The effect of information provided on a Facebook profile on romantic attraction.

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Declaration Statement

I hereby certify that the material, which I now submit for assessment on the programmes of study leading to the award of a Master of Science (Research), is entirely my own work and has not been taken from the work of others except to the extent that such work has been cited and acknowledged within the text of my own work. No portion of the work contained in this thesis has been submitted in support of an application for another degree or qualification to this or any other institution.

Signature of Candidate	Date
I hereby certify that all the unreferenced we for the award of a Master of Science (Rese Parsons. No portion of the work contained support of an application for another degree institution.	earch), is entirely the work of Jenna I in this thesis has been submitted in
Signature of Supervisors	
Signature of Supervisors	Date

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The effect of information provided on a Facebook profile on romantic attraction.

Jenna Parsons

The aim of this study was to explore the effect information provided on a social network profile has on romantic attraction. Participants were recruited online, and from the student population of an Irish third-level institution. Nine semi-structured interviews were carried out to determine the use of Facebook in romantic relationships. A total of 637 college students then took part in a factorial experiment to examine the relationship between self-generated, system-generated and friendgenerated information provided on a Facebook profile and the participants' ratings on a Romantic Attraction Scale. Participants viewed a Facebook profile which varied in comments displayed by the profile owner and comments displayed by their friends. The profiles also indicated either a high or a low number of friends. It was found that participants rated romantic attraction higher when the comments displayed by friends on the profile were positive rather than negative. No significant effect was detected between positive and negative profile owner comments, additionally, a low number of friends resulted in a higher romantic attraction score than profiles displaying high numbers of friends. This implies that self-generated information, the only information a Facebook user has complete control over, has no effect on romantic attraction. A questionnaire was carried out with 218 participants to identify if personality traits of participants can predict which elements of Facebook profiles are considered to facilitate romantic relationships. It was found that there is not a strong relationship between personality traits and how Facebook is perceived to facilitate romantic relationships. Implications of these findings suggest that due to the ease in accessibility to a Facebook profile, people should be more aware when constructing a Facebook profile and more vigilant when choosing who they allow access to their profile.

Chapter One Introduction

Social media enhances social life and instead of becoming a separate cyberspace, online social networks are becoming a part of our lives (Shirky, 2008). Facebook is one of the most popular networking sites and was originally created as a forum for college students. In addition to being used for friendship formation and maintenance, Facebook can also be used for romantic purposes (Tosun, 2012). This study examines how elements of Facebook profiles are used for romantic purposes by young adults. Few previous studies have specifically examined this area, but this chapter will describe and address related research, before proceeding to outline the current research's aims and hypotheses. It is necessary firstly to describe online social networking, define this modern phenomenon and identify the various features a social network can include. This will lead into a description of Facebook and the specific features that Facebook includes. Following this, different user groups will be identified and what Facebook is used for will be looked at. This will be followed by examining people's awareness of privacy settings and if they are aware of who may be viewing their Facebook profile. Romantic attraction will be discussed and will lead into looking at how romantic relationships are formed on social networks. Differences between online and face-to-face relationships will be identified. The importance of first impressions will be discussed and then an analysis of the similarities and differences of first impressions formed online and face-to-face will be discussed. Following this, the Brunswik Lens Model of interpersonal perception (Gosling, Ko, Mannarelli and Morris, 2002) and the Warranting Theory of impression formation (Walther and Parks, 2002) will be explained. Research studies that have looked at impression formation on social networks will be analysed. Different types of information presented in a social network profile will be identified and discussed relative to impression formation, including system-generated information, self-generated information and Friend-generated information.

Online Social Networking

Social Network Sites (SNS) are online environments where people create self descriptive profiles. The main purpose of these sites is networking (Donath & boyd, 2004). An SNS allows users to build or maintain contact with others (Utz, 2010). These sites can be aimed at making professional or work-related connections, romantic relationship initiation, or the college student population (Ellison, Steinfield,

& Lampe, 2007). Social Network Sites are based around profiles or personal homepages, which display a description of each member. Profiles can contain text and photographs of the owners as well as comments left by other members and a public display of connections which is a list of other people within the SNS that the owner has identified as friends (boyd, 2007). For the purposes of clarity, online contacts will be referred to as 'Friends' and those who the profile owner actually consider to be real life friends will be referred to as 'friends'. Three sources of information can be distinguished on an SNS, self-generated information, systemgenerated information and Friend-generated information. Self-generated information is information that a profile owner has complete control over, such as, posting personal information or photographs. System-generated information is the information which is displayed by the SNS. The most obvious system-generated information on an SNS is the number of Friends which is automatically displayed on the profile (Antheunis & Schouten, 2011). The number of Friends is a reflection of the profile owner's social network. Friend-generated information are sources of information on a user's profile that come from others. The most salient Friendgenerated information on an SNS is messages left by Friends on a user's profile. The profile owner is limited in the manipulations that can be made to these messages, that is, they can delete messages for example, but they cannot alter the text the message contains.

For many people these websites have changed how individuals become acquainted. Viewing an individual's personal webpage now occurs early in the process of getting to know others, often being the very first exposure (Gosling, Gaddis & Vazire, 2007). Many people use these personal webpage's as a way to learn about somebody that they just met (Vazire & Gosling, 2004; Walther et al., 2008). In addition, growth in the use of SNS has changed the way people form impressions of each other (Weisbuch, Ivcevic & Ambady, 2009). An SNS is a source of social information that offers many opportunities for impression formation, such as descriptions or photographs (Antheunis & Schouten, 2011). People usually try to present themselves in a positive manner and can spend hours carefully constructing the personal homepages on which others base their impressions (Weisbuch et al., 2009; Utz, 2010), however, SNS have evolved beyond the profile owner having complete

control over the information that others can observe (Tong, Van der Heide, Langwell & Walther, 2008). People other than the profile owner can now contribute information to a profile, which may include descriptions about the profile owner or their behaviour (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). Even though these postings may not be initiated by the profile owner they may still affect others' perceptions of the profile owner.

Facebook

Facebook is one of the most popular SNS and was originally created for the college community (Tosun, 2012). Facebook is a Social Networking Site which enables users to present themselves through an online profile (Ellison et al., 2007). Each user can present a considerable amount of personal information on their profile including e-mail address, hometown, hobbies, sexual orientation, relationship status and personal photographs (Walther et al., 2008). Facebook users can also join virtual groups based on common interests and learn about each others' hobbies, interests, musical tastes and romantic relationship status through the profiles (Ellison et al., 2007). Users can search for other registered users and can initiate requests to other individuals to become Friends (Walther et al., 2008). When a friend request has been accepted and two individuals become Friends, the system shows their personal profiles and their entire social networks are disclosed to each other, leading to the possibility of new friendships evolving through Friends of Friends (Walther et al., 2008). Befriending also unveils the News Feed, which tracks and displays the online activities of a user's Friends, such as uploading pictures, or befriending new people (Debatin, Lovejoy, Horn, & Hughes, 2009). The collection of Friends is not simply a list of close connections in the traditional meaning of friends. Instead, it allows participants to articulate their imagined audience or who they see being a part of their world within the site (boyd, 2007). Facebook has a feature known as the 'people you may know' tool. This recommends people to connect with based on a friend of a friend approach. Chen, Geyer, Dugan, Muller and Guy (2009) found that 61.6% of SNS users are interested in making new Friends. When asked what kind of information would make them most interested in becoming Friends with strangers, 75.2% said common Friends, 74.4% said common interests or profile content and 39.2% said geographical location.

In addition to the information that users provide on their own profile, Facebook has a section dedicated to comments by Friends known as the 'wall'. These comments can be viewed by other registered users who have been accepted as Friends or depending on privacy settings of the profile can also be viewed by Friends of Friends or the general public. The comments contain the Friends profile photo from their own profile and a verbal message (Walther et al., 2008). The messages may reflect common activities and interests or even a desire to embarrass the profile owner. In addition, the profile owner may not know for some time that a comment has been left on their wall, they will not know the message is there until they log into their Facebook or email account to retrieve the message. This is great for asynchronous communication, but it means that what has been said now is still accessible years later (boyd, 2007). Although it is possible, individuals tend not to remove Friends' comments from their wall no matter how questionable, as it is the Facebook norm to leave these comments on display (Walther et al., 2008). During the course of this research the Facebook 'wall' changed to the Facebook 'Timeline'. Despite a change in format and the ability to add life events, there is very little difference between these two features.

Facebook also includes a number of social network game applications (an assortment of board games, word games, arcade games, role playing or action games), where users can play games with members of their own social network (Wohn, Lampe, Wash, Ellison & Vitak, 2011). The games differ from traditional online games because players have to be *Friends* on Facebook in order to play the games with each other. However, some games do have chat functions that allow users to chat to each other if they are logged in to the game server simultaneously even if they are not *Friends* on Facebook. Users can then decide to become Facebook *Friends* to play the game together. Players are also able to create a list of *Friends* for their 'in game' social network.

Pempek, Yermolayeva and Calvert (2009) reported that students use Facebook approximately 30 minutes throughout the day as part of their daily routine and that Facebook use is incorporated into students' daily lives, regardless of how busy they

are. Students reported using Facebook to communicate with *Friends*, to look at or share photos, for entertainment (to fight boredom or procrastinate), to find out about events, to get to know people better (friends or people recently met) and for self presentation.

McAndrew and Jeong (2012) carried out an online survey looking at how people use Facebook. The study suggested that people who were not in a committed relationship were more concerned about making a good impression with their profile picture than people who were in a committed relationship. Many gender differences were found in relation to how Facebook is used. Overall it was found that females engage in more Facebook activity than males. Females spent more time on Facebook and they had more Facebook Friends. Additionally females were found to be more interested than males in the relationship status of others. Females also reported placing more importance than men in using profile photographs as a tool for impression management and in studying the photographs of other people. In contrast, males stated that they were more interested than women in how many Friends their Facebook Friends had. It was also found that a male's relationship status predicted his use of Facebook but a female's did not. That is, men who were in a committed relationship spent less time looking at the pages of women and less time posting, looking at, or commenting on photographs, whilst a female's relationship status appeared to be irrelevant to her Facebook use.

Online and Offline Social Networks

Subrahmanyam, Reich, Waechter and Espinoza (2008) asked college students questions about their closest friend in three contexts: social networking sites, instant messaging and face-to-face. Whilst most participants reported that SNS use had not made any difference to their relationships with friends, 20% felt that it had made them closer to their friends and 2.5% felt that it had negatively impacted on their relationships with their friends. Participants listed up to ten people they interacted with most in person, up to ten people they interacted with most on SNS and up to ten people they interacted most with on instant messaging. The percentage of overlap across the three networks was calculated. Only half of participants had any overlap

between their top instant messaging, social networking and face-to-face friends. Eleven percent had no connection between their top social networking and face-to-face friends, whilst 22% of participants reported complete overlap between their social networking *Friends* and face-to-face friends, that is, they interacted most with the same ten people on SNS and face-to-face. On average, 49% of people's top face-to-face friends were also their top SNS *Friends*. This suggests that young adults' offline and online worlds are not necessarily mirror images of each other.

This finding was also supported in a later study carried out Reich, Subrahmanyam and Espinoza (2012). Participants were asked to list the names of the top ten people they interact with face to face, on an SNS and by instant messaging. There was a complete overlap of 7% between the three types of friends, face to face, SNS and instant messaging friends. When looking at face to face friends, there was a 58% overlap with either SNS *Friends* or instant messaging *Friends*. The remaining 35% of participants had some friends listed in either two or all three categories of friends. When asked about how an SNS had affected their relationships 44% of the participants reported that their SNS use had made no difference to their relationships, whereas 43% felt it had made their friendships closer. This suggests that although the study found there was an overlap between participants' online and offline friends, participants feeling SNS use had made their friendships closer suggest that adolescents use online SNS to strengthen offline relationships.

Privacy

Debatin, et al., (2009) investigated Facebook users' awareness of privacy and perceived risks or benefits of using Facebook. Although Facebook users reported familiarity and use of privacy settings, over 90% of the participants had signed up to Facebook under their full real name and included their date of birth, hometown and had uploaded a picture of themselves and additional pictures of friends and family. Participants also reported accepting people as *Friends* that they have only heard of through others or do not know at all, therefore, exposing a wide array of personal information such as full names, birthdates, hometowns and photos to a group of unknown people.

When asked about use of social networking sites and the appropriateness of the content that they post, students indicated that they understand that what they post on their SNS can be perceived differently depending on the audience, but they continue to post information that they themselves view as inappropriate (Miller, Parsons & Lifer, 2009). Friends on an SNS have access to a significant amount of information on an individual's profile. However, when asked if they screen the people who send them Friend requests 21.2% of participants said they do not screen Friend requests before accepting them as collecting the most Friends is part of the fun. When given a list of potential audiences (friends, parents, professors and potential employers) and asked would they be comfortable with the potential audience seeing their profile it was found that students were most comfortable with their profile being viewed by friends and least comfortable with their profile being viewed by potential employers (Miller et al., 2009). Students keep their profiles set to private to keep their personal information secure, while at the same time, failing to screen who they allow have access to their profile. This gives access to personal information or inappropriate content that is displayed on the SNS profile people who may be unknown to the profile owner.

Personality and Facebook use

The Five-Factor Model divides personality into five dimensional traits; Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness (Amichai-Hamburger & Vinitzky, 2010). Ross, Orr, Sisic, Arseneault, Simmering and Orr (2009) investigated how the Five-Factor Model of personality relates to Facebook use. Using the Neuroticism-Extroversion-Openness Personality Inventory Revised (NEO-PI-R) to assess personality along the Five-Factor Model domains, they examined behaviour on Facebook as reported by participants. The findings, to some extent, support a link between personality and Facebook behaviour. Those high on the trait of Neuroticism reported that the Wall was their favourite Facebook component, whereas those low on Neuroticism preferred photos. Higher levels of Openness to Experience were associated with a greater tendency to be sociable through Facebook. Individuals that scored high on the trait of Extraversion were found to be members of significantly more Facebook groups than those who had low extraversion scores. However, levels of Extraversion were not associated with

number of Facebook *Friends*, suggesting, that although those high on Extraversion may use Facebook as a social tool, they do not use Facebook as an alternative to social activities.

Amichai-Hamburger and Vinitzky, (2010) built on this study by using a different methodological approach to gain more objective criterion than self report questionnaires alone. Participants completed the NEO-PI-R to assess personality along the Five-Factor Model. Then user information uploaded on Facebook was measured and encoded on three dimensions, basic information, personal information and education and work information.

In contrast to the findings by Ross et al. (2009), which suggested that there was not a strong link between personality and Facebook behaviour, this study suggests that a strong link may exist. The data indicated that highly extraverted participants had a significantly higher number of Facebook *Friends* and also demonstrated lower personal information sharing than those with lower extraversion. Differing to Ross et al. (2009) extraversion did not correlate with the number of Facebook groups participants were members of. Highly neurotic participants were found to prefer sharing their photos on their Facebook profile. Participants that scored higher on openness to experience included more features in the personal information section (for example activities, interests, favourite music, books, TV shows or movies). Participants that scored higher on the trait of conscientiousness were found to have more Facebook *Friends*. Additionally they were found to have fewer photos uploaded. Overall, the results suggest that there is a strong connection between personality factors and Facebook behaviour.

Moore and McElroy (2012) also found that personality had an influence on Facebook use. They carried out a survey with 219 undergraduate students that assessed their personality and their reported use of Facebook. Additionally a subsample of 143 participants voluntarily friended the investigator to allow access to their Facebook profiles and consequently giving the investigator access to objective data on their number of *Friends*, photos and wall postings. Results showed that personality had an effect on number of Facebook *Friends*, the nature of their wall

postings and on their level of regret for inappropriate Facebook content. More specifically, it was found that highly extraverted people have more Facebook *Friends* and they reported less regret over inappropriate Facebook content than less extraverted individuals. More agreeable people expressed greater levels of regret about inappropriate content they may have posted on Facebook than less agreeable individuals. Participants high in conscientiousness made significantly fewer wall postings and expressed more regret than less conscientious users. Conscientiousness was not related to time spent, frequency of use, number of *Friends* or number of photos displayed on Facebook. Highly neurotic users spent more time on Facebook than those higher in emotional stability. Neuroticism was not significantly related to number of *Friends* or photos, or to the number of wall postings. Additionally, emotional stability was positively related to both how frequently they use Facebook to keep up with others and regret. Finally, openness to experience had no significant effect on Facebook usage or content. This study showed how personality traits have a large effect on Facebook use.

Lampe, Ellison and Steinfield (2007) explored if having more personal information presented on a Facebook profile will lead to having more *Friends*. From data analysis of Facebook profiles it was found that, on average, users complete 59% of the fields available to them, for example, e-mail address, hometown, hobbies, relationship status, about me, favourite things and in some fields display a significant amount of information. Also, the amount of information presented in profiles is associated with number of *Friends*. However, it was not determined what caused this relationship, that is, whether people with many *Friends* have increased social pressure to add more information to their profiles than those with less *Friends*, or if active users of Facebook both add information to their profiles and seek out people to request as *Friends*.

Gosling, Augustine, Vazire, Holtzman and Gaddis (2011), observed that extraversion predicted a higher frequency of Facebook usage and engagement in the site by using observer and self reports of the Ten Item Personality Inventory and a questionnaire on Facebook behaviours. More specifically, extraversion was correlated with a number of Facebook behaviours, particularly those related to maintaining an up to

date presence and tending to social connections, for example, number of Facebook *Friends* or commenting on another's page. Number of photos, number of timeline posts, number of groups the profile owner was a member of and number of *Friends* were all strongly correlated with extraversion.

Information Displayed on an SNS

In order to assess the display of risk behaviours of sexual activity or substance use on an SNS, Moreno, Parks and Richardson (2007) carried out a content analysis of 142 publicly available profiles of adolescents from MySpace. The analysis found that 47% of the MySpace profiles contained risk behaviour information. The risk behaviours included, 21% portraying sexual activity, 25% describing alcohol use, 9% depicting cigarette use and 6% describing drug use. To build on this research and determine the prevalence of displayed risk behaviour information that suggests sexual behaviour, substance use and violence in a MySpace profile, Moreno, Parks, Zimmerman, Brito and Christakis (2009) analysed a total of 500 publicly available MySpace profiles of 18-year-olds. Of the 500 profiles, 270 profiles contained risk behaviour information. One hundred and twenty referenced sexual behaviours, 205 referenced substance use and 72 referenced violence. In addition, it was found that female adolescents were less likely to display references of violence and were more likely than males to display sexual references on a profile.

Moreno, Briner, Williams, Brockman, Walker and Christakis (2010) carried out a content analysis of displayed alcohol references on a social networking site. Four hundred randomly selected MySpace profiles were evaluated for references to alcohol. References to alcohol included text which portrayed experience or events involving alcohol and photographs which included alcoholic drinks being held or ingested. A content analysis found that 225 of these profiles contained a total of 341 references to alcohol. Of these references, 213 were text based references and 128 were image based. Twenty two percent of the alcohol references represented an association between alcohol and dancing or partying, with the most commonly displayed consequence of alcohol use being negative physical consequences such as hangovers.

In addition, Fournier and Clarke (2011) investigated if the presence of alcohol related content on college students' Facebook profiles was related to actual drinking behaviour. Sixty eight participants were asked about their alcohol use and were asked to report on a Likert scale how well their Facebook profile represents them. The quantity of alcohol related content on the page was recorded by two researchers viewing each Facebook profile and counting the photos and wall posts with alcohol related content. Similar to the findings of Moreno et al (2010), alcohol related content included photographs which showed alcoholic drinks and wall posts which included named alcohol drinks, or a known drinking establishment. Results indicated 76.5% of participants' profiles contained alcohol related content. Furthermore, a significant relationship between alcohol related content on Facebook and reported alcohol use was found, that is, the more alcohol related content displayed on a participants profile, the higher reported frequency and quantity of alcohol use by the participant.

Moreno, Swanson, Royer and Roberts (2011) carried out focus groups to explore male college students' views about displayed sexual references on females' social networking profiles. This study focused on sexual references displayed by females because Moreno et al (2009) found that females are more likely than males to display sexual references on an SNS profile. For the purpose of the focus groups, sexual references were regarded as sexually explicit material, discussions about sexual behaviour and photographs portraying the profile owner in a sexually suggestive way. Three major themes emerged from the focus groups, namely; sexual reference displayed by females increased the sexual expectations of the male participants, sexual reference display by females decreased the male participants interest in pursuing a dating relationship and information presented on an SNS may not be a perfect representation of a person, but it may be the best available information if the person is not very familiar. Sexual references displayed on SNS profile may lead to the possibility of viewers interpreting the messages as sexual intention which may influence the sexual expectations of potential romantic partners who view the SNS profile (Moreno et al. 2011). In addition, the display of sexual references may lead a female to attract males who are interested in sexual activity but not necessarily in romantic relationships.

Social Capital

Social capital refers to the benefits we gain from being connected (Ellison, et al., 2007). Social capital is a concept based on an individual's social networks and their predicted effects, for example, psychological well-being (Valenzuela, Park & Kee, 2009; Ellison, et al., 2007). Ellison et al., (2007) looked at the relationship between the use of Facebook and the formation and maintenance of social capital. Three dimensions of social capital were explored; namely, bridging social capital (represents relationships with acquaintances), bonding social capital (the close relationships between friends and family) and maintained social capital (the relationships that are maintained despite a change in geography, interests or workplaces).

Two hundred and eighty six students (98 male and 188 female) completed an online survey to measure Facebook usage (The Facebook Intensity scale) and psychological well being (Rosenberg Self Esteem Scale and the Satisfaction With Life at Michigan State University scale). Three measures of social capital (bridging, bonding and maintained social capital) were created by modifying existing scales, with wording changed to correspond with the context of the study (Ellison et al., 2007). The findings of the surveys suggest a strong connection between the use of Facebook and the three types of social capital, with the strongest relationship being bridging social capital. However, this study could not detect the direction of the relationship, that is, did Facebook use lead to improved social capital, or did good social capital lead to Facebook use? Additionally, Facebook was found to interact with psychological well-being, suggesting that it may provide greater benefits for users experiencing low self-esteem and low life satisfaction.

Although Ellison et al. (2007) found an interaction between Facebook use, social capital and psychological well-being, a study carried out by Elphinston and Noller (2011) highlighted that there may also be negative aspects to individuals and their romantic relationships if they rely on Facebook for positive social outcomes. Elphinston and Noller (2011) looked at the implications of Facebook intrusion on romantic jealousy and relationship satisfaction. Facebook intrusion was defined as an excessive attachment to Facebook which interferes with day-to-day activities.

Specifically the study explored young people's involvement with Facebook and the potential for Facebook intrusion to increase romantic jealousy and relational dissatisfaction. A total of 342 students took part in an online questionnaire measuring Facebook intrusion, romantic jealousy and relationship satisfaction; they also reported their time spent on Facebook during a week. The amount of time spent on Facebook was not related to relationship satisfaction, however, Facebook intrusion was correlated to relationship dissatisfaction by means of jealousy and surveillance behaviours. That is, Facebook intrusion appears only to negatively impact on relationship satisfaction through experiences of romantic jealousy. The results of this study suggest that young people's levels of Facebook intrusion can impact their romantic relationships negatively by causing jealousy or relationship dissatisfaction. The links between Facebook intrusion, romantic jealousy and relationship dissatisfaction should be a concern for people attempting to maintain satisfying intimate relationships.

Social network game applications on an SNS allow Friends within the social network to play with each other. Wohn et al (2011) looked at how game play on Facebook contributes to relationship initiation and development. Eighteen interviews were carried out with Facebook users and the findings suggest that while playing a game does not facilitate direct social interaction, indirect interaction and sharing game based content can be useful in maintaining and enhancing relationships. Participants described how they initially began to play social network games as a way of seeking social interaction with existing members of their Friend network, or to be considerate of Friends who were requesting them to join the game. Participants revealed how they became friends with complete strangers and talked about actively meeting and seeking new people through online discussion boards or Friends of their friends. This often led to friendship which could be due to the requirement of players to first become Friends on Facebook, which consequently gives them access to each other's profile and personal information on Facebook. For people who were playing with Friends they knew before joining the game, one of the reasons given was to maintain these existing relationships especially if there was geographical distance. Participants talked about how they used different features of Facebook and social network games in order to create, maintain and enhance their social connections

during game play. They used instant messaging features, such as Facebook chat and in-game chat, the Facebook wall and even used non-Facebook modes such as the telephone. The findings from this study suggest that social network game play can benefit bridging and bonding social capital, although the findings cannot determine which specific interactions contribute to social capital.

