, it implies that online dating companies saturating this demand are probable to win the liking of many users. Accordingly, the consequence is that online marketers should let go of the need to control and belief that members only are supposed to communicate and interact through their own website. It is a fact that people already today use other means of communication as Facebook, MSN and Friendster to communicate, whether the online dating site is involved or not. By means of for instance cell phones and other mobile Internet-devices online dating sites could add a new

user dimension, and simultaneously be able to track and understand the user's activity. Through integrating the decision aids mentioned above, online dating sites would be enabled to also work pro-actively with their customers, and suggest possible matches without members screening alternatives at all.

Finally, MM and MC may not always be a perfect decision aid. For example, even though MM can help users to find a more optimal partner they might be too expensive for companies, and should therefore be weighed against the expected results in form of more satisfied customers. We do not conclude that these tools always and unconditionally lead to desirable outcomes for users. Rather the effects of MM and MC found should be viewed as a demonstration of the potential effect of typical, well-functioning search tools, and an effective way to moderate the fundamental conflict between wanting too much and choice overload.

5.3.2 Choosing pathway

As the results imply that daters usually overestimate the point at which more choice become too much, there are two ways for companies to go. One method is that the company can advertise what the users think they want, which is "million of opportunities and options" (Match.com). This approach might be useful to sign on a lot of users in a short period of time. However, another way to go is to give users what they truly ask for, which is finding an optimal mate in a short period of time. Here, the amount of offers must be adjusted to humans' ability to manage information. The last approach might, in the beginning, be harder because of the difficulty of convincing users that more is not always better. Although in a long-term perspective we believe that it is better to take the hard way and satisfy the users' core needs. This method will help users to find an optimal choice in a more time-efficient way. And needless to say, customers are a company's way to success. This is even truer nowadays when word-of-mouth is an extremely powerful marketing tool and news is spread like wildfire online through social networks sites.

5.3.3 Future discussion

The findings of this study are tailored to help online dating companies to develop well-functioning search tools in order to support their customers to make good decisions. Nevertheless, the study can also provide guidance to companies in general, that offers customers various options.

The global trend today points towards an even larger choice overload, which may increase the negative aspects of choice overload even more. If this forecast is true one may believe that the loyalty to people, as well as, to products will decrease in the future. Will people in the future never have a favorite brand or settle down in proper relationships? And, is the concept of core family on the way of disappearing? Today, in comparison to just a couple of decades ago, it is rather the rule than the exception that people have several relationships during a lifetime. The increased supply of partners due to the development of the Internet might be one causing factor to this change in social behavior. Should we fight to find eternal love, or are we just as happy living as singles or with different people in short-term relationships?

With a whole generation accustomed to interact and socialize online, it is likely the future withholds even more interaction and communication online and thus brings a bright future for the online dating market. Using online dating sites is consequently not just a hype, but a future evident way of finding a mate. Designers and marketers of online dating sites are accordingly in a unique position to shape and decide on whom and in what way people will find their partners. We conclude with the quotation presented in the beginning, now proven to be true in this thesis;