Interpersonal Attraction

Emails, instant messaging, SNS and interactive games provide users with online communication opportunities. Through these communications, many users have formed relationships online (Bonebrake, 2002). Individuals that have trouble finding romantic partners offline may have less trouble online due to the many possibilities the internet offers to find like minded people, for example, chat rooms, forums or interactive gaming.

Interpersonal attraction refers to positive feelings individuals have towards others (Lefton & Brannon, 2003). Many factors can influence interpersonal attraction; including proximity, physical attraction and similarity. The proximity effect suggests that being close to someone plays an important role in the early stages of forming friendship or attraction (Hogg & Vaughan, 2008). Proximity alone does not necessarily cause attraction but it does lead to repeated interaction and greater familiarity, which enhances liking (Kassin, Fein & Markus, 2008).

Initially people are romantically attracted to those they find physically attractive (Lefton & Brannon, 2003). People believe that others who that are attractive have more positive traits and characteristics than unattractive people, especially when appearance is the first information provided. Men tend to place more emphasis on physical appearance when choosing a partner; in contrast women tend to place more emphasis on wealth (Schmitt, 2002). Similarity is an important determinant of attraction (Hogg & Vaughan, 2008), people who are similar in backgrounds, attitudes, physical attractiveness and personality characteristics are more likely to be attracted to each other than dissimilar people (Bonebrake, 2002).

In an exploratory study carried out by Fox and Warber (2013) a sequence of behaviours followed in romantic relationship development was identified. The study indicated that the following sequence represented the typical romantic relationship development: first, an individual would meet a person they were attracted to face to face; second, the individual went to Facebook to look at the persons profile and send a friend request; third, they requested the persons phone number; fourth, they began texting the person and inviting the person to meet in group settings; next, they began to post on the persons Facebook timeline and engage in Facebook messaging; and finally, they would call the person or go out on a date with them.

Online versus face-to-face relationship development

Face-to-face relationship formation depends on physical proximity; people need to meet each other in order to get a relationship started (Bonebrake, 2002). The relationship begins with attraction, which is usually physical. Then, by communication individuals discover similarities and exchange personal information, known as self-disclosure. Relationships develop in a similar way online; however, there are some differences. Online, traditional factors that lead to attraction such as proximity and physical attractiveness are greatly reduced (Bonebrake, 2002). Online, proximity is not defined by physical location, but by a particular internet forum, people have to be on the same website or interactive game to have the possibility of communicating (Levine, 2000). This leads to frequency of contact being more important for developing relationships online.

Physical attractiveness plays a large role in face-to-face relationship development as it is the most obvious characteristic of an individual, therefore many first impressions are largely based on physical appearance. Due to individuals having some control over what is disclosed online and when it is disclosed, self presentation is more under control (Levine, 2000); people have time to consciously manufacture and control how they present themselves online than they do in face-to-face interactions. Individuals can choose what information to disclose and when to disclose it, this enables individuals to hide or lie about important information (Bonebrake, 2002). It also enables individuals to present an attractive image of themselves (Whitty, 2007). Often people feel more comfortable disclosing very intimate information online than they do face-to-face (Bonebrake, 2002). Sharing this personal and intimate information usually occurs sooner in an online relationship

than in an offline relationship, which leads to online relationships developing feelings of intimacy and closeness much earlier than in an offline relationship.

A person's physical appearance is the personal characteristic most obvious and accessible to others in social interaction. Dion, Berscheid and Walster (1972) reported that attractive people are assumed to have better prospects for happy social and professional lives. They also suggested that a physical attractiveness stereotype exists which suggests that physically attractive individuals are assumed to possess more socially desirable personalities than less attractive individuals and their lives will be happier and more successful.

Wang, Moon, Kwon, Evans and Stefanone (2010) explored the effect of visual cues on initiating friendships on Facebook. Participants were exposed to a Facebook profile which contained an attractive photo, an unattractive photo or no photo (male and female variation of each condition) and completed a questionnaire measuring their willingness to initiate a friendship with the profile owner. The data collected suggested that displaying a profile photo on Facebook had a significant effect on willingness to initiate friendship with a profile owner. The results suggest that both male and female subjects were more willing to initiate friendships with opposite-sex profile owners with attractive photos. They were also more likely to initiate friendship with the profile owners who did not include a photo than with those who displayed an unattractive photo.

This study showed how visual cues, in particular physical attractiveness, can play an important role during social interaction online in a similar way to offline, as participants were more likely to initiate friendship online with physically attractive people of the opposite-sex. Physical attractiveness is one of the most important characteristics people use when forming impressions about others offline and the findings of this study suggest that relationships develop in a similar way in online situations as they do in face-to-face situations. Limitations of this research study include that text information of the Facebook profile owner was limited. The only text information available was name, gender, hometown, school, email address and a relationship status which showed the profile owner as single. The influence of text

information such as wall comments or detailed personal information such as hobbies and interests which is typically displayed on a Facebook profile were excluded from this experiment. This means that although it was found that physical attractiveness is important for impressions made on Facebook, it cannot be identified from these findings if physical attractiveness is more important than any text information displayed on Facebook for impression formation or relationship development.

Social Penetration Theory

The social penetration theory describes how intimate relationships develop. Intimacy grows as an interaction between people penetrates from the outer to inner layers of each person's personality (Wood, 2010). Relationships progress from superficial exchanges to more intimate ones as people begin to give more of themselves to one another by self-disclosure (Roeckelein, 1998).

Self-disclosure is the willingness to share intimate information and feelings with another person. Disclosing personal information and being sensitive and responsive to partners' disclosures are central processes in developing and maintaining relationships (Hogg & Vaughan, 2008; Sheldon, 2009). There are two dimensions of the social penetration theory, 1) breadth, the amount of information or number of topics of self-disclosure and 2) depth, the level of intimacy of self-disclosure. The level of intimacy has a larger effect than amount of information disclosed (Sheldon, 2009).

One of the main aims of SNS is to encourage users to disclose information to others online. In contrast to Lampe et al (2007) who found users complete 59% of fields available to them to share with others such as hometown or hobbies. Nosko, Wood and Molema (2010) found that people disclose on average 25% of all possible information that could be disclosed, such as, birth date, gender, profile pictures, photo albums, tagged photos and relationship status. This suggests that users are demonstrating some discretion regarding what kinds of revealing information they are willing to share on Facebook. Age and relationship status are important factors in determining disclosure. As age increases, the amount of personal information presented in profiles decreases. Single profile owners disclose a larger amount of

highly sensitive and potentially stigmatizing information than those who are in a relationship.

Sheldon (2009) conducted a study on how social attraction on Facebook influences self-disclosure, predictability and trust in another individual, with 243 college students who use Facebook. Social attraction was measured using the social attraction component of McCroskey and McCain's (1974) Interpersonal Attraction Scale. Predictability and self-disclosure to a Facebook *Friend* was measured by Parks and Floyd's (1996) scale of self-disclosure, which measures depth and breadth of self-disclosure. Trust was measured using the Individualized Trust Scale (Wheeless & Grotz, 1977). Participants completed the scales based on their interactions with the individual they interacted with the most on Facebook.

The findings suggest that Facebook users' social attraction influences other people's self-disclosure and perception of trust in that individual. The depth of self-disclosure that is revealed to Facebook *Friends* can increase social attraction to a greater degree than social attraction can increase the depth of self-disclosure. This suggests that on Facebook, students tend to like people to whom they self-disclose intimate information. It is the depth of self-disclosure that leads to increased social attraction, not the breadth. Data was collected from students asking them to think about the Facebook *Friend* that they talked to most often on Facebook. Therefore, it cannot be generalized that their social attraction to a Facebook *Friend* is a result of their self-disclosure on Facebook alone and not due to previous face-to-face interactions.

In an online survey carried out by Chen and Marcus (2012) it was found that students use SNS primarily to maintain existing personal relationships and selectively used privacy settings to control their self presentation on SNS. The survey also looked at self-disclosure on Facebook and it was shown that individuals disclose differently online in comparison to face-to-face interactions. Specifically, it was found that personality can have an effect on the difference in self-disclosure. It was found that online interaction from collectivistic individuals low on extraversion disclosed the least honest and the most audience relevant information, when compared to others.

Qiu, Lin, Leung and Tov (2012) looked at differences in emotional disclosure on Facebook and in real life. Participants were asked to rate on a 7-point Likert scale how likely they would be to disclose positive and negative emotional experiences on Facebook and in real life. Additionally, they were asked to identify a number of Friends. Participants were asked, for each Friend, how happy the Friend's life is on a scale from 1 (extremely unhappy) to 7 (extremely happy) and how frequently the Friend experienced positive and negative emotions. Then, participants browsed each Friend's Facebook wall page for 2 minutes. They were asked to consider each Friend's life presented on Facebook and rate how happy the Friend is on a 7-point Likert scale. Results from both the self-report and the observer ratings, suggested that users are more likely to disclose positive rather than negative emotional experiences on Facebook than in real life consequently leading viewers to have a better impression of their emotional well-being. Not only did participants report that they themselves express more positive emotion on Facebook than in real life, but they are also able to observe this discrepancy when viewing their Friends' Facebook profiles.

Online Dating Sites

Online dating allows users to evaluate the attractiveness of a potential partner before investing the time, effort and emotional energy in a face-to-face meeting (Fiore, Lindsay, Taylor, Mendelsohn & Hearst, 2008). An online dating site consists of a profile on which users can upload photographs and videos of themselves and are given the opportunity to write a description about themselves (Whitty, 2007). Users are able to spend time creating and revising their profiles which enables them to adjust their self-presentations in ways they may not face-to-face (Fiore et al., 2008). People are more likely to be attracted to others who have demographics, attitudes, values and personality traits similar to their own and online dating systems allow people to easily find others who match them in these instances (Fiore & Donath, 2005).

Whilst carrying out research into online dating and speed dating, Whitty and Buchanan (2009) identified the characteristics of people who are likely to engage in online dating as opposed to conventional dating. A survey was carried out with 271

participants. Participants were asked about their dating activity and then completed a number of psychometric scales to measure shyness, social anxiety, sensation seeking, initiating relationships and extraversion. From the results it was found that people who were shy had used online dating sites significantly more than people who were non-shy, suggesting that shy individuals are more likely to use the internet to initiate relationships than non-shy individuals. It was also found that older individuals were more likely to use online dating than younger individuals. Additionally, people who had reported using online dating sites before were more likely to consider using online dating sites again. The characteristics found to contribute to those who are likely to engage in online dating in this study are; age, shyness and people who had already tried online dating.

Fiore et al., (2008) looked at how users perceive attractiveness in online dating profiles. Online dating profiles from the Yahoo! Personals web site were viewed and rated by participants on a variety of scales including; attractiveness, trustworthiness, masculinity, femininity, warmth, self esteem, extraversion and self-centeredness. The results showed that the photograph was the most important feature of predicting attractiveness in the whole profile. Photos of men appeared attractive when they looked genuine and trustworthy, extraverted, feminine and not too warm and kind, while photos of women were found to be attractive when they appeared more feminine, less masculine, higher in self esteem and lower in self-centeredness.

Whitty (2007) asked individuals how they present themselves on an online dating site and how they view others' profiles. Participants explained that constructing a profile was a dynamic process. They discussed how they experimented by rewriting profiles to include photos and descriptions of themselves which they thought would be more successful at attracting others to their profile. Individuals did admit to misrepresenting themselves on their profiles (about their appearance, their current relationships, age, weight, socio-economic status and interests), with men being more likely to lie about relationship status and women more likely to lie about appearance. However, most participants stated that the misrepresentations they included were simply exaggerations of the truth and not blatant lies and they justified this by claiming they thought others were most likely doing the same thing.

However, they reported being annoyed to discover when they met face-to-face, that their date had misrepresented themselves in their profiles.

Men place more emphasis on being attracted to a partner who is physically attractive, this could explain why more women than men who took part in the interviews included photos in their profiles and more women than men choose to have glamour photos of themselves taken to include in their profile. Additionally it could explain why the women lied about their appearance or used outdated photos more than men did. Gender differences that are obvious in face-to-face attraction were only partly evident in this study. Women were more likely than men to present a photo and ensure it was an attractive image of themselves. However, when comparing what attractive qualities men and women desired there were no significant differences. When considering other online daters profiles, physical appearance was considered the most important characteristic. Participants claimed that they were more attracted to individuals who expressed their actual self, which they stated were the individuals that were perceived to be honest and genuine and included in their profiles the traits or characteristics that they typically express in everyday offline social settings rather than profiles that contained clichés.

Verifying Personal Information

Identity deception is common in online dating sites. Whitty and Buchanan (2012) looked at an extreme case of identity deception known as the online romance scam. This is a scam where scammers pretend to initiate a romantic relationship through online dating sites or social network sites with the intention to defraud their victims of large sums of money. During the scam, scammers will create profiles with stolen photographs. The scammer will claim they want an exclusive relationship with the victim and the communication will be frequent and intense. Often the scammer will make a request for small gifts. Following receipt or delivery of these gifts the scammer will make requests for small amounts of money and as the victim complies with these small requests then the scammer will often raise the amounts of money, pretending some crisis has occurred which requires larger sums of money. In this extreme case of identity deception, not only do victims lose money, but they also

suffer the loss of a relationship. However, not all cases of identity deception on online dating sites are so extreme or fraudulent.

The costs of creating a misrepresentation or deception on a dating site are relatively low to an individual. In contrast, on an SNS with a list of *Friends* that have access to the information on the profile, people run the risk of being embarrassed or exposed by misrepresentations (Donath & boyd, 2004). Due to the public display of connections on an SNS, this should make them more reliable than dating sites for verifying personal information of others. For example, it is much more difficult for a married person to pose as a single person on an SNS which contains a list of offline connections or *Friends* that can verify the truth than on a dating site that does not allow users to connect to each other. Nevertheless, Gross (2012) stated that about one out of every four Facebook users lies on their profile. However, reasons for being deceitful differed from those being dishonest on dating sites. In a survey of 2,000 participants, 25% of users said they were dishonest in the information they shared in their Facebook profiles for privacy reasons. Other reasons given for being deceitful on Facebook included hiding things about their identities that may be personally troubling or they did not want others to know and to be humorous.

Friendship and Romance

On many social network sites, participants may be "networking" which is looking to meet new people; or they may communicate with people who are already a part of their offline social network. Zhao, Grasmuck and Martin (2008) found that 41.3% of Facebook users with a public profile were looking for friendship, friendship in combination with dating or a relationship through Facebook, suggesting that the users were interested in presenting themselves to an audience beyond their offline friends or acquaintances. Research carried out on who uses social networking sites and what they use it for (Ellison et al., 2007; Zhao, Grasmuck, & Martin, 2008), suggest that college students are the main users and in addition to connecting with people they already know, they use it to meet new people. Thelwall (2008) found that although most individuals are using MySpace for friendship, some also use it for dating and searching for serious relationships.

SNS and Dating

Lee and Bruckman (2007) conducted interviews to obtain an insight into how people use SNS for dating. The research specifically focused on how the top Friends list influenced dating strategies in four areas; self presentation, finding dates and determining credibility, evaluating relationship status and commitment levels and maintaining connections after the romance has ceased. Self presentation, due to friends being able to view what was presented on their SNS, participants felt they had to be genuine and truthful in their self descriptions or risk being ridiculed. In relation to finding dates and determining credibility, participants described browsing for potential dates in two ways, browsing through their Friends contact list finding interesting profiles, or searching by criteria by specifying characteristics they were looking for. Whilst assessing the credibility of a profile, participants analysed the person's interactions with their Friends. They stated that understanding friendship connections can help determine an individual's credibility. Participants discussed evaluating relationship status and commitment levels, once participants began dating someone they met on Friendster or MySpace they looked to the top Friends to monitor their ongoing relationship status. Participants expected to see their profiles on their partner's top Friends list and where they were positioned on the list determined the importance of the relationship.

Participants also discussed maintaining connections after the romance has ceased, positive and negative effects of maintaining connections were exposed. Participants stated that maintaining the connection eased the awkwardness of the end of the romance, whilst others indicated the connection made checking up on the previous romantic partner too easy.

However, these findings are based on the top *Friends* feature of SNS, which is not very popular anymore and not provided on some SNS, such as Facebook. Muise, Christofides and Desmarais (2009), explored the role of Facebook in the experience of jealousy in romantic relationships. The results suggest that Facebook may expose an individual to potentially jealousy provoking information about their partner, such as knowing that their partner has unknown individuals of the opposite sex and past romantic and sexual partners as *Friends* on Facebook. Data from a survey showed a

strong correlation between time spent on Facebook and jealousy related feelings and behaviours experienced on Facebook. However, the results could not determine if time spent on Facebook increased jealousy, or if the heightened level of jealousy which emerged as a result of the information found on partners' Facebook postings resulted in increased time on Facebook.

Fox and Warber (2013) explored the implications of Facebook on emerging adults' romantic relationships. Specifically they looked at the ability to change a relationship status on Facebook to "In a Relationship" and actively link or connect a profile to a romantic partner's profile, an activity they termed going Facebook official. This study suggested that women were more likely than men to believe that going Facebook official means a relationship is exclusive and that partners are not dating other people. Women also believed that the choice to go Facebook official represented a serious step in the relationship that indicated a long-term relationship. Following on from this, Fox, Warber and Makstaller (2013) addressed the implications of publicly declaring oneself as "In a Relationship" or going "Facebook official" with a partner on Facebook. Focus groups were carried out and participants suggested this status is a new milestone for couples in a relationship and going Facebook official is understood both on Facebook and offline as meaning an individual is in an exclusive, long-term and public committed relationship. Participants considered going Facebook official to be an indicator of an increased level of commitment in relationships. It was suggested that typically entering an exclusive relationship was followed by a discussion about becoming Facebook official.

Although Fox and Warber (2013) found a gender difference in the belief of the importance of going Facebook official, research has also found that couples are likely to portray their relationship on Facebook in similar ways. Whilst looking at dating partners' Facebook use and portrayals of intimate relationships on a Facebook profile, Papp, Danielewicz and Cayemberg (2012) found that partners demonstrated similar Facebook usage and were highly likely to portray their relationship on their Facebook profiles in similar ways. It indicated from a study of 58 couples that Facebook plays an important role in dating partners' intimate relationships. Dating

partners reported similar levels of Facebook engagement; they were also more likely to display a relationship status as being in a relationship on Facebook if their partner also did. Similarly, they were more likely to show their dating partner in their profile picture if their partner also did. This suggests that romantic partners demonstrate similarity on technology behaviours. Relationship satisfaction was associated with presentations of the relationship on Facebook. A male's display of a relationship status indicating in a relationship and a female's inclusion of their partner in the profile picture was associated with greater relationship satisfaction. This gender difference in the connection between relationship satisfaction and presentations of a relationship suggest that men and women may place different importance on certain public displays of the relationship. Finally, female reports of having had disagreements over the Facebook relationship status were associated with lower level of relationship satisfaction. Whilst this study found that couples demonstrate similar Facebook usage, Hand, Thomas, Buboltz, Deemer and Buyanjargal (2013) found that there was no relationship between an individual's usage of online social networks and their perception of relationship satisfaction and intimacy. However, they found that there was a negative relationship between intimacy and the perception of a romantic partner's use of online social networks. That is, even though they spend a similar amount of time on Facebook, individuals were more likely to perceive their partner's online social network usage as having a negative effect on intimacy in their relationship. This suggests that individuals are more likely to perceive a partner's usage of social networking systems as negative in comparison to their own usage even though they have similar usage.

Bowe (2010) looked at how the Facebook relationship status can have an effect on romantic relationships. The study examined how a relationship status on Facebook can impact a relationship in the offline world. Semi-structured interviews were conducted with undergraduate Facebook users to compare attitudes concerning the relationship status. It was found that changing the relationship status has the ability to change the dynamics of an offline relationship. Changing the relationship status on Facebook allows the couple to make the relationship official in an instantaneous manner. The participants who decided to change their status to 'in a relationship with' stated that this public declaration to their *Friends* was seen as the relationship's

natural progression, it was also used as a mechanism to stop people from flirting with their partner. In contrast to this view, the participants who did not list themselves as 'in a relationship with' stated the decision not to change their relationship status and to leave it as blank is something that was discussed offline between the partners and the main reason for not changing it was due to reasons of privacy. These participants felt it unnecessary to make such a public declaration to their *Friends* about their relationships. While comparing the two groups, those who list a relationship status and those who do not, it was found that those who do decide to change their relationship status attach more meaning to their Facebook use. That is, they placed more importance in what their *Friends* thought about the information on their profile and what their *Friends* discussed about their profile page, than those who did not list a relationship status. Conversely those who do not decide to list their relationship status cited privacy as being crucial to their reasons and they portrayed a fear of making such a public commitment.

A Facebook dating application "AreYouInterested" carried out a survey on its Facebook page with approximately 1,000 participants. It was shown that 25% of participants found out that their own relationship was over by seeing it publicly broadcast on Facebook (O'Dell, 2010). The survey also showed that 21% of participants stated that they would break up with somebody through Facebook by changing their relationship status to single. It also emerged that 40% of respondents have updated their status on Facebook so that the person that they are dating sees that they have plans and almost 35% of respondents have used their Facebook status to make someone think that they have plans, even if they did not.

Another aspect of Facebook and relationships that was explored in recent research was how Facebook can be an electronic record of how people and relationships evolve. Carpenter and Spottswood (2013) explored romantic relationships on Facebook using the self-expansion model. The self-expansion model suggests that when developing close relationships people are motivated to expand themselves by adopting new interests, friends or identity characteristics. Facebook behaviours such as tagging one's partner in status updates or appearing together in photographs are examples of self-expansion processes which can be found in romantic relationships. An online survey was carried out and found that the number of past romantic

relationships a participant reported was positively correlated with the number of interests listed in a participant's Facebook profile. It is thought that this is due to self-expansion by incorporating a romantic partner's interest into one's own life. However, it was found that the number of past relationships did not affect how many *Friends* a user would have. The findings of this study show how Facebook is not just a tool for communication but it is also an electronic record of how people and relationships evolve. The study shows how past self-expansion can leave a residue which can be seen by more interests being added to a Facebook profile as a relationship changes.

First Impressions

A person who is disliked on the basis of their webpage is less likely to attract dates, friends or employers online (Walther et al., 2008). First impressions are very important during relationship initiation, as others will use this information to decide whether to pursue a relationship (Ellison, Heino, & Gibbs, 2006). First impressions often stick even after people have received new information that discredits them (Kassin, Fein & Marcus, 2008). In face-to-face social interaction, physical appearance and spontaneous behaviour such as vocabulary, grammar and nonverbal cues (for example, body movements, speech and facial expressions), influence the ways in which people initially form impressions of one another. The asynchronous nature of SNSs allows people to spend time carefully constructing an ideal presentation of themselves (Utz, 2010; Weisbuch et al., 2009; boyd, 2007; Jacobson, 1999).

Impressions developed online, may or may not be like those that occur from face-to-face interactions (Walther et al., 2008). Walther's hyperpersonal model of communication suggests that due to the absence of non-verbal cues that are available in face-to-face interactions, Computer Mediated Communication (CMC) users engage in selective self presentation (Ballard-Reisch, Rozzell, Heldman, & Kamerer, 2011). Due to this, CMC interactions can be more intimate than those of face-to-face interactions and lead to a different relationship than one based on face-to-face interaction. Due to the lack of cues in CMC there is a greater control over first impressions. People are able to devote more cognitive resources to the

communication process and have less concern about their physical self presentations. In addition due to the asynchronous nature of CMC, participants have time to carefully plan their responses and construct their self presentations. Hancock and Dunham (2001) examined comprehensiveness and intensity of impressions formed following either a text based synchronous CMC or a face-to-face interaction. Participants rated their partners' personality profile. Results revealed that impressions formed in the CMC environment were less detailed but more intense than those formed face-to-face. This finding suggests that initial impressions formed during a CMC are relatively incomplete in comparison to those formed during face-to-face interaction.

Contrasting this view, Weisbuch et al., (2009) demonstrated consistency in first impressions online and from face-to-face interaction. Participants were introduced to a confederate who they understood to be another participant and were instructed to get to know one another by asking questions. Their Facebook pages were then downloaded. The confederate rated participants on likeability, agreeableness and warmth. From videos of the social interactions, research assistants coded cues related to social expressivity and personal disclosure. Students rated the participants' Facebook page for likeability, how much they would want to be friends with the participant, how attractive the participant appeared and trustworthiness. A positive correlation between confederate liking and Facebook liking revealed similarity in impressions formed from face-to-face interaction and personal webpage's.

Back, Stopfer, Vazire, Gaddis, Schmukle, Egloff and Gosling (2010) looked at whether Facebook profiles reflect an individual's actual personality or their idealized self. Two hundred and thirty six participants (133 from an U.S. campus and 103 from Germany) took part in the study. Profile owners' personalities were measured using personality reports which measured the Big Five personality dimensions. In the U.S. sample, profile owners and four friends completed the Ten Item Personality Inventory and in the German sample, self-reports on the short form of the Big Five Inventory and the NEO Five-Factor were combined. Profile owners' idealized self was measured by rephrasing the Ten Item Personality Inventory and the Big Five

Inventory. Participants were told to "describe yourself as you ideally would like to be".

How profile owners were perceived based on their Facebook profiles were obtained from nine (U.S. sample) and ten (German sample) undergraduate research assistants, who looked at each profile and then rated their impressions of the profile owners using an observer-report form of the Ten Item Personality Inventory (U.S. sample) or the Big Five Inventory (German sample). The results suggested that Facebook profiles reflect an individual's actual personality rather than an idealized self, suggesting that people do not use Facebook profiles to portray an idealized virtual identity. This study gave an insight into the accuracy of people's self-portrayals on Facebook by means of observer ratings. However, the role of different profile elements (e.g. photographs, wall comments, or status updates) used by observers to draw conclusions were not identified.

Seidman and Miller (2013) examined how people visually process information presented in a Facebook profile. Participants' gaze was tracked as they viewed Facebook profiles to see how attention to different elements of Facebook is affected by the gender and physical attractiveness of the profile owner. The eye-tracking showed that participants spent more time looking at female profile photographs than male photographs; in contrast, they spent more time focusing on factual information presented on the male profiles than on the female profiles. It was also found that participants spent more time examining the text based information on the Facebook profiles than they did examining the photographs. The findings of this study show that when viewing a Facebook profile, viewers appear to initially make a brief analysis of the profile photograph to judge the physical attractiveness and gender of the profile owner and then spend more time reading specific information to form an impression.

Brunswick Lens Model

The Brunswick lens model describes the process by which individuals make inferences about the personality of others. The model suggests that elements are left behind in the environment by an individual which will reflect their characteristics,

enabling others to form an impression of their personality (Antheunis & Schouten, 2011). While carrying out research based on the Brunswik Lens Model, examining personality impressions based on personal offices and bedrooms, Gosling et al (2002) identified two mechanisms by which personality is displayed in physical environments, identity claims and behavioural residue (Vazire & Gosling, 2004). Identity claims are controlled symbolic statements made intentionally by individuals about how they would like to be viewed. Identity claims can be subtle (for example, displaying photographs of friends to express social nature) or explicit (for example, stating beliefs). In contrast, behavioural residue is physical traces of earlier behaviour which has been left behind unintentionally and contains cues about past or anticipated behaviour (e.g. a disorganised cd collection may reflect a low frequency of tidying behaviours) (Antheunis & Schouten, 2011).

Although Gosling et al. (2002) carried out the study in offices and bedrooms it can easily be extended from a physical environment to a virtual environment such as a social network system (Vazire & Gosling, 2004). However, unlike bedrooms or offices, an individual's social network profile is a highly controlled environment for self expression. Profile owners have the freedom to decide which information they want to share with others to portray their desired image, essentially giving them a lot more control over self presentation than is permitted in other areas of everyday life (Antheunis & Schouten, 2011). This is because profile owners make a conscious decision on what to write and what photos to share with others. This can be viewed as making identity claims.

SNS contain *Friend-generated* and *system-generated* information. Even though the information is not initiated by the owner, it is associated with them, as it is a result of their previous actions and the individual has little control over if and how this information is displayed. Therefore, this information can be seen as behavioural residue and may influence others' perception of them (Antheunis & Schouten, 2011). Behavioural residue is seen as more reliable because this information cannot be manipulated by the person who it refers to. Gosling et al. (2011) found that observable information found on Facebook profiles is associated with personality traits. By looking at the behavioural residue on Facebook profiles a link between behavioural residue and the profile owners' actual personalities were revealed. This

suggests that observers were able to form accurate impressions of profile owners based on behavioural residue available on the Facebook profile. Ivcevic and Ambady (2012) examined identity claims on Facebook pages. Research assistants rated personality traits based on the participants' Facebook information page and Facebook wall pages were assessed for quantity and content of activity. Participants self-reported their traits with the 44-item Big Five Inventory and their friends completed the BFI referring to the target individuals. It was found that when making decisions on personality traits, the identity claims that observers relied most heavily on was the profile picture, followed by quotes and interests.

Self presentation

People attempt to present themselves in a favourable way on Facebook and this may have an effect on others' perceptions. Chou and Edge (2012) carried out a survey and found that using Facebook affects people's perceptions of others. The survey asked participants to rate three statements on a 10 point Likert scale; many of my friends have a better life than me; many of my friends are happier than me; and life is fair. The results showed a relationship between the length of time people had been a member of Facebook and their belief about other people's happiness. Specifically, the longer people have been a member of Facebook, the stronger their belief that others were happier than themselves and the less they agreed that life is fair. Furthermore, the higher the number of Friends people had on their Facebook profile that they did not know offline, the stronger they believed that others had better lives than themselves. This suggests that looking at the positive information presented by others on Facebook gives the impression that others are always happy and having good lives in comparison to their own lives, the authors suggest that this leads people to the conclusion that others have better lives than themselves and consequently life is not fair. This contrasts the finding by Qiu et al (2012) that not only are people more likely to disclose positive rather than negative information on Facebook, they are also aware that their Friends are more likely to share positive rather than negative information.

It has been found that gender and relationship status may have an effect on how people try to present themselves on Facebook (Alpizar, Islas-Alvarado, Warren &

Fiebert, 2012). Alpizar et al. (2012) examined self presentation in relation to gender, sexual orientation and relationship status. Analysis was carried out on 350 Facebook profiles. The profiles were analysed for personal information, demographics, recent activities and posts on the Facebook wall. The findings from the analysis of the data suggested that individuals in a relationship had greater rates of changing their profile picture, posting pictures of themselves and other people to a greater degree and spending more time observing the activities of other Facebook users than users that were listed as single. Further results indicated that males tended to more often report themselves as being single and were more likely to provide references to entertainment than females. The analysis also suggested that while both single users and users in a relationship frequently engage in social interactions with others, there is a difference between the interactions. Participants that were listed as single were more likely to initiate communication with other Facebook users and in contrast, individuals who were listed as being in a relationship were more likely to reply to comments others posted, rather than actively seek a social interaction. It was also found that individuals that listed themselves as being either bisexual or homosexual had changed their profile picture more often and they had a greater frequency of altering their personal profile information. Alternatively, these same individuals also spent a significantly less amount of time commenting on others' profiles and pictures.

Haferkamp, Eimler, Papadakis and Kruck (2012) looked at gender differences in self presentation online and reasons for SNS use. A survey and a content analysis were carried out and it was found that in relation to self presentation, women prefer using portrait photography as profile pictures, whilst men prefer full-body shots. It was also found that men change their profile picture more often than women. Additionally, when looking at motivations for Facebook use, it was found that women are more likely to use SNS for comparing themselves with others and for self presentation, whilst men are more likely to look at other people's profiles to find new friends or relationships.

The Warranting Theory

When forming impressions of others, people tend to place most value in information that has a higher Warranting value (Walther & Parks, 2002). The Warranting Theory differentiates information according to the source or Warranting value (Utz, 2010). The warranting value refers to how reliable information is based on how accurate an impression of an individual is formed. The Warranting Theory suggests that perceivers' judgments about an individual rely more heavily on information which the individuals themselves cannot manipulate, than on self-descriptions (Walther et al., 2009). On a social network system, *Friend-generated* and *system-generated* cues may have higher warranting value than *self-generated* cues because the individual has no influence (Antheunis & Schouten, 2011). The most obvious *Friend-generated* cues are the public messages or comments on a status update that appear on the timeline of one's profile page. The most obvious *system-generated* cue is the number of *Friends* that is shown on a user's profile page. Although an individual has some control over how many *Friends* they have, the number is always displayed on the user's profile. A user cannot choose not to show the number of *Friends*.

Friend-generated and system-generated information

The information on social network sites is provided not only by the profile owner, but by the profile owners' *Friends* and the systems themselves (Tong et al., 2008). A public display of connections is a central feature on Facebook. Tong et al (2008) examined the relationship between number of *Friends* and interpersonal impressions on Facebook. Participants viewed one of five mock-up Facebook profiles, which differed in number of *Friends* displayed on the profile. Profiles indicated 102, 302, 502, 702 or 902 *Friends*. Photographs and wall posts remained the same on each profile, a positive and negative statement appeared on each wall. *Friends* were represented on the profiles by wall comments, male and female *Friends* were included and each profile included a physically attractive and a physically unattractive friend. However, the profile owner was female in all five conditions. After viewing the mock-up profile, participants completed the measurement of interpersonal attraction developed by McCroskey and McCain (1974).

Results showed a curvilinear relationship between the number of *Friends* that profile owners have and others' perceptions of their social attractiveness. Specifically, a rating of the profile owner's social attractiveness was lowest when they had 102 *Friends* and was highest when the profile indicated 302 *Friends*. Once the number of *Friends* rose above 302, the social attractiveness of the profile owner began to decline, although the results suggested that it is better to have too many *Friends* than too few.

Walther et al., (2008) examined how information provided by and about people's *Friends* in a social network profile impacts judgments about the profile owner. A total of 389 participants viewed one of the eight mock-up Facebook profiles. Differences among profiles included (a) physically attractive or unattractive photos of wall posters, (b) positively or negatively valued wall messages with descriptions of the profile owner's behaviour and (c) gender of profile owner. This was followed by completing the measurement of interpersonal attraction (McCroskey & McCain, 1974).

In this experiment, the physical attractiveness of the Friends' photos, as seen in the Facebook wall postings presented on the mock-up profiles, had a significant effect on the physical attractiveness of the profile's owner. An interaction involving the gender of the profile owner and the nature of the wall statements was obtained with respect to the effect of *Friends'* comments on judgements of the profile owner's physical attractiveness. The negative statements suggested undesirable behaviour, as they involved sexual innuendo and implied that the profile owner was drinking excessively the previous night (for example, 'WOW were you ever trashed last night! Im not sure Taylor was that impressed.' Or 'Hey, do you remember how you got home last night? Last I remember you were hanging all over some nasty slob. please tell me you didnt take [him/her] home.'). These statements raised the desirability of a man's appearance in this study whilst decreasing the desirability of a female's appearance. These results suggest a sexual double standard which relates to the differences in individuals' evaluations of men and women who engage in premarital sexual behaviours when making social judgments or forming impressions of others. The main limitation of this research study is that the positive and negative comments that were used focused on different topics, more specifically; the negative

statements it used implied sexual behaviours or activity. It was found that these statements encourage a sexual double standard. This is important because it shows how Facebook can be used to reinforce stereotypes. However, this difference between male and female profiles may not have been determined had the comments focused on topics other than sexual activity, or if topics were kept consistent between positive and negative comments. Regardless of this limitation, this study highlighted the use of behavioural residue on a Facebook profile to make judgements of others as it showed people make judgements about the profile owner based on comments left by the profile owners' *Friends* and photographs of the profile owners' *Friends*. Even though the comments were not left by the profile owners and the photographs were not of the profile owner, people may believe that this information is associated with the profile owner and use this information when forming impressions of the profile owner. However, a Facebook user has some control over this information, they have the option to untag themselves from a photograph or ask another user to remove the photographs.

Strano and Queen (2012) examined the ways in which impressions are managed on social networking sites through image suppression, namely, untagging photographs or requesting photos to be deleted. From carrying out interviews and an online survey it was found that in addition to untagging photographs because they have wrongfully been tagged or because it is a duplicate photograph, users also untag photographs for reasons of impression management. Users stated that they would untag if they felt it presented them looking physically unattractive, or if they felt their actions in the photographs could be subject to disapproval or if they wanted to disconnect themselves from a particular social group or person they once shared a friendship with. It was also suggested that requesting *Friends* to delete photographs was less common than untagging photographs although it was still common practice and socially acceptable. This study reveals that suppression activities play a part of identity management in online SNS environments.

Another study that looked at suppression activities was carried out by Rui and Stefanone (2013). They carried out an online survey with 250 Americans and 162 Singaporeans looking at strategic self presentation on Facebook. One of the topics

that the survey addressed was unwanted Friend-generated information in the form of being tagged in photographs or wall posts that were initiated by Friends and caused discomfort. When asked how participants dealt with the unwanted Friend-generated information they discussed protective self-presentation strategies. It was reported that 66.9% of participants engaged in protective behaviour in response to being tagged in photographs they did not approve of. Of this 66.9%, 239 participants reported untagging the photos themselves whilst the rest said they would ask their Friends to remove the photos. When asked about unwanted wall posts, 51 participants claimed they asked their Friends to remove posts about them that appeared on their Friends' profile, 34 claimed they added another post in selfdefence and 142 participants stated they removed the wall post that appeared on their own profile page. In total, 56.2% of respondents reported protective reactions to unwanted wall posts on Facebook. Another topic that was addressed in the survey was self-generated information. A relationship was found between audience size and self-generated information; the larger the number of Friends a participant had the more self-generated information was shared. Additionally it was found that females share more photos and actively manage unwanted photo tagging than males. This study gave an insight into how people strategically present themselves on Facebook.

Self-generated information

Walther et al. (2009) carried out two experiments to examine the impact of self-generated versus Friend-generated statements about a profile user on the impressions participants made. The experiments were carried out using mock profiles resembling Facebook, to display self-generated information (self descriptive statements) and Friend-generated information (Wall postings from profile owners' Friends) about a user.

The first experiment was carried out to test perceptions of extraversion. The second experiment was to examine perceptions of physical attractiveness. The same experimental design was followed for both experiments; participants looked at a mock Facebook profile and believed they would interact with the profile owner on completion of the experiment. There were variations in the comments on the profile for both experiments (e.g. 'That was such a blast last night... my friends from home

love you' for the extraversion experiment and 'If only I was as hot as you' for the attractiveness experiment). The findings of this research study found that *Friends'* comments are more important in forming impressions *than self-generated* comments. These findings are consistent with Walther and Parks' (2002) Warranting hypothesis which suggests that *Friend-generated* information is deemed more reliable by observers than *self-generated* information when forming impressions as it is not as easy to manipulate.

Utz (2010) looked at how one's profile, number of Friends and type of Friends influence impression formation on social network sites. Fifty male and seventy-four female participants took part in an experiment which examined how far self-generated information (photographs and text submitted by profile owner), Friend-generated information (profile photograph of Friends) and system-generated information (number of Friends) influence the perceived popularity, communal orientation and social attractiveness of the profile owner. Participants viewed a variation (varying in extraversion of profile owner, extraversion of Friends and number of Friends) of a mock profile of the target person, Anouk, on the social network site Hyves. After viewing the profile, they rated their impressions of Anouk.

The experiment showed that a user's profile, profile pictures of their *Friends* and number of *Friends* have an influence on impression formation. However, *self-generated* and *system-generated* information had no influence at all on social attractiveness. There are some limitations to this study. Screenshots with a very limited profile without wall postings or additional pictures were used. Participants could not click on the profiles of *Friends* to look at extraversion of *Friends* (they only saw the small profile pictures). Extraversion of *Friends* may have had a different effect if the participants could have accessed and interacted with the full profiles of the *Friends*.

Antheunis and Schouten (2011) investigated to what degree *Friend-generated* and *system-generated* information on social network sites influence the popularity and attractiveness of adolescents. This study specifically focused on early adolescence for two reasons; adolescents are especially likely to turn to social network sites to meet new friends and get to know each other and adolescents are more likely to be

affected by the impressions others form of them based on their online profiles as they are often preoccupied with how they appear to others. A total of 497 high school students between 12 and 15 years were shown a variation of a Hyves profile of a girl called Eline. These variations include *Friends* 'attractiveness, *Friends*' wall postings and number of *Friends* displayed. Participants were asked that they were to form an impression of Eline based on her profile. Once participants had formed an impression they completed McCroskey and McCain's Measurement of Interpersonal Attraction (1974), examples of statements on this questionnaire include 'Eline seems pleasant to be with,' and 'Eline is pretty'.

Results showed that Eline was perceived as being more attractive when the profile included attractive Friends and more socially attractive when the profile had positive wall postings (for example, 'ELINE PARTYGIRL!!Was superfantasticamazing y'day! You're fun to go out with! Never ever had so much fun! Shall we go again soon?!?!??!'). Additionally, the number of Friends displayed on the profile positively influenced perceived extraversion, although it had no effect on perceived attractiveness. This study showed how system-generated and Friend-generated information are important contributions to social attraction. By investigating the two types of information in one experiment it also demonstrated that Friend-generated information is a stronger predictor of attractiveness than system-generated information.

Research Questions and Hypotheses

Literature to date has been examined. An overview of impression formation online was given and the similarities and differences between online and offline personas were identified. The similarities between online and offline relationship development and how people are starting to build relationships on SNS and tailor SNS profiles to portray a positive image of themselves were also identified. The literature also looked at the types of information presented on an SNS profile, that is, *system-generated*, *self-generated* and *Friend-generated* information. The studies looked at found that *Friend-generated* information (*Friends*' wall postings and *Friends*' physical attractiveness) was a stronger predictor of attractiveness than *system-generated* information (number of *Friends*) and *self-generated* information (Walther

et al., 2009; Utz, 2010; Antheunis & Schouten, 2011). This led to the generation of the following research questions and hypotheses.

Although earlier research has investigated the effects of the number of Friends (system-generated information), the comments displayed by Friends (Friend-generated information) and the comments made by the profile owner (self-generated information) on impression formation on social network sites, they have not been investigated in a single study. This study will explore the three types of information. Previous research has been carried out on which type of information provided on a social network profile is more important when forming impressions about popularity; extraversion and social or physical attraction in interpersonal friendship (Walther et al., 2009; Utz, 2010; Antheunis & Schouten, 2011). However, given that the previous research has focused on interpersonal friendship and Facebook is also used for dating, this research will focus on dating and romantic relationships.

RQ1: Does Facebook facilitate romantic relationships?

An SNS is a source of social information and people often use a social network profile as a way to learn about somebody (Vazire & Gosling, 2004). The large number of activities provided by Facebook, such as joining virtual groups based on common interests, playing interactive games and sharing personal information and photographs, provides users with many opportunities to build and maintain relationships. Previous studies have found that online SNS facilitate friendship, for example, Subrahmanyam et al (2008) found that 20% of participants in their study thought that Facebook had made them closer to their friends. Thelwall (2008) suggested that in addition to maintaining existing friendships, online SNS are used for dating and developing romantic relationships. Zhao et al (2008) found that up to 41.3% of Facebook users with a public profile were seeking friendship or a romantic relationship through Facebook. Consequently, this study will investigate if Facebook facilitates romantic relationships in a similar way to how previous studies have found Facebook to facilitate friendship.

RQ2: Does information presented on a Facebook profile have an effect on romantic attraction?

Earlier research has investigated the effects of system-generated information, Friend-generated information and self-generated information on impression formation on social network systems but have yet to be investigated in a single study (Walther et al., 2009; Utz, 2010; Antheunis & Schouten, 2011). Whilst looking at Friend-generated and system-generated information, Walther et al (2008), found a sexual double standard. This was due to the negative statements suggesting undesirable behaviour such as sexual innuendo and implied excessive drinking. For this reason it was decided that for the present study, positive and negative comments to be displayed on profiles would be consistent and not of varying topics. It was also decided to not include sexual references in this study. However, due to findings by Moreno et al (2010) and Fournier and Clarke (2011) which suggested a large amount of people share alcohol related content on Facebook, it was decided that the profiles would include alcohol related comments.

H1: Positive comments left by *Friends* will lead to higher scores on a Romantic Attraction Scale than negative comments would.

H2: Positive comments left by the profile owner will lead to higher scores on a Romantic Attraction Scale than negative comments would.

H3: A profile owner with a large number of *Friends* will be judged as more romantically attractive than a profile owner with a fewer number of *Friends*.

RQ3: Which type of information provided on Facebook has a greater effect on romantic attraction, *system-generated* information, *self-generated* information, or *Friend-generated* information?

Previous research has been carried out on which type of information provided on a social network profile is more important when forming impressions, finding that *Friend-generated* information was a stronger predictor of attractiveness than *system-generated* information and *self-generated* information (Walther et al., 2009; Utz, 2010; Antheunis & Schouten, 2011). However, the three types of information have not been investigated in a single study. This study will investigate these variables

together as it will determine the strongest predictors of attractiveness and allow any interaction effects between the variables to be identified.

H4: *Friends*' comments will be a greater predictor of higher scores on a Romantic Attraction Scale than profile owners' comments.

H5: *Friends*' comments will be a greater predictor of higher scores on a Romantic Attraction Scale than number of *Friends*.

H6: Number of *Friends* will be a greater predictor of higher scores on a Romantic Attraction Scale than profile owners' comments.

RQ4: Can personality traits of participants predict which elements of Facebook profiles are considered to facilitate romantic relationships?

Previously studies by Ross et al. (2009) and Amichai-Hamburger and Vinitzky (2010) were carried out on the relationship between personality and Facebook behaviour. Overall, the results of the two studies suggested that there is a connection between personality factors and Facebook behaviour. However these findings are based on the information that is uploaded to Facebook profiles by Facebook users. It is unknown if there is a relationship between personality type and how people perceive the different types of information presented on others' Facebook profiles. Consequently this study will investigate if different personality traits can predict how Facebook is perceived to facilitate romantic relationships.

H7: Participants with high extraversion scores will rate chat and the ability to join Facebook groups as important relationship facilitators.

Ross et al. (2009) found that individuals that scored high on the trait of Extraversion were found to be members of significantly more Facebook groups than those who had low extraversion scores.

H8: Participants with high Neuroticism scores will rate the timeline and sharing photographs as important relationship facilitators.

Ross et al. (2009) found those high on the trait of Neuroticism reported that the Wall was their favourite Facebook component, whereas those low on Neuroticism preferred photos. Whereas Amichai-Hamburger and Vinitzky (2010) found highly

neurotic participants were found to prefer sharing their photos on their Facebook profile.

H9: Participants with high openness to experience scores will rate personal information sections as important relationship facilitators.

Amichai-Hamburger and Vinitzky (2010) found that participants that scored higher on openness to experience included more features in the personal information section.

H10: Participants with high conscientiousness scores will rate the people you may know tool and *Friend* suggestions as important relationship facilitators.

Amichai-Hamburger and Vinitzky (2010) found that participants that scored higher on the trait of conscientiousness were found to have more Facebook *Friends*.

H11: Participants with high agreeableness scores will rate photographs as important relationships facilitators.

Amichai-Hamburger and Vinitzky (2010) found a U-shaped correlation between agreeableness and the number of pictures uploaded to Facebook.

These research questions and hypotheses will be dealt with in the following chapters. Chapter Two will focus on Research Question 1. Semi-structured interviews were carried out to answer this question. The method followed when carrying out the interviews and findings from the interviews will be discussed during Chapter Two. Chapter Three will deal with Research Questions 2 and 3 and Hypotheses 1-6. An experiment was carried out in order to test these hypotheses. The design of the experiment and the findings from the experiment will be discussed in detail during Chapter Three. Chapter Four will focus on research question 4 and Hypotheses 7-11. An online questionnaire was carried out in order to test these hypotheses. The design of the questionnaire and its findings will be discussed in detail in Chapter Four. Finally, Chapter Five will summarise the findings from the three studies. Chapter Five will also discuss the implications of the findings of the three studies and indicate directions for future research.