*"You could be successful **online**, but it's random,"*

Lisa Clampitt

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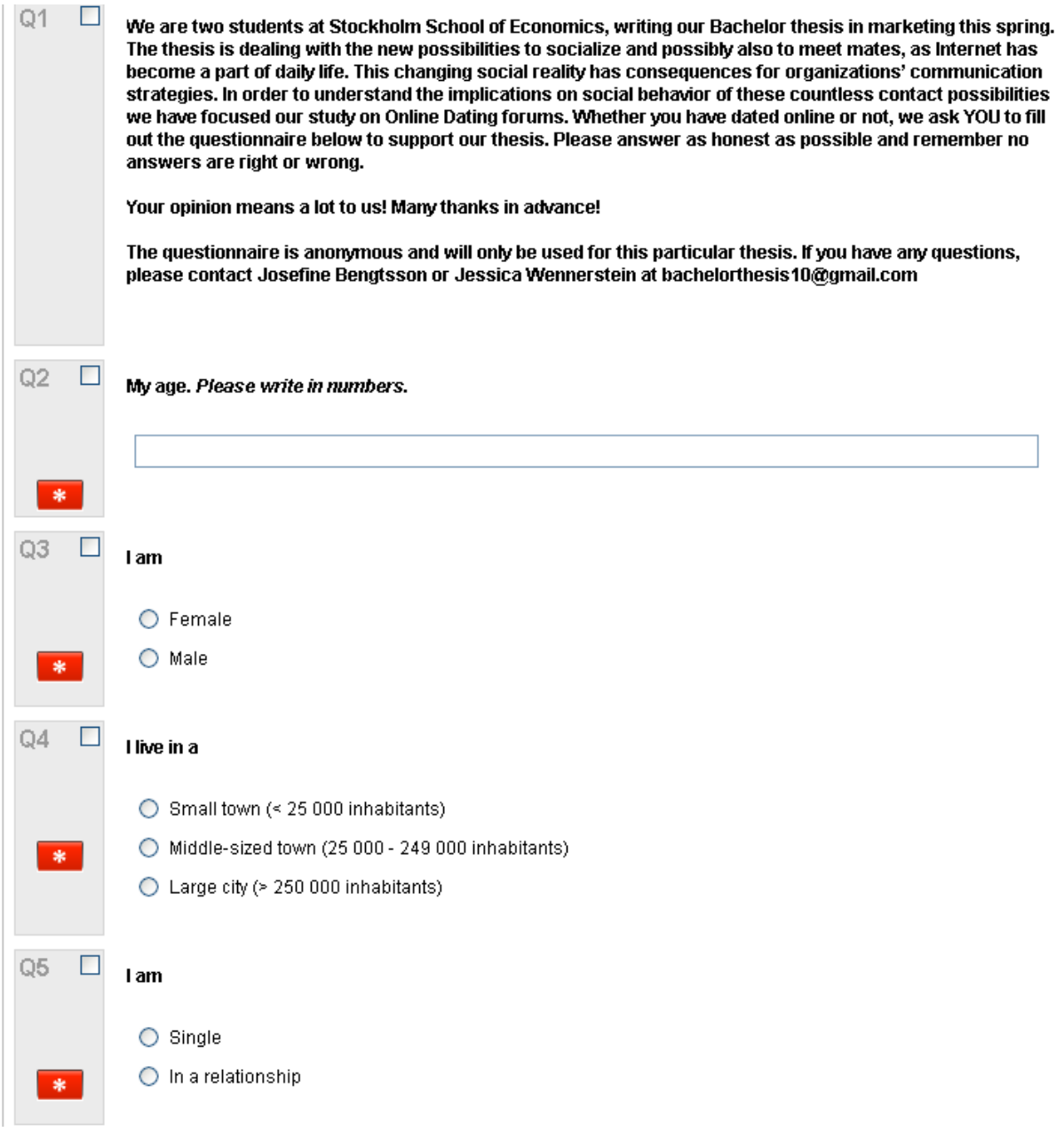
Helena Ehnbom, CEO of Onlypeople and former market director of Match.com 2010-05-13

7. APPENDIX

Appendix 1: Focus group discussion questions

- What are the main advantages/disadvantages with online dating? How do they differ from an offline dating context?
- How do you search for people to contact?
- How do you make your final decision whom to initiate contact with? When being contacted, what makes you to either answer or not?
- How do you find the search tools to function as they are constructed today? If you were to change anything, what would you change?

Appendix 2: Questionnaire, many alternatives



Q1

We are two students at Stockholm School of Economics, writing our Bachelor thesis in marketing this spring. The thesis is dealing with the new possibilities to socialize and possibly also to meet mates, as Internet has become a part of daily life. This changing social reality has consequences for organizations' communication strategies. In order to understand the implications on social behavior of these countless contact possibilities we have focused our study on Online Dating forums. Whether you have dated online or not, we ask YOU to fill out the questionnaire below to support our thesis. Please answer as honest as possible and remember no answers are right or wrong.

Your opinion means a lot to us! Many thanks in advance!