Chapter Two Study One

Methods

Study Design

Research Question One asked if Facebook facilitated romantic relationships. Study One utilised a qualitative design. In terms of research design several options were considered, a survey would have been too inflexible to gain a more in depth insight into the topic, the flexibility of a qualitative approach was more suited. Focus groups were considered. However, due to the nature of the topic it was decided it would be more appropriate to conduct interviews as participants may not feel comfortable talking about such personal information in a group setting. To allow participants the flexibility of discussing the topic in detail whilst remaining on topic (Robson, 2002), it was decided that semi-structured interviews would be carried out. To ensure all necessary data was collected during the interview, it was decided to include a quantitative aspect to the interviews. The information gathered during Study One will help to design Study Two which will adopt an experimental design. Convenience sampling was used to recruit undergraduate students.

Participants

To participate, volunteers had to be students with a Facebook account. As much of the interview focused on the functionality of Facebook, participants would have to have knowledge on how Facebook worked. Five female and four male participants volunteered to take part. All participants were undergraduate students with an age range of 20 to 40. Convenience sampling was used to recruit students. The researcher approached students during class time asking for participants to take part in an interview.

Ethics

This research was approved by the Department of Learning Sciences Ethics Committee in IADT. Ethical guidelines, as issued by the British Psychological Society (BPS) and the Psychological Society of Ireland (PSI) were adhered to at all stages throughout the interview process. Written consent was obtained from all participants and they were informed that they could withdraw from the study at any time. Participation was anonymous and confidential. On occasion some participants began to discuss specific events that they had experience or knowledge of and they were reminded that they should not mention names of people involved in order to maintain anonymity.

Participants were asked if they would give permission for audio recording of the interview. They were informed it was not a requirement and should they not consent to being recorded, they could still take part in the interview. The recordings and transcriptions were treated with full anonymity and confidentiality. Recordings and transcriptions were stored on a password protected computer, to which only the researcher had access. Assigned codes were used in place of participant names. Participants were informed that no identifiable data would be used from the recording. After completion of the interview, participants were debriefed and given a chance to ask the researcher questions. They were also reminded that they could withdraw their data from the study and all data collected would be kept confidential.

Materials

An interview consent form (Appendix A) was used to give participants information about the research and to obtain consent from participants. A debrief form (Appendix B) was given to participants with additional information about the research and with the researchers contact details. An audio recorder was used to record the interviews. Pilot testing of the recording device ensured that the equipment was functional.

Interview Script

To give the researcher a document to keep each interview on topic whilst allowing participants flexibility to discuss the topic in detail, an interview script (Appendix C) was used during the interviews. The interview script (Appendix C) focused on areas such as relationship status updates, photographs on Facebook, browsing through Facebook profiles and dating on Facebook. The script encouraged participants to discuss stories or experiences they had encountered with Facebook, whilst not revealing names or personal information of others. The interview script (Appendix C) was semi-structured with open ended questions. The script began with general questions about the use of Facebook, for example,

"Why do you think people are interested in what others share on their profile?"

"What reasons could people have for looking at profiles of people they do not know?"

This led into more specified questions about Facebook and relationships for example;

"Do you think people use Facebook for romantic reasons?"

"What reasons would people have for using facebook for dating instead of an online dating site?"

Once the interview script (Appendix C) had been developed it was pilot tested on a female participant. The participant found some of the questions on the interview script (Appendix C) to be quite confusing and the script appeared to contain too many questions so the script was modified and some questions were removed. The questions on the script were also failing to gather some of the required data concerning if and how Facebook facilitates romantic relationships. It was decided, rather than add questions regarding this information to the script, it would be more convenient to include a quantitative exercise during the interview to gather this information. Having participants complete an exercise in relation to how Facebook facilitates romantic relationships would provide participants with an opportunity to think about the topic before being asked the interview questions and it would also ensure that specific data about what elements of Facebook facilitates romantic relationships would be gathered.

Exercise One

To determine what elements of Facebook facilitate romantic relationships, participants were given an exercise which included a list of the different elements on Facebook and asked to rate on a scale of one to ten how much each element facilitates romantic relationships. Elements of Facebook included Facebook chat, friend suggestions, relationship status, the Facebook wall, photographs and games. After the exercise was designed another pilot test was carried out with a male

participant to test the modified interview script (Appendix C) and Exercise One (Appendix D). Exercise One (Appendix D) did not cause any problems for the participant. The interview script (Appendix C) appeared to be much easier for the participant to understand and the participant was happy with the number of questions asked. However, the interview was still not obtaining some important information about the type of interactions people use and the level of intimacy appropriate on Facebook. To gain this information it was decided that participants be provided with an informal interactive stimulus activity during the interview to put them at their ease and to give them confidence in answering later questions.

Exercise Two

To determine what types of comments participants felt were appropriate to share on Facebook, participants were presented with ten examples of Facebook comments. Each comment was presented to participants one at a time on a white A4 page with large black writing. When presented with each comment the participant was asked if they thought each comment was appropriate for a Facebook wall or a private message and if so, would it be deemed appropriate for someone the commenter knew or someone they did not know. The Facebook comments focused on relationships and were taken from Facebook profiles. These examples included data from Facebook status updates such as,

"You left your Facebook logged on! Just wanted you to know how cute it is to see you flirting with massive amounts of girls. Kind of humiliating for me, really... but now you can feel my pain! I'm sorry i wasn't 'good enough' for you not to do that to me. Here's the thing, now you're single... so you can do whatever you want! :D"

and Facebook wall comments, for example,

"i saw u on my ppl u may know tool i would love to know more abt u!".

A third pilot study was carried out with a male participant to pilot Exercise One (Appendix D), Exercise Two (Appendix E) and the interview script (Appendix C) together. No problems were raised during the third pilot study and the whole process lasted approximately 50 minutes.

Procedure

The interviews took place in a small private room between the 20th and 27th March 2012. Participants were greeted and given a seat facing the researcher. The interview session then commenced with an explanation of the interview process and the general subject area of the interview. They were given a consent form (Appendix A) which explained the research and the participants' rights. The researcher explained that participation was voluntary and they could withdraw from the study or refuse to answer any questions they did not wish throughout the interview. Participants were asked for permission to audio record the interview but were reminded it was not a requirement. Once the consent form (Appendix A) had been signed, the interview session began.

The interview consisted of three distinct phases: Exercise One (Appendix D), which was the exercise focused on the elements of Facebook that facilitate romantic relationships; Exercise Two (Appendix E), which focused on Facebook comments and finally the semi-structured interview section.

On completion of the interview, participants were given a debrief form (Appendix B) and were reminded they could withdraw from the study at any time. The whole process took 40-50 minutes. All interviews were audio recorded as all interviewees gave permission to do this. On completion of all interviews, the recordings were transcribed.

Results

Research Question One asked if Facebook facilitates romantic relationships.

Participants took part in an interview which was broken into three distinct phases.

Exercise One was related to how much elements of Facebook facilitate romantic attraction. Exercise Two focused on use of language on Facebook and finally a semi-structured interview.

Exercise One

Exercise One gave participants an opportunity to think about the topic of how Facebook facilitates romantic relationships before proceeding to the interview questions and it also provided data about what specific elements of Facebook facilitates romantic relationships. Exercise One provided participants with a list of Facebook elements and asked participants to rate on a scale of 1-10 how much each element facilitates romantic relationships. The findings will now be discussed.

Table 1 illustrates the findings of Exercise One. Facebook chat was found to be the highest element of Facebook in facilitating romantic relationship development with a mean of 8.33. The second highest was the ability to share a relationship status which was found to have a mean of 7.67, this was followed by comments on the Facebook wall with a mean of 6.78 and comments on status updates with a mean of 6.44.

Table 1: Elements of Facebook that facilitate romantic attraction.

	Min	Max	Mean	Standard Deviation
Photographs	4.00	9.00	6.22	1.86
Activities	2.00	9.00	6.00	2.73
Comments on wall	1.00	9.00	6.78	2.68
Chat	7.00	10.00	8.33	1.22
Status updates	1.00	9.00	5.44	2.60
Comments on Status updates	1.00	9.00	6.44	2.40
Newsfeed	1.00	7.00	5.00	1.73
Check in	1.00	7.00	4.67	1.88
Games	1.00	3.00	2.33	0.86
Relationship status	5.00	9.00	7.67	1.58
Interested in	2.00	9.00	6.22	2.49
Groups	1.00	7.00	4.22	1.86
Poking	1.00	9.00	5.22	2.54

Exercise Two

Participants were shown a number of examples of comments found on Facebook and were asked to comment about their appropriateness in the context of romantic relationships. The purpose of this exercise was, firstly, to provide an informal stimulus exercise to put participants at ease and give them confidence in answering later questions. Secondly, the activity would provide feedback on the views of participants on the kind of language and level of intimacy appropriate on Facebook. Participants were shown the comments one at a time and asked if the comment was appropriate for a Facebook wall or an instant message and if so, was it appropriate from someone that is known or someone that is unknown. The findings are discussed below. Each comment will be discussed separately.

1. 'Heyy how u doin beautiful (:'

Most participants found this use of language to be appropriate for an instant message on Facebook but only if they were saying it to somebody they already knew.

Participants felt it was inappropriate for posting on a Facebook wall and only one participant felt it would be appropriate to say this to somebody unknown.

2. 'i saw u on my ppl u may know tool i would love to know more abt u!'

Six participants stated that this type of comment was appropriate for somebody that is unknown; five stated that it was appropriate to be put in an instant message whilst only two believed it would be suitable to be posted on the Facebook wall. Two of the participants that believed this type of comment was inappropriate to send to somebody expressed a strong opinion of how it was completely inappropriate to contact somebody on Facebook if you do not know them. However, it was stated that this type of comment could be sent to somebody that you had a brief meeting with.

3. 'My marriage is over!!'

Participants were in complete agreement that this type of message containing such personal information would be completely inappropriate for someone unknown. One participant stated that even if it was sent to somebody known on a Facebook wall it would still be publicly available to those unknown so for privacy reasons, personal statements such as this should not be displayed at all on a Facebook wall

"Well if you put it on a wall of even someone you know, it's going to be quite public" (Participant 3)

Only four people thought it would be appropriate for somebody known, with only one of these four people thinking it would be ok to display on the Facebook wall. Although participants did not believe it was appropriate, two participants did believe that this kind of comment would be seen as a Facebook wall post.

4. 'mail me ur digits we do beers..'

Seven participants believed this would be appropriate for somebody known. Of these, six believed it was appropriate for an instant message and five thought it was okay to appear on a Facebook wall. One participant also stated,

"That looks like something you would see put on somebody's wall, your Friends wall" (Participant 2)

Three participants thought it would be acceptable to send this type of message to someone unknown. One participant stated that looking at the profile of somebody that is unknown would give an indication of their response which would let you know if it would be appropriate or not for that particular individual.

"If you didn't know them and you got the impression from their profile that they might respond well to that, you could also use it I suppose" (Participant 2)

5. 'I ♥ u2 XX'

Most participants found this level of intimacy to be appropriate for Facebook. However, one participant completely disagreed,

"I don't like that kind of thing, not appropriate for Facebook" (Participant 5)

6. 'Woo back on the market, what you doin tonite girl?'

Participants were unanimous in the opinion that this type of discourteous language would be inappropriate for someone unknown on Facebook. Six participants thought it would be ok for someone known, with five of these thinking it would be appropriate for a Facebook wall.

"You would probably see it up on a wall post" (Participant 7)

Although one participant did explain how the appropriateness would depend on the context and it would only be appropriate if it was a joke. One participant felt it would be best kept for an instant message because it may be disrespectful to others if they were to see it.

"On a wall it's very disrespectful if the person's ex is on Facebook as well so it's better for private message" (Participant 3)

Another participant thought that if a message was going to be so discourteous, then the individual probably would not care how appropriate it would be and how appropriate it would be for others to see. "If they're going to say it like that, they probably wouldn't care and they would put it on a wall anyway" (Participant 8)

One participant also told how they had seen this type of message on Facebook

"I dunno [sic] how appropriate it is but I have seen this sort of thing on somebody's wall" (Participant 2)

7. 'Hottie if ive ever seen one ♥'

Only two participants thought this type of language was appropriate for people who were unknown, whilst five thought it would be suitable for someone known. Five participants felt it would be most appropriate in an instant message but two felt it could be also appropriate for a Facebook wall.

"I would think it would be better in a Facebook message, but it could be nice to be on someone's wall as well, depending if the person would view it well" (Participant 3)

One participant told how although they were unsure of how appropriate it would be, they still thought it would be posted to someone's Facebook wall

"I don't think it would be appropriate but I still think people would do it" (Participant 2)

8. 'I'm sorry for sleeping with your girlfriend: (i sent you a farmville gift. Are we ok now?'

Six participants found this relaxed attitude in a Facebook message to be appropriate for someone that is known provided it is sent in an instant message. It was mentioned that placing a message like this on a wall making it visible to others would make it more inappropriate than sending in an instant message.

"I would be more annoyed if it went up on my wall and it was visible to others but I would be very annoyed if it came through an instant message as well, em, but it's probably appropriate in a weird world we live in for an instant message" (Participant 7)

Of the three participants that thought it would be an inappropriate message to send, one of these stated it may be ok to send a message like this if it was meant to be humorous.

9. 'I couldn't help but notice you recently went from being "in a relationship" to "single". I would just like to remind you, that nothing would piss off your exboyfriend more than if you had sex with me. Thank you for taking the time to read this message.'

Five participants thought this type of humorous message was appropriate for a Facebook instant message with four of these participants stating it was suitable for someone known and only one participant stating it was more appropriate for someone unknown.

"It would be fine as an instant message kind of a thing but with a smiley at the end like [sic]" (Participant 1)

One participant discussed how a message like this may be appropriate if trying to instigate a relationship with somebody.

"Maybe in an inbox it would be appropriate y'know, [sic] if somebody is trying it on, but not up on a wall" (Participant 7)

10. 'You left your Facebook logged on! Just wanted you to know how cute it is to see you flirting with massive amounts of girls. Kind of humiliating for me, really... but now you can feel my pain! I'm sorry i wasn't 'good enough' for you not to do that to me. Here's the thing, now you're single... so you can do whatever you want! :D'

Four participants thought a message like this would be more appropriate for an instant message and one participant thought it would be suitable for a Facebook wall.

Interviews

Participants took part in a semi-structured interview that lasted on average 20-30 minutes. The interview questions (Appendix C) focused on general Facebook use, the use of the relationship status, the use of photographs and the use of Facebook in romantic relationships. All interviews were recorded. The interview recordings were

transcribed and data was analysed by two readers for frequency, overlap and contradictions in phrases and themes. There was 68.44% agreement between the two readers. Throughout the course of the interviews, themes emerged in relation to several aspects of Facebook. The five major themes of the interview transcriptions are discussed below.

- 1. Facebook as a relationship facilitator
- 2. Relationship status
- 3. Creating a positive image
- 4. Facebook and Dating sites
- 5. Facebook stalking

Facebook as a Relationship Facilitator

When asked if people check profiles of others they meet offline, eight participants indicated that it was common practice to check the Facebook profile of somebody they had an initial offline encounter with. Three participants discussed how they had personally checked Facebook profiles of people they had initially met offline. When asked what reasons people would have for doing so, one participant told how Facebook can be used as a tool to gain information about somebody that you have an initial offline encounter.

"If you meet a lad on a night out or something you're just like ah yeah I'll check this weirdo [sic] out see if he is a psycho or not" (Participant 8)

Another participant told how of it is common for people to tell others to find them on Facebook on first introduction,

"Find me on Facebook they tell ya [sic] so then you have met them and then you find them on it". (Participant 1)

While none of the participants had met anyone through Facebook, five participants felt it was a good way to develop a friendship further. One participant told how they had increased friendships through Facebook.

"I've increased friendships with people after meeting them once briefly, being Friends on Facebook, talking on Facebook getting more acquainted then meeting up as friends but I've never purely made friends on Facebook". (Participant 3)

Four participants expressed how Facebook can be used as a tool to facilitate relationships development,

"it can be a good place to get talking with someone but not necessarily romantic talking, but at the same time, the more you talk to someone, the more emotionally involved you get and the more emotional attachment there is to it." (Participant 3)

A Facebook profile provides an opportunity for an individual to gain an insight into likes and dislikes of a profile owner and may lead to them being liked more by the profile owner.

"by kind of reciting back the things that they said they like". (Participant 2)

It also emerged during two interviews that browsing an individual's Facebook profile can be like a substitute for face to face interaction with the person.

"You get a sense of the person, like hanging out with them even when they're not there". (Participant 3)

It emerged that turning an offline friendship into a romantic relationship through Facebook and getting to know others through mutual *Friends* on Facebook was common. One participant explained how Facebook allows you to develop a

friendship more and described how you get to chat more socially without the intent of dating but it may progress to dating

"It's like talking in a social setting. It's not with the intent of being, of starting dating and stuff but, there can be some of that, maybe you know, you're real to your friend, kind of like you can talk to them normal" (Participant 3)

It was discussed during one interview how Facebook can be used as a tool to further get to know someone

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"I think if you know someone already you can use it as a tool" (Participant 1)
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One participant also reported that Facebook makes it easier for people to ask out others they already know,

"I know people who have propositioned people but they would have known each other" (Participant 3)

One participant explained how she thought Facebook is more secure than a dating site because Facebook focuses on your friends and community and provides opportunities to meet *Friends* of your *Friends*,

"Facebook is a network that revolves around your friends and your community first as opposed to a certain number of people that want to use a dating site so maybe you can ask your friends about their friends that you might be interested in or whatever it might be but I think it's more secure socially because you have, y'know, [sic] bigger groups of people" (Participant 2)

One participant told of her single friend who would browse through her *Friends* list seeing if there was anybody she would be interested in

"I have a single friend where she would surf around a bit you would see her y'know [sic] she might look through my Friends list to see is there anybody there that would interest her" (Participant 7)

Another participant told the story of her sister meeting her partner through Facebook by somebody she had an initial offline meeting

"My sister was asked out but it was some lad that she knew so, but she had only met him once kinda [sic] thing" (Participant 8)

Relationship Status

The ability to share and change a relationship status was a topic that came up a great deal during each interview. Participants explained positive and negative effects of the relationship status on Facebook. When asked about sharing relationship status on Facebook, the sample differed greatly in their opinion. Two participants did not think it was at all appropriate to share such personal information on Facebook whilst another participant made the comparison to a wedding ring.

"Well I suppose it's the same thing as wearing a wedding ring y'know [sic], you kind of know if someone is or isn't available so to speak" (Participant 1)

Four participants expressed how people will check a relationship status on Facebook if they are interested in someone and want to make sure they are single.

"Maybe they were interested in them to see their relationship status"
(Participant 9)

They also told how it was useful to find out when somebody was in a relationship.

"Someone is in a relationship you know not to be sending them dubious flirty comments cause [sic] you will have a fella [sic] coming after you with a fist". (Participant 1)

Five participants thought that others would actively monitor a relationship status if they wanted to know if someone was single.

"Well you're always going to have some lurkers that want to wait for somebody to break up with somebody" (Participant 2)

When asked about people using the relationship status tool to end a relationship, all participants thought that it was not common practice and told how they had never heard a story of somebody they knew ending a relationship by a change of relationship status. It was also thought that a public change in relationship status on Facebook may affect a real life attraction.

"I think it could be possibly used like y'know [sic] not through facebook but like if you were Friends with someone and thought they like ya [sic] liked them and ya saw that they were single maybe it could like affect the real, like in real life, how they like act and stuff" (Participant 5)

One participant told how people could browse through profiles looking for people who are listed as single.

"Looking at people who are single who I'm friends with, yeah they would look around profiles to see who is single and who is not single" (Participant 7)

In addition to allowing others the ability to see an individual's relationship status on Facebook, it also gives an individual the option to choose if and when this information will be shared and who will be allowed to view this information. For example, one participant explained how the relationship status can also be used as a tool when people want to actively seek a potential partner; the relationship status can be changed to single so everybody can see.

"They can go back on the market, like they can make it available information to everybody" (Participant 7)

However, one participant explained the negative effects of sharing a relationship status and how it causes an extra strain on a person when a relationship ends because then the relationship has to be ended virtually.

"With the potential of breaking up I wouldn't want it and it's a big deal and it causes an extra strain on a person if you've broken up with someone" (Participant 3)

When asked why people would choose to publicly announce their relationship status on Facebook when this information can be kept private, two participants told how they thought a change in relationship status to 'single' could be vicious and done deliberately to hurt the other person,

"Maybe it's a dig [sic] at the other person" (Participant 7)

whilst two others thought it was done to gain attention.

"Some people are looking for the attention for going from in a relationship to single". (Participant 6)

Another participant thought for privacy reasons, it would be best to hide such personal information.

"I know you can hide your relationship status if I went from being in a relationship I would hide it as opposed to announce it although I don't use it that option" (Participant 3)

Creating a Positive Image

When asked the reasons why people would share photographs on Facebook five participants explained how they thought people try to create a certain image through photographs. One participant felt photographs were uploaded to create a positive image and even if a photograph was uploaded to Facebook by a *Friend* that the profile owner did not like, they would ask whoever put it up to take it down.

"It's from a positive side though I would feel y'know [sic] no one would ever post up a picture of them looking terrible or y'know[sic] they'd get on to somebody very quickly to take down a picture that they looked terrible in. But they would be very quick to y'know [sic], going out for the day and looking nice or going somewhere nice and sorta [sic] pictures like that" (Participant 7)

One participant thought photographs were uploaded for self presentation purposes and described how the photographs often portray an element of fun.

"I suppose to show people that they had a really good time or something like that cause I suppose you wouldn't really be putting up pictures that are too negative of yourself em [sic] so to show kinda the whole self presentation thing that y'know [sic] this person looks like they are having a great time so if I put up these photos people will think I'm having a great time" (Participant 9)

Another participant thought it was to exaggerate how much fun they were having.

"To show that they are having more fun than they actually are". (Participant 6)

Checking how much fun somebody is having was also given as a reason by three participants as to why people would be interested in looking through other people's photographs.

"To see if they have like funny nights out that kinda thing [sic]" (Participant 8)

Facebook and Dating Sites

When asked what reasons people would have for using Facebook for dating rather than an online dating site, five minor themes emerged, there is more information available on Facebook than on an online dating site, the information presented on Facebook is more honest than an online dating site, Facebook is more secure and more social than an online dating site, a relationship can build more naturally on Facebook than on an online dating site and online dating sites carry a stigma.

Two participants stated that a Facebook profile contains a larger amount of information than an online dating site profile. The amount of pictures on a Facebook profile allows people to browse through somebody's photos if they were interested in a particular person in the photos and a Facebook wall will also allow a person's interactions with others be seen.

"there is more information on Facebook than there is on a dating site, like there's loads of pictures, you can see them talking to their Friends if they're not on private so you know what they're like, their humour is like" (Participant 4)

In addition to the amount of information contained on a Facebook profile, it also emerged during one interview that the information presented on the profile was more honest than that of a dating profile because a dating site profile is specifically aimed at looking attractive.

"If you have something up on a dating site, you're trying to make yourself look the best so you have photoshopped [sic] your picture and you have yourself looking great and sure your interesting and you love everything. Sure you're the best person ever and a great sense of humour and all this kind of craic. Whereas that might not be at all like and you can go onto your facebook and find out well actually they like to sit at home most nights and all this kind of thing. So it would be a bit more honest, I presume" (Participant 1)

Two participants also expressed how they felt Facebook was a more secure environment than an online dating site.

"There's a safe network built up there y'know [sic]. If they can get to know people via people they already know, there's a certain perceived safety" (Participant 7)

Two participants explained how it is more casual to meet somebody on Facebook than on a dating site where everybody is there to get a date, she made the comparison "It can be like meeting someone in a bar as opposed to meeting someone in a singles bar on a singles night". (Participant 3)

The same participant also felt Facebook was more natural and relationships can just develop through Facebook interactions even if it was not the initial intentions of the individuals.

"Maybe you know you're real to your friend kind of like you can talk to them normal and it's not kind of, not tainted but not carrying this idea that maybe you're going to get a date out of it, you can just see how it goes" (Participant 3)

Throughout the interview three participants described a stigma around online dating sites and stated this is why they think people would be more inclined to use Facebook for dating instead of an online dating site,

"You can't get a date you have to go on online dating things, whereas on facebook it's just, it's the next step away from typical interaction isn't it" (Participant 7)

However, one participant felt if a person was actively looking for a date it may be better to use an online dating site because it would offer more privacy.