The questionnaire is anonymous and will only be used for this particular thesis. If you have any questions, please contact Josefine Bengtsson or Jessica Wennerstein at bachelorthesis10@gmail.com

Q2

My age. *Please write in numbers.*

Q3

I am

- Female
- Male

Q4

I live in a

- Small town (< 25 000 inhabitants)
- Middle-sized town (25 000 - 249 000 inhabitants)
- Large city (> 250 000 inhabitants)

Q5

I am

- Single
- In a relationship

Q6

I am / have previously used online dating sites

- ○ Yes
- ○ No

Q7

For how many months, at present and earlier, have you used online dating forums?

Q8

If you were single and an online dating site existed that was perfect in every sense to you, how likely is it that you would use it?

- ○ Very Unlikely
- ○ Unlikely
- ○ Somewhat Unlikely
- ○ Undecided
- ○ Somewhat Likely
- ○ Likely
- ○ Very Likely

Q9

I have met my current or a previous partner online

- ○ Yes
- ○ No

Q10

Now, imagine you have set up for an online dating site with the goal of selecting the one individual of whom you would most prefer to make contact, and possibly, meet.

A separate group of participants (n=97) has been asked to rate the individuals' physical attractiveness of each of the profiles on a scale 1-10. The average score they received is an indication of that person's perceived attractiveness.

Also, the individuals' social status, present and future financial status has been evaluated.

- Peter is 27 years old. He is very popular within his social network, has a well-paid job at a travel agency and is moderately handsome. On a scale, he is rated: Physical attractiveness: 6 . Social status: 8 . Present and future financial status:6
- Fredrik is 27 years old. He is unemployed with a high-school degree. He is very good-looking and has a lot of friends and social connections. On a scale, he is rated: Physical attractiveness: 8. Social status: 9 . Present and future financial status. 3
- Christoffer is 27 years old. He is a fairly attractive man and has a moderate social network. He is an employee at a lawyer's office and is becoming a junior partner. On a scale, he is rated: Physical attractiveness: 5. Social status: 6. Present and future financial status: 9
- John is 27 years old. He is a successful event manager and keeps in touch with a wide network of friends. He is not that good-looking. On a scale, he is rated: Physical attractiveness: 3. Social status :8 . Present and future financial status: 9.
- Simon is 27 years old. He has a moderate number of friends, is quite attractive and is permanently employed by a pr-agency. On a scale, he is rated: Physical attractiveness: 7. Social status: 6. Present and future financial status: 7.
- Aaron is 27 years old. He is a very successful lawyer and holds an impressive network of friends, acquaintances and workplace relations. He is not physically attractive at all. On a scale, he is rated; Physical attractiveness: 1. Social status: 9. Present and future financial status: 10
- Gustaf is 27 years old. He is working as a model and is considered to be very good-looking. He receives short-term job offerings without future guarantees. He has some close friends and social connections. On a scale, he is rated; Physical attractiveness :10. Social status: 5. Present and future financial status: 5
- Victor is 27 years old. He is moderately handsome, has a wide social network and holds an average position at an engineering company. On a scale, he is rated; Physical attractiveness: 6. Social status: 8 . Present and future financial status: 6.
- Mattias is 27 years old. He is a doctor at a public hospital and is an average-looking man. He has some good friends and some acquaintances in his network. On a scale, he is rated; Physical attractiveness: 5. Social status: 6. Present and future financial status: 9
- Robert is 27 years old. He is a very successful engineer and has an average number of friends. He is not attractive. On a scale, he is rated; Physical attractiveness: 3. Social status: 7. Present and future financial status: 10.