"People might want to go on dating sites because they don't want people to know that they're looking or whatever" (Participant 2)

Facebook Stalking

An interaction with *Friends* on Facebook not only gives an insight into the person's personality, but also into their activity. One participant made the comparison of Facebook being like taking a look into someone's daily life and how if the opportunity presents itself to look at this information people are going to look.

"If someone said that keyhole over there looks into someone's house and you can watch them doing their day to day activities you wouldn't ignore the keyhole, you would have a look" (Participant 3)

Four participants spoke about Facebook stalking, an activity which they described as browsing through peoples profiles to gain information and insight. It was thought that when people are Facebook stalking they are looking for specific information. One participant described why people would stalk profiles of people they do not know,

"say if you're just extremely bored you just go onto a profile to see what's funny then you might go have a bit of a roam". (Participant 8)

The same participant also claimed

"Everyone does it" (Participant 8).

Another participant told how she had heard of people Facebook stalking.

"I have heard of girls Facebook stalking guys but it's not like serious it's just like seeing what they're doing" (Participant 6)

Upon further investigation the participant told how she had friends who would check when people they are interested in are going out next, an activity she identified as Facebook stalking.

"Like going through and seeing what they're doing and seeing when they will probably be out next, basically Facebook stalking". (Participant 6)

Summary of Results

All participants gave highly informative interviews covering a range of topics in relation to use of Facebook and Facebook facilitating romantic relationships. During the interviews the main points that emerged were:

After initial offline meetings, people find each other on Facebook. This
allows people to gain insight into others and allows a friendship to develop.

- The relationship status on Facebook is a good way to find out if someone is single or in a relationship and it also allows someone to publicly announce they are single if they want to find a romantic partner.
- Facebook is a good way to develop a friendship into a romantic relationship and it also provides the opportunity to meet Friends of your Friends.
- People upload photographs onto Facebook to create a positive image of themselves to show how much fun they are.
- Facebook has a larger amount of information than an online dating site, in
 addition the information is also considered to be more honest or trustworthy
 because it is not specifically aimed at trying to look attractive; it is more
 natural.
- Facebook is also considered to be more secure and more social than online dating sites.
- A relationship can build more naturally on Facebook than on an online dating site.
- Online dating sites carry a stigma so people may prefer to use Facebook for romantic reasons.
- The amount of information present on a Facebook profile allows for Facebook stalking, that is, allows others access to information including where they are going and who they are talking to.

Discussion

The aim of the interview in Study One was to examine Research Question One and investigate if and how Facebook facilitates romantic relationships. During the interviews, it emerged that participants thought Facebook does facilitate romantic relationships and the specific tools that act as facilitators were identified. The key findings of Study One are discussed below. Facebook as a relationship facilitator will be discussed first. This will be followed by the use of the relationship status tool on Facebook which will lead into a discussion of how a positive image is created on Facebook. The differences between Facebook and dating sites will be identified and issues around Facebook stalking will be discussed. Finally, the implications of the findings and strengths and limitations of the research will be discussed.

Facebook as a Relationship Facilitator

All participants gave reasons regarding friendship to explain their use of Facebook. In agreement with Pempek, (2008) one of the main reasons people used Facebook was to maintain contact with people. This also supports the findings of Reich et al (2012) that found 43% of participants felt that the SNS had made their friendships closer. During the interview it appeared that participants believed Facebook to be a good way to gain an insight into the personality of the profile owner. This supports the work by Back et al (2010) who found that Facebook profiles reflect an individual's actual personality rather than an idealised self. This implies that Facebook is a good way to get to know someone's personality. It was also believed that accessing the information on Facebook, in particular the likes and dislikes of an individual, may lead to being liked more by the profile owner as this information can be communicated back to them by the viewer.

Chen et al (2009) found that 61.6% of SNS users are interested in making new friends. However, none of the interview participants indicated an interest in seeking new friendships through Facebook. Nevertheless, participants discussed checking profiles of people they had initially met offline. Although participants said they never made friends through Facebook, it appeared that after initial offline meetings, people would find each other on Facebook and a friendship can develop. This

supports the suggestion of Vazire and Gosling (2004) that people use personal webpages as a way to learn about somebody that they just met. In Exercise Two, Comment Two dealt with the Facebook "people you may know tool" and requesting an unknown person as a *Friend*. Six participants stated that this type of comment was appropriate for somebody that is unknown, suggesting that although they had never made friends through Facebook, they did not think of it as inappropriate behaviour. Although the *Friends* list was not explicitly stated to be a facilitator of romantic relationships, it was mentioned that Facebook provides an opportunity to meet *Friends* of *Friends* by allowing others to browse through the list of *Friends* to see if there is anybody single who they may be interested in.

Facebook chat was rated highest in Exercise One suggesting that participants thought Facebook chat was the most likely element to facilitate relationships on Facebook. One participant stated that the more you talk to somebody the more emotionally involved you become to them. They went on to explain that this makes Facebook a good way to develop a friendship into a romantic relationship. This is in agreement with Levine's (2000) suggestion that frequency of contact is important in online relationship development.

It was stated during the interview that Facebook was a good way to ask somebody out who is already known to them. This was also evident during Exercise Two. Comment Four and Six dealt with asking people out through Facebook. Participants found these messages to be appropriate for people known and also thought they were the kind of messages that would appear on Facebook.

Relationship status

Relationship status was rated as the second most likely element of Facebook to facilitate romantic attraction in Exercise One and during the interview it emerged how the relationship status can be used. The relationship status allows the profile owner to make a public announcement if they become single and they want to seek a partner, in turn allowing others to find out if the profile owner is available or not. This adds to Fox et al (2013) and Bowe's (2010) finding that suggested sharing a relationship status when in a relationship is a new milestone and was used as a mechanism to stop people from flirting with their partner. During the present

interview it also appeared that monitoring the relationship status of somebody you are attracted to was quite common, that is, they would check and recheck if an individual had changed their relationship status to 'single'. The relationship status allows others to search through profiles of others and find people who are single. Participants also described how a public change in relationship status on Facebook, from in a relationship to single, may be perceived as a vicious attempt to upset somebody.

Although only two participants specifically stated a dislike for sharing relationship status on Facebook, during Exercise Two it appeared that if a comment with the same information was displayed on Facebook it would be a lot less appropriate. Two of the Facebook comments from Exercise Two dealt with relationship status. The first comment to deal with relationship status was Comment Nine. Most participants found a humorous message like this would be appropriate to send to somebody in a private message, however it was not appropriate to be placed on a public wall where others could see it. Comment Three illustrated the end of a marriage and participants were in agreement that a message like this indicating the end of a relationship would be completely inappropriate for someone unknown and even if it was sent to somebody known on a Facebook wall it would still be publicly available to those unknown so therefore it should not be displayed on a Facebook wall. This same concern of unknown people having access to this information was not shown during the interview when dealing with the relationship status tool, suggesting participants thought the same information would be appropriate had it been shared via the relationship status tool.

During the interview participants stated that it was not common practice to use the relationship status tool to end a relationship, they also did not know of any situation where a relationship had ended via the relationship status tool. This is in contrast to a survey carried out by O'Dell (2010) who found that using the relationship status tool to end a relationship was a lot more common than the participants in the present study suggested. O'Dell found that 25% of participants found out that their own relationship was over by seeing it publicly broadcast on Facebook. It was also shown that 21% of participants stated they would break up with somebody through Facebook by changing their relationship status to single.

Facebook and Dating sites

Participants discussed the differences between Facebook and online dating sites, five main reasons people would use Facebook for dating rather than an online dating site were identified, namely; there is more information available on Facebook than on an online dating site, the information presented on Facebook is more honest than an online dating site, Facebook is more secure and more social than an online dating site, a relationship can build more naturally on Facebook than on an online dating site and online dating sites carry a stigma.

Facebook has a lot more information than an online dating site, namely, more pictures and interactions with their Friends which provide a look into their daily life which is not available on a dating site. The photographs and interactions with Friends can be seen as identity claims and behavioural residue which Gosling et al. (2002) stated are elements that are left behind in the environment by an individual which reflect their characteristics. The interaction with Friends is a good example of behavioural residue as people are leaving behind traces of earlier behaviour. During the interviews it emerged that these interactions with Friends or behaviour residue can tell a lot about an individual, for example, what their humour is like. Gosling et al. (2011) found that impressions based on behavioural residue found on a Facebook profile were accurate impressions of profile owners. In addition, Walther et al. (2009) found that the public interactions between a profile owner and their Friends are used to form impressions on an SNS. More specifically, Friends' comments were more important than the profile owner comments in forming impressions. Because these interactions are not available on an online dating site it means that not only is there more information on a Facebook profile, but the information appears to be more valuable because it is coming from not only the profile owner themselves but from their Facebook Friends. As suggested by the Warranting Theory (Walther & Parks, 2002), people place more emphasis on information that is provided by others or that cannot be manipulated by the profile owner.

In addition to Facebook having more information and the information being more valuable than an online dating site; the information is also considered to be more honest or trustworthy because it is not specifically aimed at trying to look attractive

and so it is more natural. This was reflected in a study carried out by Whitty (2007) when it was found that constructing an online dating profile was a dynamic process and often people would rewrite profiles with photographs and descriptions that would be more successful at attracting others. Whitty (2007) also found that misrepresentations on online dating profiles were found to be common. Although not specifically stated during the interview, this may be due to the list of *Friends* incorporated into a Facebook profile which all have access to the information presented. Donath and boyd (2004) suggested that the list of *Friends* that have access to a Facebook profile allows verification of the information on the profile. This verification by *Friends* is not available on an online dating site because people cannot connect to each other within the site.

Participants stated Facebook is also a more casual way to get a date in comparison to a dating site due to people accessing a dating site just to find a date. The number of people who use Facebook and the access to *Friends* and a *Friends* list makes Facebook a more social setting to meet a partner. This number of people was also given as a reason to why Facebook is more secure for dating. This could also be due to the list of *Friends* being available to verify information (Donath & boyd, 2004). Facebook chat was rated as the most likely element of Facebook in facilitating romantic relationships and during the interviews it emerged that simply chatting to someone via Facebook is considered a good way to develop a friendship into a romantic relationship.

Creating a positive image

Weisbuch et al (2009) suggested that people try to present themselves in a positive way and can spend hours carefully constructing an SNS profile. McAndrew and Jeong (2012) suggested that people who were not in a committed relationship were more concerned about making a good impression with their profile picture than people who were in a committed relationship. This was expressed during the interviews whilst discussing photographs. Participants thought photographs were used to create a certain image through Facebook and suggested that photographs are always from a positive perspective. Specifically, it was thought that photographs were used to create a fun image and show others that they are having fun. This

shows support for the findings of Qiu et al (2012) that not only are people more likely to disclose positive rather than negative information on Facebook, they are also aware that their *Friends* are more likely to share positive rather than negative information. It was also suggested that, even if a photograph was uploaded that the profile owner did not like, they would ask whoever put it up to take it down. Strano and Queen (2012) and Rui and Stefanone (2013) also found that this suppression of unwanted *Friend-generated* information was quite common in Facebook for reasons of impression management. Although participants believed the information presented in a Facebook profile was more trustworthy than that of an online dating site, participants also believed that photographs were used to exaggerate how much fun they were having. Exaggerating the truth was an activity Whitty (2007) found to be common in online dating sites, however, participants believed it is common on Facebook too.

In addition, the ability to comment on a status update was rated higher on Exercise Two than the status update itself; suggesting participants placed more value in *Friend-generated* information than *self-generated* information. This finding supports Walther et al. (2009) which found that *Friends'* comments are more important in forming impressions than self-comments. This could be due to the Warranting Theory (Walther & Parks, 2002), which theorizes that judgments about an individual rely more heavily on information which the individuals cannot manipulate, than on information generated by the individual, that is, the participants cannot change the text in their *Friends' comments* but they can edit the text in their own comments (Walther et al., 2009).

Facebook stalking

Comments on the wall and the ability to comment on status updates on Facebook were rated high on Exercise One. Upon further investigation during the interview it appeared that not only do these elements of Facebook allow people to interact with each other but they also show a person's interactions with their *Friends* and potentially an insight into planned activity. Ellison (2007) stated that people use Facebook to learn others' hobbies, interests, musical tastes and romantic relationship

status, but during the interviews it emerged that people may be looking for additional information such as information about where people may be.

Participants taking part in the interviews appeared to be more aware about privacy than those in studies carried out by Debatin et al (2009) and Miller et al., (2009). This was apparent during Exercise Two when participants thought a lot of the comments were not suitable for the wall so would be better off in private messages. It was also stated that writing on someone's wall allows the statement to be visible to their *Friends* hence giving access to the comment to people that are unknown. Privacy concerns were also raised during discussion of the differences between Facebook and online dating sites. It was suggested that online dating sites offer more privacy than Facebook.

Theoretical and practical Implications

Walther's hyperpersonal model of communication suggests that due to the lack of non-verbal cues that are present in face-to-face interaction, CMC interactions can be more intimate than face-to-face interactions. The findings of this interview show support for this model of communication, particularly the theme 'Facebook as a relationship facilitator' where participants implied that Facebook is a good way to get to know someone's personality and it is also a good way to develop a friendship into a romantic relationship by investing time into chat. It also shows support for the theory of interpersonal attraction which suggest that proximity and similarity can influence interpersonal attraction. The proximity effect suggests being close to someone plays an important role in forming a relationship, in online relationship development, proximity is defined by being a member of the same internet forum or SNS. People becoming *Friends* on Facebook and interacting or chatting will lead to repeated exposure and as one of the participants stated, will lead to greater emotional involvement. It was also stated that when someone lists their likes and dislikes, it could lead to an individual being more liked by portraying similar interests.

The findings also show some support for the sequence of behaviours followed in romantic relationship development on Facebook which was suggested by Fox and Warber (2013). Participants discussed having an initial offline encounter with an

individual and then finding them on Facebook and sending *Friend* requests. The relationship would then develop by interacting and talking on Facebook which leads to the possibility of a romantic relationship developing. However, Fox and Warber (2013) indicated that after sending a *Friend* request, there would be a request for the individual's phone number and they would begin texting. This stage of the sequence was not suggested by the participants during the interview as they indicated following initial *Friend* requests and chatting on Facebook a friendship would develop which could then potentially lead to a romantic relationship.

People appear to be aware that a Facebook profile reflects an individual's personality so people should be careful about the information presented on Facebook and who they allow to view their profile, as judgements may be made on what is presented. People also need to be conscious of the type of information that is disclosed on Facebook, (e.g. people may be looking out for where they are going next). In addition, a public change in relationship status on Facebook, from in a relationship to single, may be perceived as a vicious attempt to upset somebody.

Strengths and Limitations of Research

The semi-structured nature of the interviews allowed participants to discuss the topic in detail. The interviews indicated that Facebook is used to facilitate romantic relationships. It also identified the specific tools that are considered to be relationship facilitators.

There were also some limitations of Study One which include; a small number of participants all taken from one community, all participants were students, therefore, these findings cannot be generalized to other communities. However, a large amount of Facebook users are students so these findings may still be representative of many Facebook users. It is apparent from the findings that Facebook is used for romantic reasons. Specifically, it was found that Facebook chat, the Facebook wall, comments on status updates and relationship status were among the highest facilitators of relationship development. This should be explored further.

Further Research

While this study identified several of the major issues regarding Facebook and romantic attraction and confirmed the role of Facebook in relationship formation and dissolution, it does not examine the interactions between specific Facebook elements in a quantitative manner. This shortcoming is addressed in the following two studies, which utilise the findings of this study to design an experiment and a measure to determine how information provided on a Facebook profile influence romantic attraction.

Conclusion

Overall it was found that participants thought Facebook does facilitate romantic relationships. The specific tools that act as facilitators were identified as; photographs, the chat tool, public interactions on the timeline and the ability to share a relationship status. Five main reasons why people would use Facebook for dating rather than an online dating site were identified; there is more information available on Facebook than on an online dating site, the information presented on Facebook is more honest than an online dating site, Facebook is more secure and more social than an online dating site, a relationship can build more naturally on Facebook than on an online dating site and online dating sites carry a stigma. It was also stated that people use Facebook to create a positive image by use of photographs, that is, uploading attractive photographs but asking *Friends* to remove undesired photographs.

Chapter Three Study Two

Method

Overview

The aim of Study Two is to explore the effect information provided on a social network profile has on making judgments about a profile owner. Students participated in a factorial experiment to examine the relationship between *self-generated*, *system-generated* and *Friend-generated* information provided on a Facebook profile and the participants' ratings on a Romantic Attraction Scale. Participants viewed an image of a Facebook profile which varied in comments displayed by the profile owner, comments displayed by the profile owners' *Friends*, number of *Friends* and gender of the profile owner. They then completed the Romantic Attraction Scale (Campbell, 1999) to determine romantic attraction.

Study Two

Previous research has investigated the effects of the number of Friends (system-generated information), the comments displayed by Friends (Friend-generated information) and the comments made by the profile owner (self-generated information) on impression formation on social network systems. They have not however, been investigated in a single study. This study explores the interactions between the three types of information. Investigating these variables together will determine the strongest predictors of attractiveness and will allow this research to investigate any possible interaction effects between the variables. Previous research has focused on interpersonal friendship and not specifically dating, while this study examines dating and romantic relationships.

The information gathered during Study One helped to design Study Two which adopts an experimental methodology. This study examines a subset of the research questions and hypotheses outlined on page 41. Specifically, this study seeks to address the research questions "Does information presented on a Facebook profile have an effect on romantic attraction?" and "Which type of information provided on Facebook has a greater effect on romantic attraction, *system-generated* information, *self-generated* information, or *Friend-generated* information?"

The specific hypotheses addressed by this study are:

H1: Positive (rather than negative) comments left by *Friends* will lead to higher scores on the Romantic Attraction Scale.

H2: Positive (rather than negative) comments left by the profile owner will lead to higher scores on the Romantic Attraction Scale.

H3: A profile owner with a large number of *Friends* will be judged as more romantically attractive than a profile owner with a fewer number of *Friends*.

H4: *Friends*' comments will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments.

H5: *Friends*' comments will be a greater predictor of higher scores on the Romantic Attraction Scale than number of *Friends*.

H6: Number of *Friends* will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments.

Design

Because the study includes several independent variables, a factorial experimental design was used. A factorial experiment is more efficient than testing one variable at a time and will allow for any interactions between independent variables be detected. The experiment had a 2 (number of Friends: high or low) \times 2 (profile owner messages: positive or negative) \times 2 (Friends' messages: positive or negative) design. Participants took part in an experiment and a post-test questionnaire. Convenience sampling was used to recruit students.

Participants

Due to the experiment being based on Facebook, knowledge of how Facebook worked was required for participation in the experiment. A total of 637 students, 367 Male and 262 Female (8 participants chose not to disclose gender) participated in the experiment. Participants had an age range of 18-62 (mean = 23.61, standard deviation = 6.29). Initially participants were recruited from a third level institute in Ireland, however, failure to reach the required number of participants to undertake

sufficient statistical analysis, participants were then sought online through the following websites; the Social Psychology Network, Psychological Research on the Net and Amazons Mechanical Turk. Due to the different recruitment methods being used and the use of online recruitment websites, there may be cultural differences amongst participants. Participants were randomly assigned to one of 16 Facebook profiles. The distribution of participants across profile experimental groups can be seen in Table 2 below.

Table 2: Breakdown of Male and Female participants in each experimental group.

Experimental group		Participant	:5
	Total	Male	Female
Male High Friends X negative owner X Positive Friends	33	1	32
Male High Friends X positive owner X negative Friends	38	5	33
Male High Friends X positive owner X positive Friends	35	5	30
Male Low Friends X negative owner X negative Friends	37	3	34
Male Low Friends X positive owner X negative Friends	35	4	31
Male Low Friends X negative owner X Positive Friends	38	13	25
Male Low Friends X positive owner X positive Friends	38	19	13
Male High Friends X negative owner X negative Friends		5	30
Female Low Friends X positive owner X positive Friends	43	37	6
Female Low Friends X negative owner X Positive Friends	40	35	5
Female Low Friends X positive owner X negative Friends	46	42	3
Female Low Friends X negative owner X negative Friends	44	43	1
Female High Friends X positive owner X positive Friends	42	37	5
Female High Friends X positive owner X negative Friends	46	40	6
Female High Friends X negative owner X Positive Friends	44	41	3
Female High Friends X negative owner X negative Friends	42	37	5

Before being randomly assigned to an experimental profile, participants were asked where they attracted to males or attracted to females. Based on this a male participant viewing a male profile and a female participant viewing a female profile were considered to be non-heterosexual. It could not be identified if these participants were homosexual or bisexual as it was not specifically asked during the experiment, so for the purpose of this study, a male participant viewing a male profile and a female participant viewing a female profile will be referred to as non-heterosexual. This can be viewed in Table 3 which shows the random assignment of participants to the experimental profiles based on their attraction to males or females. In total there were 540 Heterosexual and 89 non-heterosexual participants.

Participants were asked about their relationship status and Table 3 below shows the statistics for relationship status of the participants. A large proportion of participants (51.5%) reported being single with 46.2% reporting being in a relationship, 2.2% reported being divorced or separated. The 4 participants that stated they were in a relationship other than those listed, reported being in casual relationships or dating.

Table 3: Relationship status of participants.

Relationship status	Frequency	Percent	
Single	329	51.6	
In a relationship	213	33.4	
Engaged	10	1.6	
Married	59	9.3	
Divorced	2	.3	
Cohabiting	12	1.9	
Separated	3	.5	
Other	4	.6	

Table 4 shows how often participants checked their Facebook profile. It was reported that 61.7% of participants checked their Facebook profile several times a day and only 6% of participants reported checking their Facebook profile less than once a week.

Table 4: How often participants checked their Facebook profile.

How often Facebook is checked	Frequency	Percent	
Several times a day	393	61.7	
Once a day	125	19.6	
Several times a week	56	8.8	
Once a week	20	3.1	
Less than once a week	38	6.0	

Materials

A consent form (Appendix F) with a description of the study and outline of relevant ethical issues was used to obtain consent from participants. A questionnaire to determine participants' demographic information and use of social network sites was administered (Appendix G). Due to the research being focused on relationships, participants were asked their relationship status and if they were interested in males or females. They were also asked how often they used Facebook. Participants were

then randomly assigned to one of 16 Facebook profiles (Appendix J – Appendix Y) and then completed a Romantic Attraction Scale (Appendix I), the Facebook profiles and the Romantic Attraction Scale will be discussed in more detail below. On completion of the experiment participants were also given a debrief form (Appendix H).

Romantic Attraction Scale

To determine romantic attraction participants completed the Romantic Attraction Scale (Appendix I). The Romantic Attraction Scale was developed by Campbell (1999) whilst examining narcissism and romantic attraction. The Romantic Attraction Scale is a five item self report measure, which uses a seven point likert scale. Questions include "How attractive do you find this person?" or "How much would you actually like to date this person?". Campbell (1999) found the internal consistency of the Romantic Attraction Scale to be high, with Cronbach's a = .89.

The Facebook Profiles

There were sixteen Facebook profiles (Appendix J – Appendix Y) based on gender as well as the independent variables of number of *Friends*, profile owner messages and *Friends*' messages. Table 5 shows a list of the experimental profiles used for each condition.

Table 5. List of experimental conditions.

Male High friends X negative owner X Positive friends Male High friends X positive owner X negative friends Male High friends X positive owner X positive friends Male Low friends X negative owner X negative friends Male Low friends X positive owner X negative friends Male Low friends X negative owner X Positive friends Male Low friends X positive owner X positive friends Male High friends X negative owner X negative friends Female Low friends X positive owner X positive friends Female Low friends X negative owner X Positive friends Female Low friends X positive owner X negative friends Female Low friends X negative owner X negative friends Female High friends X positive owner X positive friends Female High friends X positive owner X negative friends Female High friends X negative owner X Positive friends Female High friends X negative owner X negative friends

Except for the experimental manipulations, all information on the profiles was consistent amongst the conditions. Each Facebook profile displayed personal information about the profile owner (specifically their name, location, a photo and birthday), a photo of the profile owner which had been posted to the timeline from a friend (the photo remained consistent among conditions, there was one male photo and one female photo), a change in relationship status from 'in a relationship' to 'single', three messages left by Friends and three messages left by the profile owner. Due to the sexual double standard that found negative statements suggesting undesirable behaviour such as sexual innuendo and excessive drinking increased males' desirability but decreased females' desirability (Walther et al, 2008), it was decided that positive and negative comments to be displayed on profiles would be consistent and would not include sexual references. However, due to findings by Moreno et al (2010) and Fournier and Clarke (2011) which suggested a large amount of people share alcohol related content on Facebook it was decided that the profiles would include alcohol related comments. Figure 1 and Figure 2 show a screenshot of a female and male Facebook profile that was used during the experiment.