- Carl is 27 years old. He is working as personal trainer at a gym. He is quite social and he is in a very good physical shape. On a scale, he is rated; Physical attractiveness: 8. Social status: 7. Present and future financial status: 5
- Sam is 27 years old. He has multiple friends and acquaintances, he is a creative director at a large advertising agency and is moderately good-looking. On a scale, he is rated; Physical attractiveness: 5. Social status : 9. Present and future financial status: 6
- Johan is 27 years old. He is extremely handsome and a very skilled computer programmer. He has no close friends or social network. On a scale, he is rated; Physical attractiveness: 9. Social status: 1. Present and future financial status: 10
- Thomas is 27 years old. He is working as a policeman and has an average network of friends. He is very handsome. On a scale, he is rated; Physical attractiveness : 8. Social status : 6. Present and future financial status: 6
- Eric is 27 years old. He is working as a sales person, is very socially skilled and in a fairly good physical shape. On a scale, he is rated; Physical attractiveness: 6. Social status: 9. Present and future financial status: 5.
- Max is 27 years old. He is a journalist receiving infrequent job offerings. He is good-looking and very popular in his social network. On a scale, he is rated; Physical attractiveness: 8. Social status: 9. Present and future financial status: 3
- Richard is 27 years old. He is an attractive man with a good job at bank office. He does not have many good friends. On a scale, he is rated; Physical attractiveness: 7. Social status: 5. Present and future financial status: 8
- Klas is 27 years old. He is a well-established, published writer. He has a quite small number of friends and is an average-looking man. On a scale, he is rated; Physical attractiveness: 6. Social status: 4. Present and future financial status: 10
- Henric is 27 years old. He is a designer receiving irregular job projects. He is quite attractive and has a large number of friends and work connections. On a scale, he is rated; Physical attractiveness: 7. Social status: 9 . Present and future financial status : 4.
- Michael is 27 years old. He is fairly attractive, has a somewhat large social network and a permanent employment as a dentist. On a scale, he is rated; Physical attractiveness: 6. Social status: 7. Present and future financial status: 7

Q12

Consider your chosen option above. How **satisfied** are you with your choice?

- ○ Very Dissatisfied
- ○ Dissatisfied
- ○ Somewhat Dissatisfied
- ○ Neutral
- ○ Somewhat Satisfied
- ○ Satisfied
- ○ Very Satisfied

Q13

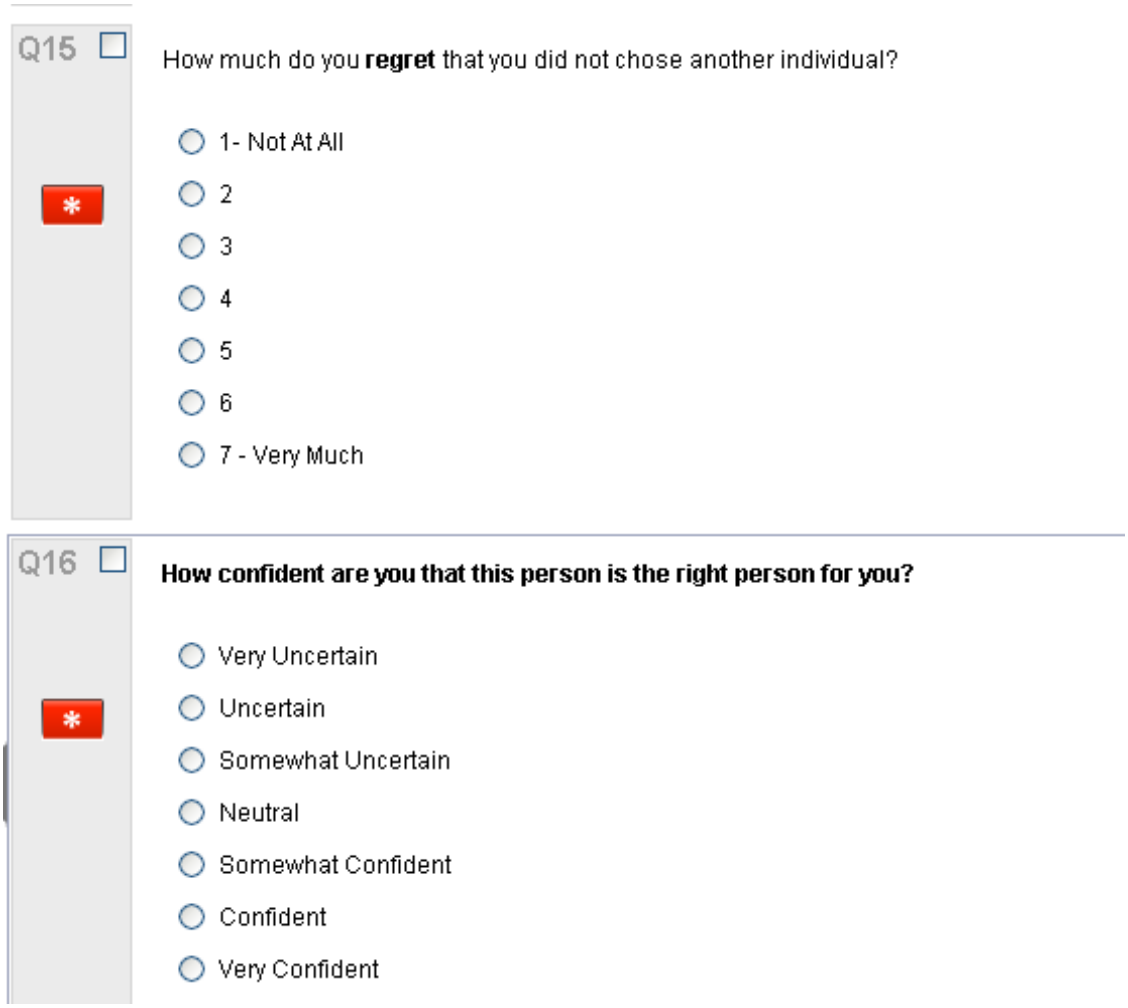
How **enjoyable** did you find it to make the decision?