Figure 1. Sample Female Facebook profile used in Study Two

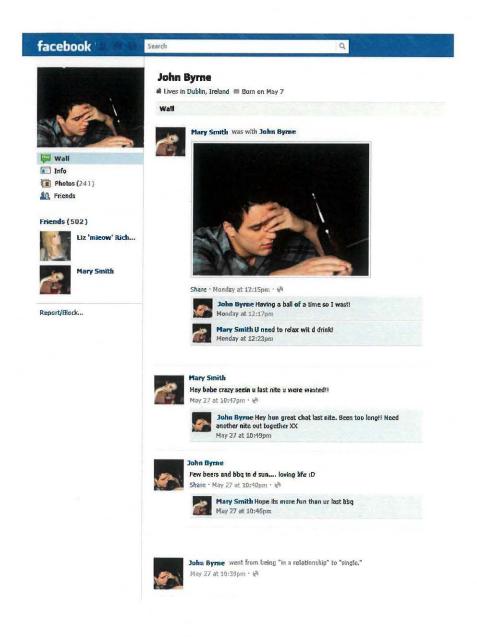


Figure 2. Sample male Facebook profile used in Study Two

Relationship status

Based on findings from Study One which found relationship status to be one of the main elements of Facebook to facilitate romantic relationships, it was decided to include a change in relationship status from 'in a relationship' to 'single'.

Photograph

Based on findings from Study One which found photographs on Facebook to be considered quite high on facilitating romantic relationships, it was decided to include a photograph on the Facebook profile. Due to the findings from a study carried out by Walther et al., (2009) which found that *Friends'* comments are more important in forming impressions than self-comments, it was decided to have the photograph appear as a message posted from a *Friend* to the profile owners Facebook timeline. The photograph consisted of a male or female (the profile owner) holding an alcoholic drink. Under the photo there was a positive or negative comment from the profile owner and the profile owner's *Friend*.

The positive Friend comment was the following:

"U look like u had fun :P"

The negative Friend comment was the following:

"U need to relax with d drink!"

The positive profile owner comment was the following:

"Having a ball of a time so I was"

The negative profile owner comment was the following:

"Yea maybe a bit too much fun"

Friends' messages. Comments left by Friends appeared on the Facebook timeline about the profile owner regarding social behaviours. The comments were considered to be positive or negative because they portray the profile owner to be undertaking positive or negative behaviour.

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The positive Friend message was the following:

"Deadly nite last nite:) woop no hangover either XX"

The negative *Friend* message was the following:

"Hey babe crazy seein u last nite u were wasted!!"

The Friend comment was followed by the positive response from the profile owner:

"Hey hun great chat last nite. Been too long!! Need another nite out together XX"

Or the negative response from the profile owner:

"Stop rubbin it in. Am never drinkin again!!!!

"hungover isn't even the word... grr :(need some TLC <3"

Profile owners' status updates. Based on findings from Study One which found that commenting on a status update was considered to facilitate romantic attraction, the profiles contained a status update from the profile owner with a responsive comment from a Friend. The status update was regarding social behaviours and was displayed on the Facebook timeline and appeared to be written by the profile owner. The status update was considered to be positive or negative because it portrayed the profile owner in a positive or negative manner.

The positive profile owner status update was the following:

"Few beers and bbq in the sun.... lovin life:D"

With the positive response from a Friend:

"Ur bbq's are always sooo much fun :D"

Or the negative response from a Friend:

"Hope its more fun than ur last bbq"

The negative profile owner status update was:

"Feel like punching the head off someone! So annoyed today"

With the positive response from a Friend:

"Never heard you talk like this before hope u ok"

Or the negative response from a Friend:

"Jaysus do u ever stop givin out????"

Number of Friends. Utz (2010) found a curvilinear relationship between number of Friends that profile owners have and others' perceptions of their social attractiveness. Ratings of the profile owners' social attractiveness was lowest when they had 102 Friends and was highest when the profile indicated 302 Friends. Once the number of Friends rose above 302 the social attractiveness of the profile owner began to decline. For this reason the low number of Friends was chosen to be 102. Utz (2010) also found that it is better to have too many Friends than too few, therefore, the high number of Friends for the present study was chosen to be 502, which was the middle value of the number of Friends Utz (2010) used.

Procedure

Participation took place online, on a computer. Participants were given a link to a consent form (Appendix F) which explained that participation was voluntary and they could withdraw from the study at any time or refuse to answer any questions they did not want to answer throughout the study. Participants were then randomly assigned to one of the experimental conditions. Participants were asked to view a screenshot of a facebook profile (Appendix J - Y) by reading comments on the wall, number of *Friends* and any information available about the owner. They were given as much time as they needed to form an impression of the profile owner. Following viewing the screenshot of the profile, participants completed the Romantic Attraction Scale (Appendix I) to determine romantic attraction, or the extent to which they judge the profile owner as a potential romantic partner (Campbell, 1999).

Participants were then debriefed (Appendix H) and reminded that they could withdraw their data from the research.

Ethics

This research was approved by the Department of Learning Sciences Ethics Committee in IADT. Ethical guidelines, as issued by the BPS and the PSI, were adhered to at all stages throughout the experiment process. Consent was obtained from all participants and they were informed that they could withdraw from the study at any time. Participation was anonymous and confidential. Data collected was stored on a password protected computer to which only the researcher had access. Participants were informed that no identifiable data would be used from the data collected. After completion of the experiment, participants were debriefed and reminded they could withdraw their data from the study and all data collected would be kept confidential.

Data Analysis

A between groups ANOVA was conducted to examine the effect of number of *Friends*, *Friends*' comments and owner comments on the Romantic Attraction Scale. There was homogeneity of variance between groups as assessed by Levene's test for equality of error variances. The mean romantic attraction score for each level of each independent variable can be seen in Table 6.

Table 6: Mean Romantic Attraction Scale score for each independent variable.

Romantic Attraction Scores						
***************************************		Min	Max	Mean	St. Dev	St. Error
Number of Friends	High	5	35	16.02	8.15	.461
	Low	5	35	17.48	7.92	.447
Owner Comments	Positive	5	35	17.09	8.34	.499
	Negative	5	35	16.48	7.83	.421
Friends' comments	Positive	5	35	17.80	7.71	.472
	Negative	5	35	15.97	8.24	.435

Hypothesis 1 stated Positive comments left by *Friends* will lead to higher scores on the Romantic Attraction Scale than negative comments. It was found that positive *Friends*' comments led to significantly higher scores on the Romantic Attraction Scale than negative *Friends*' comments F(1, 618) = 11.424, P = .001.

Hypothesis 2 examined if positive comments left by the profile owner will lead to higher scores on the Romantic Attraction Scale than negative comments. The ANOVA found that there was no statistically significant main effect of owners' comments F(1, 618) = 2.355, P = .125.

Hypothesis 3 stated a profile owner with a large number of *Friends* will be judged as more romantically attractive than a profile owner with a fewer number of *Friends*. The ANOVA found a significant main effect of number of *Friends* F(1, 618) = 10.530, P = .001 suggesting that a lower number of *Friends* led to higher scores on the Romantic Attraction Scale than a higher number of *Friends*. Therefore, hypothesis 3 was rejected.

No significant interaction was determined between the effects of Number of *Friends* and owners' comments F(1, 618) = 1.480, P = .224. However, there was a

significant interaction between the effects of Number of Friends and Friends' comments, a low number of Friends and positive Friends' comments led to higher scores on the Romantic Attraction Scale F(1, 618) = 4.575, P = .033. There was no significant interaction between the effects of owners' comments and Friends' comments on the Romantic Attraction Scale F(1, 618) = .003, P = .958. There was no significant interaction between of number of Friends, Friends' comments and owner comments on the Romantic Attraction Scale F(1, 618) = 1.853, P = .174.

The mean romantic attraction score for each level of each variable can be seen in Table 7. Male participants scored higher in the Romantic Attraction Scale than female participants. Heterosexual participants gave lower scores on the Romantic Attraction Scale than non-heterosexual participants. In relation to how often Facebook is checked, those who check Facebook several times a week scored the highest on the Romantic Attraction Scale with those who check Facebook once a day having the lowest score. The male profiles were scored as less romantically attractive than female scores.

Table 7: Mean Romantic Attraction Scale score for each variable.

R	omantic Attraction Scores			
		Mean	St. Dev	St. Error
Gender	Male	19.25	7.80	.416
	Female	13.64	7.36	.568
Sexual Orientation	Heterosexual	16.46	8.02	.355
	Non Heterosexual	19.71	8.06	.864
Relationship Status	Single	17.82	7.78	.436
	In a relationship	15.92	8.36	.500
How often Facebook is checked	Several times a day	17.26	8.14	.420
	Once a day	15.43	7.06	.659
	Several times a week	18.83	8.79	1.19
	Once a week	17.53	10.42	2.39
	Less than once a week	15.03	7.66	1.31
Gender of profile owner	Male	14.40	7.738	.474
Control Appropriate Control Section (Section Control Section C	Female	18.96	7.82	.429

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict romantic attraction. For the analysis,

participants who reported being in a relationship, cohabiting, married and engaged, were grouped together as they were all in relationships. The prediction model was statistically significant F(9, 588) = 15.262, p < .0005 and accounted for approximately 17.7% of romantic attraction ($R^2 = .189$, Adjusted $R^2 = .177$). Beta values and significance values for each variable are shown in Table 8.

Table 8: Coefficient values showing how much each independent variable contributes to the dependent variable, romantic attraction.

	Beta	Sig
Age	.162	.000
Gender	241	.000
Sexual orientation	.143	.000
Relationship Status	094	.015
How often Facebook is checked	100	.009
Gender of profile owner	.115	.037
Number of Friends	.066	.084
Owner Comments	011	.781
Friends' comments	099	.010

As can be seen in Table 8, Gender of the participant received the strongest weight in the model with males giving higher scores on the Romantic Attraction Scale than females. This was followed by Age and Sexual Orientation with non-heterosexual participants giving higher scores on the Romantic Attraction Scale than heterosexual participants. Number of *Friends* and owner comments were the two predictors that received the weakest weight in the model and were also found to be not significant.

Hypothesis 4 examined if *Friends*' comments will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments. The multiple regression found that *Friends*' comments had a higher Beta weight than owner comments.

Hypothesis 5 stated *Friends*' comments will be a greater predictor of higher scores on the Romantic Attraction Scale than number of *Friends*. The multiple regression found that *Friends*' comments had a higher Beta weight than number of *Friends*.

Hypothesis 6 examined if Number of *Friends* will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments. The

multiple regression found that Number of *Friends* had a higher Beta weight than profile owners' comments.

A between groups ANCOVA was conducted to assess the interaction effect of number of *Friends*, Friends' comments and owner comments on romantic attraction. Sexual Orientation was used as a covariate to control for individual differences. A significant main effect was determined for Sexual Orientation F(1, 609) = 12.273, P < .0005 which shows that non-heterosexual participants scored higher on the Romantic Attraction Scale than heterosexual participants.

A one way, between subjects Kruskal-Wallis test was carried out to examine if how often Facebook was checked had an effect on the romantic attraction scores. It was found that how often Facebook was checked had no significant effect on romantic attraction $\chi^2(4, N = 621) = 8.048$, P = .090.

A one way, between subjects Kruskal-Wallis test was carried out to examine if relationship status had an effect on the romantic attraction scores. For the analysis, participants who reported being in a relationship, cohabiting, married and engaged, were grouped together as they were all in relationships. The Kruskal-Wallis test found that there was a significant difference on the Romantic Attraction Scale across the different relationship status $\chi^2(1,N=612)=10.868$, P<.0005. An inspection of the mean ranks for the different relationship status groups suggest that those who are single had higher scores on the Romantic Attraction Scale than those who were in relationships.

In addition to statistical analysis being carried out on the overall effect of *Friends'* comments, profile owner comments and number of *Friends* on the Romantic Attraction Scale, an ANOVA was also carried out on each individual question on the Romantic Attraction Scale. The findings will now be considered for each individual question.

Level of Attraction

A between groups ANOVA was conducted to examine the effect of number of *Friends*, *Friends*' comments and owner comments on question 1 of the Romantic Attraction Scale which asked 'how attractive do you find this person?'. There was a

significant main effect of number of *Friends* suggesting that a low number of *Friends* lead to higher scores on the Romantic Attraction Scale F(1, 626) = 12.594, P < .0005 and a significant main effect of *Friends*' comments which suggests positive comments left by *Friends* leads to increased romantic attraction F(1, 626) = 11.424, P = .004. However, there was no statistically significant main effect of owners' comments F(1, 626) = 2.053, P = .152. In addition, no statistically significant interaction was observed between the independent variables on question 1 of the Romantic Attraction Scale.

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict results of question one in the Romantic Attraction Scale. The prediction model was statistically significant F(9, 596) = 14.333, p < .0005 and accounted for approximately 16.7% of question one on the Romantic Attraction Scale ($R^2 = .178$, Adjusted $R^2 = .166$). Beta values and significance values for each variable are shown in Table 9.

Table 9: Coefficient values showing how much each independent variable contributes to the dependent variable, question one on the Romantic Attraction Scale.

	Beta	Sig	
Age	.178	.000	
Gender	156	.004	
Sexual orientation	.165	.000	
Relationship Status	092	.017	
How often Facebook is checked	108	.005	
Gender of profile owner	.170	.002	
Number of <i>Friends</i>	.086	.025	
Owner Comments	008	.826	
Friends' comments	077	.041	

As can be seen in Table 9, age received the strongest weight in the model followed by Gender of the profile owner and Sexual Orientation. Owner comments received the weakest weight in the model and were also found to be not significant.

Level of Desirability

A between groups ANOVA was conducted to examine the effect of number of *Friends*, *Friends*' comments and owner comments on question 2 of the Romantic Attraction Scale which asked 'How desirable would you find this person as a dating partner?'. A significant main effect was observed for all three independent variables, number of *Friends F* (1, 628) = 10.354, P = .001, *Friends*' comments F(1, 628) = 10.240, P = .001 and owners' comments F(1, 628) = 4.173, P = .041. However, no statistically significant interaction was observed between the independent variables on question 2 of the Romantic Attraction Scale.

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict results of question two in the Romantic Attraction Scale. The prediction model was statistically significant F (9, 598) = 13.146, p<.0005 and accounted for approximately 15.3% of question two on the Romantic Attraction Scale (R^2 = .165, Adjusted R^2 = .153). Beta values and significance values for each variable are shown in Table 10.

Table 10: Coefficient values showing how much each independent variable contributes to the dependent variable, question two on Romantic Attraction Scale.

	Beta	Sig	
Age	.170	.000	
Gender	197	.000	
Sexual orientation	.146	.000	
Relationship Status	086	.026	
How often Facebook is	087	.023	
checked			
Gender of profile owner	.111	.046	
Number of Friends	.068	.076	
Owner Comments	038	.318	
Friends' comments	098	.010	

As can be seen in Table 10, Gender received the strongest weight in the model followed by Age and Sexual Orientation. Number of *Friends* and owner comments were the two predictors that received the weakest weight in the model and were also found to be not significant.

Desire to Date

A between groups ANOVA was conducted to examine the effect of number of *Friends*, *Friends*' comments and owner comments on question 3 of the Romantic Attraction Scale which asked 'How much would you actually like to date this person?'. There was a significant main effect of number of *Friends* F(1, 625) = 8.477, P = .004 and a significant main effect of *Friends*' comments F(1, 625) = 8.483, P = .004. However, there was no statistically significant main effect of owners' comments F(1, 625) = 2.884, P = .090. In addition, an interaction effect was found between number of *Friends* and *Friends*' comments F(1, 625) = 7.161, P = .008.

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict results of question three in the Romantic Attraction Scale. The prediction model was statistically significant F(9, 595) = 14.004, p < .0005 and accounted for approximately 16.2% of question three on the Romantic Attraction Scale ($R^2 = .175$, Adjusted $R^2 = .162$). Beta values and significance values for each variable are shown in Table 11.

Table 11: Coefficient values showing how much each independent variable contributes to the dependent variable, question three on Romantic Attraction Scale.

	Beta	Sig	
Age	.177	.000	
Gender	258	.000	
Sexual orientation	.119	.002	
Relationship Status	102	.008	
How often Facebook is checked	091	.018	
Gender of profile owner	.068	.215	
Number of Friends	.056	.145	
Owner Comments	023	.546	
Friends' comments	088	.021	

As can be seen in Table 11, Gender received the strongest weight in the model followed by Age and Sexual Orientation. Number of *Friends* and owner comments

were the two predictors that received the weakest weight in the model and were also found to be not significant.

Self Esteem

A between groups ANOVA was conducted to examine the effect of number of Friends, Friends' comments and owner comments on question 4 of the Romantic Attraction Scale which asked 'How would you feel about yourself if you were dating this person?'. There was a significant main effect of number of Friends showing that a low number of Friends leads to higher romantic attraction F(1, 624) = 6.937, P = .009 and a significant main effect of Friends' comments was identified which shows positive Friends' comments leads to higher romantic attraction F(1, 624) = 12.222, P = .001. However, there was no statistically significant main effect of owners' comments F(1, 624) = 1.583, P = .209. No two way interactions were observed for question 4 of the Romantic Attraction Scale, although a 3 way interaction was observed between number of Friends, Friends' comments and owners' comments, suggesting a low number of Friends, positive Friends' comments and positive owner comments led to higher scores on the Romantic Attraction Scale F(1, 624) = 4.046, P = .045.

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict results of question four in the Romantic Attraction Scale. The prediction model was statistically significant F (9, 594) = 9.130, p<.0005 and accounted for approximately 10.8% of question four on the Romantic Attraction Scale (R^2 = .122, Adjusted R^2 = .108). Beta values and significance values for each variable are shown in Table 12.

Table 12: Coefficient values showing how much each independent variable contributes to the dependent variable, question four on Romantic Attraction Scale.

	Beta	Sig	
Age	.119	.003	
Gender	226	.000	
Sexual orientation	.074	.063	
Relationship Status	054	.177	
How often Facebook is checked	077	.052	
Gender of profile owner	.063	.265	
Number of Friends	.046	.247	
Owner Comments	020	.610	
Friends' comments	111	.005	

As can be seen in Table 12, Gender received the strongest weight in the model followed by Age and *Friends*' comments. Number of *Friends*, owner comments and relationships status were the three predictors that received the weakest weight in the model and were also found to be not significant.

Friends' Opinions

A between groups ANOVA was conducted to examine the effect of number of Friends, Friends' comments and owner comments on question 5 of the Romantic Attraction Scale which asked 'How do you think your Friends would feel about you if you were dating this person?'. A significant main effect of number of Friends was identified which suggested that a lower number of Friends led to higher scores on the Romantic Attraction Scale F(1, 629) = 5.997, P = .015 in addition, a significant main effect of Friends' comments was found which shows positive Friends' comments led to higher scores on the Romantic Attraction Scale F(1, 629) = 10.366, P = .001. No statistically significant main effect of owners' comments was observed F(1, 629) = .037, P = .848 and no significant interaction effects were detected.

Gender, age, sexuality, relationship status, how often facebook is checked, gender of profile owner, number of *Friends*, owners' comments and *Friends*' comments were used in a standard multiple regression to predict results of question five in the Romantic Attraction Scale. The prediction model was statistically significant F(9, 599) = 10.830, p < .0005 and accounted for approximately 12.7% of question five on

the Romantic Attraction Scale ($R^2 = .140$, Adjusted $R^2 = .127$). Beta values and significance values for each variable are shown in Table 13.

Table 13: Coefficient values showing how much each independent variable contributes to the dependent variable, question five on Romantic Attraction Scale.

	Beta	Sig
Age	.085	.032
Gender	240	.000
Sexual orientation	.125	.002
Relationship Status	076	.052
How often Facebook is checked	077	.048
Gender of profile owner	.081	.148
Number of Friends	.034	.380
Owner Comments	.040	.309
Friends' comments	085	.028

As can be seen in Table 13, Gender received the strongest weight in the model followed by Sexual orientation, Age and *Friends*' comments. Number of *Friends* and owner comments were the two predictors that received the weakest weight in the model and were also found to be not significant.

Discussion

The aim of this experiment was to examine if the information provided in a Facebook profile has an effect on romantic attraction. Prior research has already shown the effects of *system-generated* information, *Friend-generated* information and *self-generated* information on impression formation on social network systems. The present research study extended these findings to impression formation in romantic relationships. The results from the experiment showed that information presented on a Facebook profile does have an effect on romantic attraction. The key findings of Study Two are discussed below. The first three hypotheses addressed the use of the information provided on Facebook to judge the romantic attraction of the profile owner. The last three hypotheses addressed which type of information provided on Facebook has a greater effect on romantic attraction, *system-generated* information, *self-generated* information, or *Friend-generated information*. Each Hypothesis will be dealt with individually and then the implications of the findings and limitations of the research will be discussed.

Hypothesis One stated that positive comments left by *Friends* will lead to higher scores on the Romantic Attraction Scale than negative comments. It was found that positive comments left by *Friends* led to higher scores on the Romantic Attraction Scale than negative comments left by *Friends*. This implies that information shared by a *Friend* about a profile owner has an effect on romantic attraction. This finding is consistent with the work of Walther et al (2008) which found information provided by a *Friend* has an effect when forming impressions of a profile owner. However, Walther et al (2008) used different topics for the positive and negative comments displayed on the profiles and due to the topic of the negative comments used, a difference between male and female profiles was detected. In an attempt to overcome this limitation, positive and negative comments in the present research were focused on alcohol and being out with *Friends* instead of comments including sexual activity.

Hypothesis 2 stated positive comments left by the profile owner will lead to higher scores on the Romantic Attraction Scale than negative comments. It was found that comments left by the profile owner had no significant effect on romantic attraction.

This suggests that participants did not use the information provided by the profile owner when forming an impression of romantic attraction. This is similar to research carried out by Utz (2010) who found that *self-generated* information had no effect on social attraction. Strano and Queen (2012) looked at image suppression by ways of untagging photographs or requesting photos to be deleted. In addition, Rui and Stefanone (2013) looked at suppression activities in unwanted wall posts by *Friends* as a way to manage impressions online. In relation to suppression activities for unwanted wall posts by *Friends*, their participants stated they would add another post in self-defence. However, the present study found that *self-generated* comments have no effect on impression formation. Therefore, trying to suppress negative information by contributing positive information about the self may not be as beneficial as other methods of suppression such as deleting the comments.

Hypothesis 3 stated that a profile owner with a large number of *Friends* will be judged as more romantically attractive than a profile owner with a fewer number of *Friends*. In contrast to Tong et al (2008) it was found that a profile owner with a fewer number of *Friends* was judged to be more romantically attractive than a profile owner with a higher number of *Friends*. Tong et al (2008) found that a rating of a profile owner's social attractiveness was lowest when they had 102 *Friends* and was highest when the profile indicated 302 *Friends*. The present study used the lowest scoring and highest scoring number of *Friends* that was used by Tong et al (2008), however, it was found that romantic attraction was higher when the profile displayed 102 *Friends* and was lower when the profile displayed 302 *Friends*. This suggests that the number of *Friends* has a different effect on impression formation for different types of relationships, for example, friendship or romantic relationships. This finding is also in contrast to a study carried out by Antheunis and Schouten (2011) who found the number of *Friends* had no effect on perceived attractiveness, although it was found to affect perceived extraversion.

Hypotheses four stated that *Friends*' comments will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments. In agreement with Walther et al (2009), it was found that *Friends*' comments had a larger effect on romantic attraction than profile owner comments. This is in contrast to a study carried out by Utz (2010) who found that *self-generated* information had a

larger effect on romantic attraction than Friend-generated information when judging popularity. This could be due to Utz (2010) using different types of information for Friend-generated and self-generated information. For self-generated information the whole profile was used which consisted of a photograph and text which portrayed either an extraverted or introverted profile owner, whereas the Friend-generated information was a photo which portrayed either an introverted or extraverted Friend. The present study used the same type of information for the Friend-generated and self-generated information, that is, comments from Friends and comments from profile owners.

Hypothesis Five stated that *Friends' comments* will be a greater predictor of higher scores on the Romantic Attraction Scale than number of *Friends*. In agreement with Antheunis and Schouten (2011), it was found that *Friend-generated* information is a greater predictor of attractiveness than *system-generated* information. This suggests that people place more emphasis on information provided by a profile owners' *Friends* rather than information that is provided by Facebook.

Hypothesis Six stated that number of *Friends* will be a greater predictor of higher scores on the Romantic Attraction Scale than profile owners' comments. It was found that number of *Friends* had a higher impact on romantic attraction than profile owners' comments. This indicates that participants relied more heavily on *system-generated* information than *self-generated* information when forming impressions of romantic attraction. This is in contrast to Utz (2010) who found that *system-generated* information and *self-generated* information had no effect on social attractiveness. This suggests that different types of information are important for impression formation for different types of relationships, that is, friendship or romantic relationships.

Theoretical and Practical Implications of research

The Brunswik Lens Model suggests personality is left behind in the environment by means of identity claims and behavioural residue (Vazire & Gosling, 2004). The model also suggests that behavioural residue is seen as more reliable because this information cannot be manipulated by the person who it refers to. The findings of this experiment show support for this model as the identity claims (profile owner

comments) had no significant effect on romantic attraction but both types of behavioural residue (*Friend* comments and number of *Friends*) had an effect on romantic attraction. This suggests that participants used the behavioural residue to form impressions of the profile owner more than they used the identity claims.

These findings show support for the Warranting Theory (Walther & Parks, 2002) which suggests Friend-generated and system-generated information are more reliable sources of information than self-generated information. Findings that Friends' comments and number of Friends significantly altered romantic attraction support this theory. Furthermore, it was found that Friends' comments and number of Friends have a greater influence on romantic attraction than profile owner comments. This is due to the warranting value of the information. Friends' comments and number of Friends are seen to have a higher warranting value, therefore they are thought to be more reliable sources of information because the profile owner has very little control over this information. However, they have complete control over their own comments so this is thought to be less reliable.

This research indicates that people need to be aware of who they accept as *Friends* on Facebook for two reasons. Firstly, people need to be conscious of what information their *Friends* will share on Facebook and how this may have an impact on others' perceptions of them. Secondly, people need to be conscious of who they allow have access to this information on Facebook and how this information can be used to make judgements. First impressions are very important during relationship initiation as others can use this information to decide whether to pursue a relationship (Ellison et al., 2006) and first impressions often last even after people have received new information that discredits them (Kassin et al., 2008). Therefore, if a Facebook profile is the first information received by an individual it is important that it does not contain information that is going to negatively impact the impression formation.

Strengths and Limitations of research

The present research extended prior research on impression formation online. First, it compared the effects of *self-generated*, *system-generated* and *Friend-generated* information within the same experiment. Second, it compared which type of information provided on a Facebook profile had more of an effect on romantic attraction. This had been done by Utz (2010) but not in relation to romantic attraction. Romantic attraction was chosen because in addition to forming and maintaining friendship, Facebook is used for dating and developing romantic relationships (Thelwall, 2008).

There are also some limitations of the present research. A limitation of Study Two was that all participants were students and therefore, these findings cannot be generalized to other communities. However, a large amount of Facebook users are students so these findings may still be representative of many Facebook users.

The nature of the experiment focussed on positive versus negative information generated by the profile owner or by their *Friends*. Although the comments displayed on the timeline attempted to portray the profile owner in either a positive or negative situation, lack of manipulation checks on the profiles means it is unknown if the profile owner did actually appear to be either positive or negative to the participants. Nevertheless, the manipulations had an effect.

Relationship status had a significant effect on scores on the Romantic Attraction Scale, with single participants scoring significantly higher than those in a relationship. Due to the nature of some of the questions on the Romantic Attraction Scale "how much would you actually like to date this person?" this may have had an effect on those participants who were already in a relationship. Participants could have been asked why they would or would not date the person in the profile to overcome this limitation. Physical attractiveness is one of the most important characteristics people use when forming impressions so it is possible that participants based their responses of the Romantic Attraction Scale on the photographs that were used in the profiles (Wang et al., 2010). Nevertheless, this experiment showed that when forming impressions of potential romantic partners people can use cues provided on a Facebook profile to make these decisions.

Further Research

Further research could address the issue of relationship status by only including participants who are not in a relationship. A qualitative aspect could be added to the study by asking participants why they would or would not like to date the person in the profile. Manipulation checks could also be carried out by asking participants to rate timeline postings on a Likert scale from very negative to very positive and if they thought the profile owner had few *Friends* or a lot of *Friends*. Then additional analysis could be carried out between how positive or negative the postings were and romantic attraction.

Conclusion

Overall it was found that *Friends'* comments have the largest effect on romantic attraction. Additionally it was found that number of *Friends* has an effect on romantic attraction whilst profile owner comments had no effect on romantic attraction. Therefore the study found that the only information the user has complete control over has no effect on romantic attraction. This is important because it means Facebook users do not have complete control over the impressions formed by potential romantic partners. They may have a little control, that is, they can ask their *Friends* to take down photographs or comments, but, *Friends* do not have to oblige and they do not know who has viewed the information before it has been taken down.

Chapter Four Study Three

Method

Overview

The aim of Study Three was to explore if personality traits of participants can predict which elements of Facebook profiles they consider to facilitate romantic relationships. Participation took place online. Participants completed a personality scale and a questionnaire on what elements of Facebook they thought would facilitate romantic relationships.

The specific hypotheses addressed by this study are:

- H7: Participants with high extraversion scores will rate chat and the ability to join Facebook groups as the most important relationship facilitators.
- H8: Participants with high Neuroticism scores will rate the timeline and sharing photographs as the most important relationship facilitators.
- H9: Participants with high openness to experience scores will rate personal information sections as the most important relationship facilitators.
- H10: Participants with high conscientiousness scores will rate number of Facebook Friends and Friend suggestions as the most important relationship facilitators.
- H11: Participants with high agreeableness scores will rate photographs as the most important relationships facilitators.

Design

The aim of Study Three was to investigate if participants' personality type has an effect on what elements of Facebook they believe are most important in facilitating romantic relationships. To do this, a questionnaire was developed which attempted to measure how much Facebook was considered to facilitate romantic attraction and which elements of Facebook were most instrumental in such romantic attraction. During the course of this study, the validity and component structure of this measure were assessed. Due to the aim of Study Three focusing on personality type, the Big Five Inventory (BFI) was used, the BFI will be explained in further detail below.

Participants completed the BFI then completed a questionnaire which focused on the elements of Facebook that facilitate romantic relationships.

Participants

A total of 218 people, 61 (28%) male and 156 (72%) female participated in the study. One participant did not provide gender information. Participants had an age range of 18 – 68 (mean = 26.06, standard deviation = 9.14). Participants were recruited online through websites. A link to the study was placed on the Social Psychology Network and Psychological Research on the Net websites. An advertisement was placed on Facebook.

Participants were asked about their relationship status and Table 14 below shows the statistics for relationship status of the participants. A large proportion of participants (57%, n=126) reported being in a relationship, engaged, married or cohabiting with 38% (n=84) reported being single and 2% (n=5) reported being either divorced or separated.

Table 14: Relationship status of participants.

Relationship status	Frequency	Percent	
Single	84	38.5	
In a relationship	83	38.1	
Engaged	11	5.0	
Married	26	11.9	
Divorced	4	1.8	
Cohabiting	6	2.8	
Separated	1	.5	
Other	1	.5	

Participants were asked if they were attracted to males, females or attracted to both and Table 15 below shows the statistics for what gender participants were attracted to. It was reported that 65% (n=141) of participants were attracted to males with 27% (n=59) attracted to females and only 7% (n=15) attracted to both.

Table 15: *Gender participants were attracted to.*

Attracted to	Frequency	Percent	
Male	141	64.7	
Female	59	27.1	
Both	15	6.9	

Table 16 shows how often participants checked their Facebook profile. It was reported that 69.7% n=152 of participants checked their Facebook profile several times a day and only 4.1% n=9 of participants reported checking their Facebook profile less than once a week.

Table 16: How often participants checked their Facebook profile.

How often Facebook is checked	Frequency	Percent	
Several times a day	152	69.7	
Once a day	33	15.1	
Several times a week	18	8.3	
Once a week	6	2.8	
Less than once a week	9	4.1	

Materials

An information page (Appendix Z) with a description of the study and outline of relevant ethical issues was provided to participants. Participants indicated their consent at the end of the information page if they wanted to participate in the research. A questionnaire to determine participants' demographic information and use of social network sites was administered (Appendix G).

Participants then completed the 44 item Big Five Inventory (BFI) (Appendix AA) and this was followed by a questionnaire to determine what elements of Facebook they believed facilitate romantic relationships (Appendix BB). The BFI and the questionnaire used to determine what elements of Facebook facilitate romantic relationships will be discussed in more detail below. On completion of the survey participants were also given a debrief form (Appendix CC).

BFI

To measure personality characteristics participants completed the 44 item BFI (Appendix AA). The BFI measures the five dimensional traits suggested by the Five-Factor Model, Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. The BFI is a series of 44 short phrases based on adjectives which are prototypical of the five dimensional traits suggested by the Five-Factor Model. Examples of the short phrases include "Is considerate and kind to almost everyone",

"Can be moody" and "Gets nervous easily". Participants indicate how much they agree or disagree with each statement on a scale of 1 disagree strongly to 5 agree strongly. The reliability of the BFI scale was found to range from .75 to .90 in American and Canadian samples, with a three month test-retest reliability ranging from .80 to .90, with a mean of .85 (John & Srivastava, 1999).

Questionnaire on Facebook Elements

To determine what elements of Facebook facilitate romantic relationships, participants were given an exercise which included a list of the different elements on Facebook and asked to rate on a scale of one to ten how much each element facilitates romantic relationships. The list of the elements from Facebook that were used can be seen in Table 17. Elements of Facebook included Facebook chat, friend suggestions, relationship status, the Facebook timeline, photographs and games. This is the same questionnaire that was used in Study One, however, due to changes in Facebook since Study One was carried out, some elements on the questionnaire were modified or removed. Specifically, the 'Facebook wall' was changed to the 'Facebook timeline' and 'the ability to poke someone' was omitted due to lack of frequent usage. Additionally, the 'people you may know' tool and 'games invitations' were added.

Table 17: *The list of Facebook elements that participants were asked to rate.*

Element of Facebook thought to facilitate relationships

Photographs

Activities and Interests sections

Leaving comments on the Facebook 'Timeline'

Chat function

Status updates

Commenting on a status update

The Newsfeed

Checking in

Playing Games

Games Invitations

Sharing Relationship status

Sharing 'Interested in'

Friend suggestions

'People you may know' tool

The ability to join Facebook Groups

In order to test its dimensionality, a factor analysis was carried out on the data collected from the questionnaire. This factor analysis was not carried out during Study One as, during Study One, the main aim of the questionnaire was to encourage discussion. The 15 Facebook elements were subjected to a maximum likelihood analysis using SPSS. The maximum likelihood analysis did not determine any factors. It was decided to load the 15 elements into one factor in a principal component analysis and inspection of the single factor indicated that it is a single-dimension scale that explains 39% of the variance. Table 18 shows the factor loadings of each individual element to the single dimension scale.

Table 18: Dimensionality indicating Factor loadings for each element.

Element of Facebook	Component 1
'People you may know' tool	.758
Friend suggestions	.709
Sharing 'Interested in'	.694
Commenting on a status update	.683
Leaving comments on the Facebook 'Timeline'	.680
Checking in	.667
Status updates	.660
The ability to join Facebook groups	.657
The Newsfeed	.587
Photographs	.585
Sharing relationship status	.578
Playing games	.546
Activities and interests sections	.514
Chat function	.507
Games invitations	.441

Coefficient alpha was used to assess scale reliability. Cronbach's alpha for the questionnaire on Facebook elements from the current sample was .885. All 15 items produced corrected item-total correlations greater than .38 with elimination of any one of them reducing the alpha. Corrected item-total correlations and alpha levels if any of the elements were deleted can be seen in Table 19.

Table 19: Corrected item-total correlation and alpha if any element of the scale was deleted.

Element of Facebook	Corrected item-total correlation	Cronbach's Alpha if item deleted	
Photographs	.515	.879	
Activities and Interests sections	.466	.882	
Comments on the 'Timeline'	.603	.875	
Chat function	.427	.882	
Status updates	.579	.876	
Commenting on a status update	.592	.876	
The Newsfeed	.506	.879	
Checking in	.602	.875	
Playing Games	.490	.880	
Games Invitations	.387	.884	
Sharing Relationship status	.503	.880	
Sharing 'Interested in'	.632	.874	
Friend suggestions	.634	.874	
'People you may know' tool	.691	.871	
Ability to join Facebook	.586	.876	

Procedure

Participation took place online. Participants received a link to an information and consent form (Appendix Z) which explained that participation was voluntary and they could withdraw from the study at any time or refuse to answer any questions they did not want to answer throughout the study. Once participants gave consent they were directed to the BFI. Following completion of the BFI, participants then completed the questionnaire on Facebook elements. Participants were then debriefed (Appendix CC) and reminded that they could withdraw their data from the research.

Ethics

This research was approved by the Department of Technology and Psychology ethics committee in IADT. Ethical guidelines, as issued by the BPS and the PSI, were adhered to at all stages throughout the survey process. Consent was obtained from all participants and they were informed that they could withdraw from the study at any time. Participation was anonymous and confidential. Data collected was stored on a password protected computer to which only the researcher had access. Participants

were informed that no identifiable data would be used from the data collected. After completion of the survey, participants were debriefed and reminded they could withdraw their data from the study and all data collected would be kept confidential.

Data Analysis

A regression was carried out on each element of Facebook to analyse the relationship between the personality traits, the participants' demographic information and the elements of Facebook considered to be the most important relationship facilitators. Correlations were carried out to test individual hypotheses. Following this correlations were carried out to investigate potential relationships between the remaining elements of Facebook and the participant personality traits.

Table 20, below, shows the means and standard deviations for each element of Facebook. An overall attitude to Facebook score was also obtained by adding each individual's score for each element of Facebook that appeared on the scale. As can be seen in Table 20 below, chat was thought to be the most important relationship facilitator with the highest mean of 7.57. Games invitations were rated as the least important relationship facilitator and received the lowest mean of 2.50.

Table 20: Means and standard deviations for each element of Facebook

Element of Facebook	Mean	St. Dev
Photographs	6.98	2.38
Activities and Interests sections	5.51	2.61
Comments on the 'Timeline'	6.65	2.35
Chat function	7.57	2.40
Status updates	6.26	2.19
Commenting on a status update	6.40	2.35
The Newsfeed	5.31	2.36
Checking in	4.61	2.68
Playing Games	2.92	2.45
Games Invitations	2.50	2.41
Sharing Relationship status	6.21	2.80
Sharing 'Interested in'	5.49	2.70
Friend suggestions	4.22	2.63
'People you may know' tool	4.10	2.70
The ability to join Facebook	4.36	2.66
Overall attitude to Facebook	79.18	23.71

The enter method of multiple regression was used to determine if personality characteristics, age, gender, sexual attraction and how often Facebook is used could predict which elements of Facebook would be most associated with facilitating romantic attraction. The results of these multiple regressions are presented in Table 21 below. The model failed to accurately predict scores for most elements, but did significantly predict scores for Facebook chat (at p=.007) and Friend suggestions (at p=.017). These results are discussed in more detail below.

Table 21: Regression analysis for each element of Facebook.

Element of Facebook	F	Df	P
Photographs	1.070	(10,181)	.387
Activities and Interests	.776	(10,180)	.651
Comments on the 'Timeline'	1.381	(10,180)	.192
Chat function	2.555	(10,181)	.007
Status updates	1.120	(10,179)	.349
Commenting on a status update	1.191	(10,180)	.300
The Newsfeed	1.357	(10,180)	.204
Checking in	.748	(10,174)	.679
Playing Games	1.377	(10,176)	.194
Games Invitations	1.313	(10,178)	.226
Sharing Relationship status	.540	(10,180)	.860
Sharing 'Interested in'	.489	(10,178)	.896
Friend suggestions	2.258	(10,177)	.017
'People you may know' tool	1741	(10,179)	.075
The ability to join Facebook Groups	.991	(10,177)	.453
Attitudes toward Facebook	1.063	(10,158)	.394

Predictors of Scores for 'Facebook Chat'.

As can be seen in Table 22 overleaf, gender was the predictor that received the highest weight in the model with females scoring chat higher than males. Sexual attraction had the next highest weight with those who were attracted to males scoring higher than those who were attracted to females. Extraversion and how often Facebook is checked also received high weight and were found to be significant. Even though the model was found to be significant it only explained 7.5% of the variance, therefore it is not a good model.

Table 22: Coefficient values showing how much each predictor variable contributes to the dependent variable, Facebook chat.

	В	SE B	β	Sig
Gender	1.65	.74	.33	.027
Sexual attraction	1.31	.74	.26	.080
Extraversion	.82	.32	.20	.011
How often Facebook	-1.05	.45	17	.022
checked				
Age	05	.02	14	.065
Neuroticism	.388	.25	.12	.135
Relationship status	42	.36	09	.255
Attractiveness	11	.32	03	.728
Openness	11	.29	03	.709
Conscientiousness	01	.29	00	.977

Predictors of Scores for 'Friend Suggestions'

As can be seen in Table 23 below, how often Facebook was checked and gender were the two highest predictors, with those who check Facebook less than everyday rating *Friend* suggestions as more important relationship facilitators than those who check Facebook everyday and females scoring higher than males. Additionally, extraversion scored high in the model. Even though the model was found to be significant it only explained 6.3% of the variance, therefore it is not a good model.

Table 23: Coefficient values showing how much each predictor variable contributes to the dependent variable, Friend suggestions.

	В	SE B	β	Sig
How often Facebook checked	1.69	.52	.24	.001
Gender	1.18	.84	.21	.163
Extraversion	.71	.36	.15	.053
Openness	36	.33	08	.274
Age	.02	.03	.05	.485
Conscientiousness	15	.32	04	.641
Relationship status	19	.41	04	.652
Agreeableness	.15	.36	.03	.682
Neuroticism	05	.29	02	.853
Sexual attraction	01	.84	00	.988

Extraversion and Chat / Ability to join Facebook Groups

Hypothesis 7 stated that participants with high extraversion scores will rate chat and the ability to join Facebook groups as the most important relationship facilitators. Chat and extraversion were significantly positively correlated r=.186, p<.01 this can be seen in Figure 3. Additionally there was a non-significant positive correlation of .075 between the ability to join Facebook groups and extraversion this can be seen in Figure 4 overleaf. Therefore, Hypothesis 7 was partially supported.

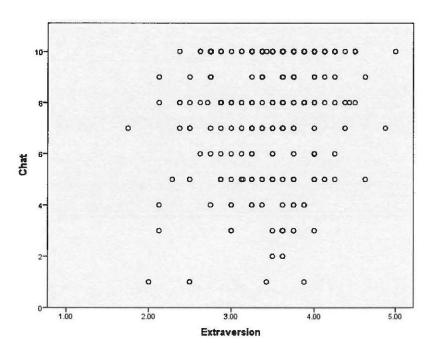


Figure 3: Significant positive correlation between chat and extraversion.

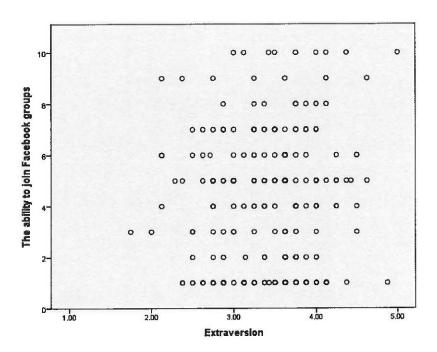


Figure 4: Non-significant positive correlation between joining Facebook groups and extraversion.

Neuroticism and Timeline / Sharing Photographs

Hypothesis 8 stated that participants with high Neuroticism scores will rate the timeline and sharing photographs as the most important relationship facilitators. There was a non-significant positive correlation of .112 between commenting on the timeline and neuroticism (Figure 5 overleaf). There was also a non-significant negative correlation of -.069 between sharing photographs and neuroticism (Figure 6 overleaf). Hypothesis 8 was rejected.

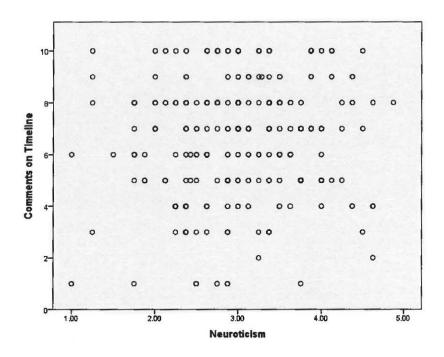


Figure 5: Non-significant positive correlation between the Timeline and Neuroticism.

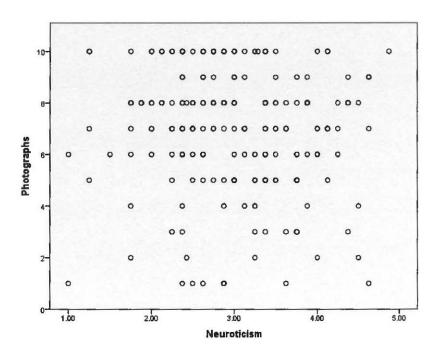


Figure 6: Non-significant negative correlation between photographs and Neuroticism.

Openness to Experience / and Personal Information

Hypothesis 9 stated that participants with high openness to experience scores will rate personal information sections as the most important relationship facilitators. There was a non-significant positive correlation of .031 between openness to experience and the personal information sections of Facebook, this can be seen in Figure 7 below. Therefore, Hypothesis 9 was rejected.

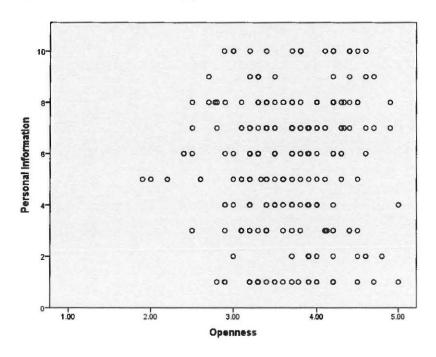


Figure 7: Non-significant positive correlation between personal information and openness.

Conscientiousness and Friend suggestions / People You May Know

Hypothesis 10 stated that participants with high conscientiousness scores will rate the people you may know tool and *Friend* suggestions as the most important relationship facilitators. There was a non-significant positive correlation of .053 between the people you may know tool and conscientiousness (Figure 8 overleaf). There was also a non-significant positive correlation of .047 between Friend suggestions and conscientiousness (Figure 9 overleaf). Therefore, Hypothesis 10 was rejected.

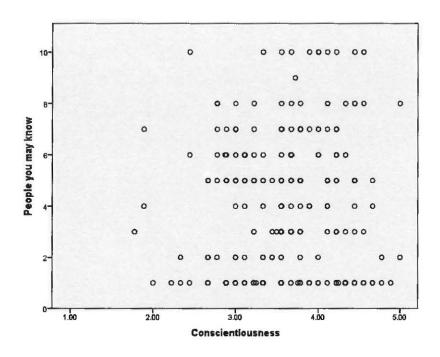


Figure 8: Non-significant positive correlation between the people you may know tool and conscientiousness.

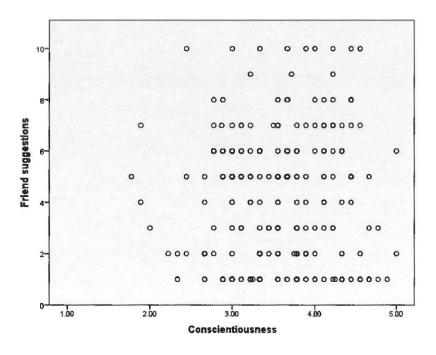


Figure 9: Non-significant positive correlation between Friend suggestions and conscientiousness.

Agreeableness and Rating of Photographs

Hypothesis 11 stated that participants with high agreeableness scores will rate photographs as the most important relationships facilitators. Photographs and agreeableness were significantly positively correlated r=.152, p<.05 (Figure 10 below). Hypothesis 11 was supported.