- ○ Very Unpleasant
- ○ Unpleasant
- ○ Somewhat Unpleasant
- ○ Neutral
- ○ Somewhat Enjoyable
- ○ Enjoyable
- ○ Very Enjoyable

Q14

How **difficult** did you find it to make this decision?

- ○ Very Difficult
- ○ Difficult
- ○ Somewhat Difficult
- ○ Neutral
- ○ Somewhat Easy
- ○ Easy
- ○ Very Easy



Appendix 3: Comparison between respondent groups

	Many (127)	Few (134)	All (261)
Average age	25.92	27.67	26.81
Women	49%	60%	54%
Men	51%	40%	46%
Large city	83%	66%	74%
Middle-sized city	15%	28%	21%
Small town	2%	7%	5%
In a relationship	44%	55%	49%
Used online dating	8%	8%	8%
Met partner online	5%	4%	4%
	Many (127)	**Few (134)**	**All (261)**

Appendix 4: SPSS results

Correlations

			Enjoyment	enjoy2
Spearman's rho	Enjoyment	Correlation Coefficient	1,000	,981**
		Sig. (2-tailed)	.	,000
		N	8	8
	enjoy2	Correlation Coefficient	,981**	1,000
		Sig. (2-tailed)	,000	.
		N	8	8

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

			Satisfaction	satis2
Spearman's rho	Satisfaction	Correlation Coefficient	1,000	,777*
		Sig. (2-tailed)	.	,023
		N	8	8
	satis2	Correlation Coefficient	,777*	1,000
		Sig. (2-tailed)	,023	.
		N	8	8

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

			Difficulty	diff2
Spearman's rho	Difficulty	Correlation Coefficient	1,000	,961**
		Sig. (2-tailed)	.	,000
		N	8	8
	diff2	Correlation Coefficient	,961**	1,000
		Sig. (2-tailed)	,000	.
		N	8	8

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

			Regret	regret2
Spearman's rho	Regret	Correlation Coefficient	1,000	,883**
		Sig. (2-tailed)	.	,004

		N	8	8
	regret2	Correlation Coefficient	,883**	1,000
		Sig. (2-tailed)	,004	.
		N	8	8

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5: In-depth interview questions

- How do you think the online mate choice process is carried through?
- How do you think the numerous mate choice options online affect people mate choices?
- Do you think the current search tools make people choose satisfyingly?
- What do you see as the greatest challenge in online dating sites' search process?