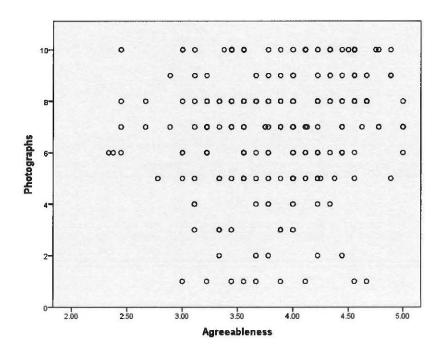


Figure 10: Significant positive correlation between photographs and agreeableness.

Other findings

In addition to statistical analysis being carried out on each of the hypotheses, correlations were also carried out for each of the elements of Facebook thought to facilitate relationships and each personality trait. These results are presented in Table 24 overleaf.

Table 24: Correlations for between each personality trait and each element of Facebook.

Extrav	ersion	Agreeable	Conscientious	Neuroticism	Openness
Photographs	.058	.152	033	069	.001
Activities and	.010	.019	023	.010	.031
Interests					
Comments on the	.116	013	050	.112	.056
'Timeline'					
Chat function	.186	.008	083	.103	023
Status updates	.156	.039	092	.043	018
Comment on status	.166	001	022	.139	.055
update					
The Newsfeed	.118	013	083	.107	100
Checking in	029	.052	.036	.069	114
Playing Games	055	006	066	.055	097
Games Invitations	024	031	060	.055	187
Relationship status	.035	.092	.068	097	.021
Sharing 'Interested in'	.080	.111	.095	009	.013
Friend suggestions	.127	.053	.047	037	070
'People you may	.127	.004	.053	016	015
know' tool					
Joining Facebook	.075	.030	026	065	072
Groups					
Overall attitude to	.147	.079	003	.014	057
Facebook					

From this analysis, games invitations and openness to experience were found to be negatively correlated r=-.187, p=.01 this can be seen in Figure 11 overleaf. Additionally, the overall attitude to Facebook was positively significantly correlated with extraversion r=.147, p<.05 this can be seen in Figure 12 overleaf.

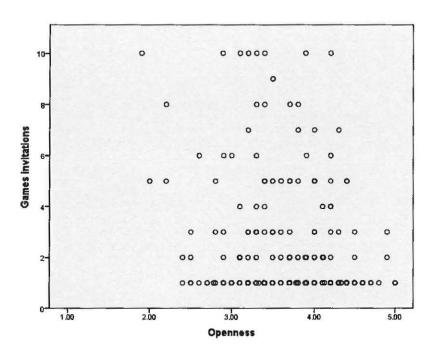


Figure 11: Significant negative correlation between games invitations and openness to experience.

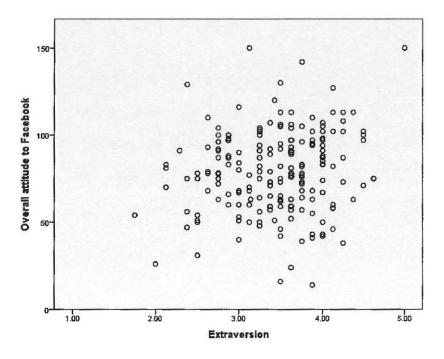


Figure 12: Significant positive correlation between overall attitude to Facebook and extraversion.

Discussion

The aim of this study was to examine if personality traits can predict which elements of Facebook profiles are considered to facilitate romantic relationships. Previous research has already shown that there is a relationship between personality traits and Facebook behaviour, specifically, the information that is uploaded onto Facebook. The present study extended these findings by investigating personality traits and how people perceive the different types of information that others present on Facebook. The findings suggest that some personality traits can predict which elements of Facebook profiles are considered to facilitate romantic relationships. The key findings of Study Three are discussed below. Each hypothesis will be dealt with individually and then the implications of the findings and strengths and limitations of the research will be discussed.

Hypothesis Seven stated that participants with high extraversion scores will rate chat and the ability to join Facebook groups as important relationship facilitators. It was found that participants high on extraversion did rate Facebook chat higher than those who were low on extraversion. This indicates that there is a relationship between extraversion and how Facebook chat is perceived to facilitate romantic relationships on Facebook. It was also found that there was no significant relationship between extraversion and the perceived utility of joining Facebook groups in facilitating romantic attraction. Ross et al (2009) and Gosling et al (2011) found that extraversion was correlated with how many groups a user was a member of. The present study found that extraversion does not predict Facebook groups as a relationship facilitator. This suggests that whilst highly extraverted people may be members of more groups, they do not believe groups facilitate romantic relationships.

Hypothesis Eight stated that participants with high neuroticism scores will rate the timeline and sharing photographs as important relationship facilitators. It was found that there was no significant relationship between commenting on the timeline and neuroticism. This implies that there is no relationship between neuroticism and how the timeline is perceived to facilitate romantic relationships. Ross et al. (2009) reported that the Facebook wall was the favourite Facebook component of highly

neurotic individuals and Moore and McElroy (2012) found neuroticism was significantly related to how often people use Facebook to keep up with others. However, results from the present study suggest that although it is their favourite component, they do not believe it facilitates romantic relationships. It was also found that there was no significant relationship between how sharing photographs was perceived to facilitate romantic relationships and neuroticism. Ross et al (2009) found that people low on neuroticism preferred sharing photos whereas, Amichai-Hamburger and Vinitzky found that highly neurotic individuals preferred sharing photos. However, the present study found no relationship between neuroticism and how participants perceived the timeline or photographs to facilitate romantic relationships. It was suggested during the interview stage of this research that photographs are shared in an attempt to create a positive image. If people are aware that this is how photographs are used, the Warranting Theory suggests they may be less likely to use this information to make judgements about others. This could be why even though photographs may be the favourite component of Facebook for highly neurotic individuals, the current research has found that such users do not believe that they are a good way to begin romantic relationships.

Hypothesis Nine stated that participants with high openness to experience scores will rate personal information sections as important relationship facilitators. It was found that there was no significant relationship between openness to experience and personal information sections of Facebook, suggesting no relationship between openness and how personal information sections are perceived to facilitate romantic relationships. Moore and McElroy (2012) found that openness to experience had no significant effect on Facebook usage or content, whilst Amichai-Hamburger and Vinitzky (2010) found that participants that scored high on the openness to experience scale include more information in the personal information sections. However, findings from the present study suggest that they do not believe these sections of Facebook help facilitate romantic relationships.

Hypothesis Ten stated that participants with high conscientiousness scores will rate the people you may know tool and *Friend* suggestions as important relationship facilitators. It was found that there was no significant relationship between conscientiousness and the people you may know tool, suggesting that

conscientiousness has no relationship with how the people you may know tool is perceived as a relationship facilitator. It was found that there was no significant relationship between conscientiousness and *Friend* suggestions, which implies that conscientiousness has no relationship with how *Friend* suggestions are perceived as a relationship facilitator. Overall, the people you may know and the *Friend* suggestions tool were rated as two of the lowest elements of Facebook perceived to facilitate romantic attraction. It may be that these tools are no longer frequently used on Facebook, thus leading to their lower ratings. However the relative usage of Facebook tools and features was not specifically examined in the current study, and so this requires further examination to confirm the reason for the lower ratings for these items. Amichai-Hamburger and Vinitzky (2010) found that highly conscientious individuals had more Facebook *Friends* than those who scored lower on conscientiousness. However, this study found that although highly conscientious individuals may have more *Friends*, they do not believe making new *Friends* via the people you may know tool or *Friends* suggestions is a good relationship facilitator.

Hypothesis Eleven stated that participants with high agreeableness scores will rate photographs as important relationships facilitators. It was found that participants high on agreeableness did rate photographs higher than those who were low on agreeableness. This implies that agreeableness has a relationship with how photographs are perceived to facilitate romantic relationships.

An unanticipated negative correlation was found between games invitations and openness to experience. Additionally, the overall attitude to Facebook was found to have a positive correlation with extraversion.

Theoretical and Practical Implications

Study Three shows some support for the theory of interpersonal attraction which suggests one of the main factors to influence attraction is physical attraction. Overall, Study Three found photographs to be one of the highest scoring elements of Facebook thought to facilitate romantic attraction along with Facebook chat, commenting on the timeline and status updates which are all text based ways to interact with each other. This could also support the proximity effect which suggests

repeated exposure in an online environment may lead to greater emotional attachment.

This research indicates that whilst there is not a strong relationship between personality traits and how Facebook is perceived to facilitate romantic relationships, there is a relationship between some personality traits and how Facebook is perceived to facilitate romantic relationships. Therefore, people should be careful about the information presented on Facebook and who they allow to view their profile.

Strengths and Limitations

The present research extends prior research on personality traits and Facebook use by exploring the individual elements of Facebook and how they are perceived to facilitate romantic relationships. The results suggested that some personality traits can predict which elements of Facebook profiles are considered to facilitate romantic relationships. There are some limitations to the research.

In order to understand why most of the hypotheses were rejected it is important to consider there may have been a problem with the rationale of the hypotheses for Study Three. The hypotheses of this study were based on previous research which had found relationships between personality traits and what elements of Facebook people use most often. The previous research did not indicate a relationship between personality traits and predictions of which elements of Facebook profiles are considered to facilitate romantic relationships. Perhaps the study would have been more beneficial if it focused on a qualitative aspect asking participants to create a list of what elements they thought facilitate romantic relationships.

Additionally, it is practical to consider there may have been methodological problems arising. The questionnaire on Facebook elements was based on all visible elements available on Facebook that could potentially be used in facilitating relationships. However, it is unknown how often each of the elements presented on the scale were used. For example, chat and photographs may be used more often than playing games. If participants are not familiar with the tools it could affect how they rated them on the scale. It is also possible that individuals do not differentiate

between the different elements of Facebook when considering romantic attraction and they just look at Facebook as a whole. For example, during the interviews in Study One when discussing talking to others, participants did not differentiate between publicly or privately chatting to others. Therefore, it is possible that participants did not differentiate between elements such as Facebook chat, commenting on the timeline or status updates.

Further Research

Whilst the present research extends prior research on personality traits and Facebook use by exploring the individual elements of Facebook and how they are perceived to facilitate romantic relationships, further research should focus on the more popular elements of Facebook. Further research should also examine if there is a relationship between a user's most used element and the element they perceive to be the highest relationship facilitator.

Conclusion

Overall it was found that there is not a strong correlation between personality traits and how the individual elements of Facebook are perceived to facilitate romantic relationships. However, it was found that extraversion has a correlation with how Facebook chat is perceived to facilitate romantic relationships on Facebook and that agreeableness has a correlation with how photographs are perceived to facilitate romantic relationships. This implies that there is a correlation between some personality traits and how some elements of Facebook are perceived to facilitate romantic relationships.

Chapter Five
General Discussion

Discussion

The effect of information provided on a Facebook profile on romantic attraction has been investigated in a variety of ways during this research study including qualitative data collection during the interviews in Study One, the quantitative data collected during the experiment in Study Two and the online questionnaire in Study Three. This final chapter begins by presenting the research questions and hypotheses that have been addressed by Study One, Study Two and Study Three. The findings of these studies will be discussed in relation to previous literature and theories. Following this, some strengths and limitations of the current research and suggestions for further research will be outlined. Finally, an overall conclusion to the research will be presented.

Research Question One asked if Facebook facilitates romantic relationships. During interviews carried out in Study One, it emerged that participants thought Facebook does facilitate romantic relationships. The participants also identified the specific tools that act as facilitators, namely: photographs, the chat tool, public interactions on the timeline and the ability to share a relationship status. Another finding that emerged from the interviews was reasons people would use Facebook for dating rather than an online dating site. Participants identified five main reasons, namely: there is more information available on Facebook than on an online dating site, the information presented on Facebook is more honest than an online dating site,

Facebook is more secure and more social than an online dating site, a relationship can build more naturally on Facebook than on an online dating site and online dating sites carry a stigma. It was also stated that people use Facebook to create a positive image by use of photographs, that is, uploading attractive photographs but asking *Friends* to remove undesired photographs.

Fox and Warber (2013) suggested a sequence of events followed in romantic relationship development on Facebook, this was partially supported by the interview. The interview participants suggested that people would initially have an offline encounter with an individual and then find them on Facebook and send Friend requests. The relationship would then develop by interacting and talking on Facebook which could lead to the possibility of a romantic relationship developing.

Then a friendship would develop which could, potentially, lead to a romantic relationship.

Research Question Two asked if information presented on a Facebook profile has an effect on romantic attraction. The experiment carried out in Study Two found that the information presented on a Facebook profile does have an effect on romantic attraction. The types of information that have an effect on romantic attraction were addressed in the following three hypotheses. Hypothesis One stated that positive comments left by Friends will lead to higher scores on a Romantic Attraction Scale than negative comments would. It was found that positive comments left by Friends led to higher scores on the Romantic Attraction Scale than negative comments left by Friends, indicating that Friends' comments do have an effect on romantic attraction. Hypothesis Two stated that positive comments left by the profile owner will lead to higher scores on a Romantic Attraction Scale than negative comments would. It was found that comments left by the profile owner had no significant effect on romantic attraction. This suggests that profile owner comments have no effect on romantic attraction. Hypothesis Three stated that a profile owner with a large number of Friends will be judged as more romantically attractive than a profile owner with a fewer number of Friends. A significant difference appeared between the profile owner with a large number of Friends and a profile owner with a fewer number of Friends, however, it was the profile owner with a fewer number of Friends that was judged to be more romantically attractive than a profile owner with a higher number of Friends. This suggests that number of Friends has an effect on romantic attraction.

These findings are important because, as found in the interviews in Study One, it was stated that public interactions, particularly observing how an individual interacts with their *Friends*, is important for facilitating relationships on Facebook. The findings of Study Two are consistent with the work of Walther et al (2008) which found information provided by a Friend has an effect when forming impressions of a profile owner, additionally it supports the research carried out by Utz (2010) who found that *self-generated* information had no effect on social attraction. Interestingly, it was found that number of *Friends* has the reverse effect of what was found by Tong et al (2008), who found a profile owner with 302 *Friends* was more socially

attractive that an profile owner with 102 *Friends*. The figures used in the study for the present study were adopted from the Tong et al study. This suggests that the number of *Friends* has an effect on impression formation; however the effect on impression formation may differ for different types of relationships, for example, friendship or romantic relationships.

Research Question Three asked which type of information provided on Facebook has a greater effect on romantic attraction, system-generated information, self-generated information, or Friend-generated information. The next three hypotheses from Study Two addressed Research Question Three and compared which type of information provided on Facebook has a greater effect on romantic attraction. It was found that Friend-generated (Friends' comments) information had the greatest effect on romantic attraction followed by system-generated (number of Friends) information, whilst self-generated (profile owners' comments) information had no significant effect. Hypothesis Four stated Friends' comments will be a greater predictor of higher scores on a Romantic Attraction Scale than profile owners' comments. It was found that Friends' comments had a larger effect on romantic attraction than profile owner comments. Hypothesis Five stated Friends' comments will be a greater predictor of higher scores on a Romantic Attraction Scale than number of Friends. It was found that Friend-generated information is a greater predictor of attractiveness than system-generated information. Hypothesis Six stated number of Friends will be a greater predictor of higher scores on a Romantic Attraction Scale than profile owners' comments. It was found that number of Friends had a higher impact on romantic attraction than profile owners' comments.

During Study One it was stated that public interactions are considered to facilitate romantic relationships. In Study Two it was found that *Friend-generated* information has the most impact on romantic attraction, therefore if what the *Friends* say has the biggest impact on romantic attraction, individuals need to be aware of who they allow to post publicly on their Facebook timeline. The findings from Research Question Three are in agreement with Walther et al (2009) who found that *Friends'* comments had a larger effect on romantic attraction than profile owner comments. However, it is in contrast to a study carried out by Utz (2010) who found that *self-generated* information had a larger effect on romantic attraction than *Friend-*

generated information when judging popularity. The findings are also in agreement with Antheunis and Schouten (2011) who found that *Friend-generated* information is a greater predictor of attractiveness than *system-generated* information.

Research Question Four was addressed in Study Three and asked if personality traits of participants can predict which elements of Facebook profiles are considered to facilitate romantic relationships. The findings suggest that some personality traits can predict which elements of Facebook profiles are considered to facilitate romantic relationships. Hypothesis Seven stated participants with high extraversion scores will rate chat and the ability to join Facebook groups as important relationship facilitators. It was found that participants high on extraversion did rate Facebook chat higher than those who were low on extraversion; however, there was no significant correlation between extraversion and the perceived utility of joining Facebook groups in facilitating romantic attraction. Therefore, Hypothesis Seven was partially supported. Hypothesis Eight stated participants with high neuroticism scores would rate the Timeline and sharing photographs as important relationship facilitators. It was found that there was no significant correlation between commenting on the Timeline or sharing photographs and neuroticism. Hypothesis Nine stated participants with high openness to experience scores would rate personal information sections as important relationship facilitators. No significant correlation was found between openness to experience and personal information sections of Facebook. Hypothesis Ten stated participants with high conscientiousness scores will rate the people you may know tool and Friend suggestions as important relationship facilitators. No significant correlation was found between conscientiousness and the people you may know tool or Friend suggestions. Hypothesis Eleven stated participants with high agreeableness scores will rate photographs as important relationships facilitators. A significant correlation was found between agreeableness and photographs. In addition to hypotheses testing, correlations were also carried out for each of the elements of Facebook thought to facilitate relationships and each personality trait. From this analysis, games invitations and openness to experience were found to be negatively correlated and the overall attitude to Facebook was positively significantly correlated with extraversion.

The hypotheses of Study Three were based on research by Ross et al (2009) and Amichai-Hamburger and Vinitzky (2010) which had found relationships between personality traits and what elements of Facebook people use most often. However, most of the hypotheses were rejected and there were very few significant findings in relation to personality traits and what elements of Facebook are predicted to facilitate romantic relationships. However, it can be determined from the findings and previous research that even though there is a relationship between personality traits and the elements of Facebook people use most often, this does not indicate that because participants prefer certain elements of Facebook they will think these elements predict romantic relationships.

Theoretical and Practical Implications

The findings from this study show support for the theory of interpersonal attraction. This support is particularly evident in Study One and Study Three. The theory of interpersonal attraction suggests that proximity, similarity and physical attraction can influence interpersonal attraction. The proximity effect suggests being close to someone plays an important role in forming a relationship; repeated exposure in an online environment may lead to greater emotional attachment. People becoming *Friends* on Facebook and interacting or chatting will lead to repeated exposure and possibly lead to greater emotional involvement. This was also portrayed in Study Three which found text based ways to interact with each other, such as Facebook chat, commenting on the Timeline and status updates, were all scored highest on the scale of which elements of Facebook are perceived to facilitate romantic relationships. Additionally, Study Three found photographs to be one of the highest scoring elements of Facebook thought to facilitate romantic attraction. This is the only access people have to the profile owner's physical appearance to know if they are physically attracted to someone on Facebook.

The findings from this study also show support for the Brunswick lens model and the Warranting Theory. The Brunswik Lens Model suggests personality is left behind in the environment by means of identity claims and behavioural residue. Additionally, behavioural residue is seen as more reliable because this information cannot be manipulated by the person who it refers to (Vazire & Gosling, 2004). The

Warranting Theory suggests system-generated and Friend-generated information are more reliable sources of information than self-generated information because the profile owner has less control (Walther & Parks, 2002). This is particularly reflected in results from the experiment carried out in Study Two. Friends' comments and number of Friends significantly altered romantic attraction whilst profile owner comments had no effect on romantic attraction. This is due to the warranting value of the information. Friends' comments and number of Friends are seen to have a higher warranting value. Therefore, they are thought to be more reliable sources of information because the profile owner has very little control over this information, however, they have complete control over their own comments so this is thought to be less reliable. This was also reflected during the interview, particularly when comparing Facebook to online dating sites. Participants suggested that having access to public interaction with Friends, which can be viewed as a source of behavioural residue, was a reason to view Facebook as having more information available, the information presented on Facebook being more honest and Facebook being more secure than an online dating site.

Strengths and Limitations of Research

The present research extends prior research on how Facebook is used. It specifically focussed on how Facebook is used for romantic reasons. First, participants were asked if Facebook is used for romantic reasons and then they were asked how it was used for romantic reasons. The present research also extends prior research on impression formation online by comparing the effects of self-generated, system-generated and Friend-generated information within the same experiment and comparing which type of information had the highest effect on romantic attraction. The present research also extended the research into Facebook use and personality traits by investigating if personality traits of participants can predict which elements of Facebook profiles are considered to facilitate romantic relationships.

There were also some limitations to the present research. The study focussed on the social network site Facebook; consequently, these findings may not apply to other social networking sites. Nevertheless, Facebook is currently one of the dominant social network sites and so it was deemed appropriate to focus solely on Facebook

for this study. During the course of this research there was a change in the format of Facebook from the Facebook 'Wall' to the Facebook 'Timeline'. However, aside from the change in terminology, the layout and the ability to add life events, there is very little difference between these features. This change in Facebook format and terminology may have complicated findings, although this is unlikely.

Further Research

Further research could compare if positive or negative and *self-generated* information have a greater impact on impression formation. Based on the present research and recent research by Strano and Queen (2012) and Rui and Stefanone (2013) on suppression activities, further research could focus on comparing if deleting negative *Friend-generated* information or adding positive *self-generated* information in self defence has more of an impact on counteracting a negative impression.

Conclusion

Overall it was found that Facebook is used to facilitate romantic relationships in several ways, namely: by use of photographs, the chat tool, public interactions on the timeline and the ability to share a relationship status. Reasons why people would be more likely to use Facebook over an online dating site were also identified. It was found that the information presented on a Facebook profile has an effect on romantic attraction. Friend-generated information has the highest impact on how participants rated romantic attraction followed by system-generated information. This was followed by self-generated information that had no impact at all on how romantic attraction was related. The study also suggested that some personality traits can predict which elements of Facebook are perceived to facilitate romantic relationships.

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Appendix A - Consent form used during interviews

Research study title: The effect of information provided in a social network profile on romantic attraction

Please read this information on the research topic and sign at the bottom of the next page if you consent to taking part. You are asked to participate in this study which is designed to aid our understanding about online social networks. If you agree to participate you will be asked to take part in an interview. The researcher intends to audio record this interview; no identifiable data will be used from this recording. If you would prefer to not be recorded please inform the researcher

Voluntary participation

Participation is voluntary and you are free to decline to respond to any questions if you so wish. At any time you may withdraw your participation from the study without consequence.

Potential Risks

There are no foreseen potential risks to taking part in this study.

Confidentiality

The data collected will be kept strictly confidential and will only be available to the researcher and project supervisors. Under no circumstances will your name or any identifying characteristics be included in the final report. The recordings from this interview will be recorded and transcribed by the researcher, the transcriptions will be stored on a password protected computer. Transcriptions will be identified by codes and will not contain participant names.

Data

Data is being collected as part of a dissertation for an M.Sc. in Psychology at iadt. The recordings from this interview will be transcribed by the researcher, the transcriptions will be stored on a password protected computer. Transcriptions will be identified by codes and will not contain participant names.

This study has been approved by the Department of Learning Sciences Ethics Committee (DLSEC). If you require further information on this research study please feel free to contact me at Jennaparsons@student.iadt.ie or my project supervisors Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Consent I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time. I agree to take part in this study. I understand that data collected about me during this study will be anonymised before it is submitted for publication. I agree to allow the data collected to be used for future research projects. **Audio Recording** I agree to the interview being audio recorded. I agree for any quotes to be used. I don't want any quotes to be used. I want to see any proposed quotes before making a decision. (Signature of participant)

Date:

Appendix B - Debrief form used during interviews

Debrief form

Thank you for taking part in the present study. During the interview you were requested to answer questions about behavior on online social networking sites. The purpose of this interview was to examine the use of Facebook in romantic relationships. Your opinions will provide useful information which will further the understanding of development of romantic relationships on Facebook. The data collected during this interview will be used to design an experiment concerning the effect of information provided in a social network profile on romantic attraction. Additionally the data collected during the interviews may be published in their own rights in academic publications.

I would like to remind you that you have the right to withdraw your data from this study at any time. The data that has been collected will be kept strictly confidential; under no circumstances will your name or any identifying characteristics be included in the final report.

If you have any questions regarding this study, please feel free to ask the researcher at this time or contact at a later date on Jennaparsons@student.iadt.ie or the researcher's supervisors at Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Thanks again for your participation.

Jenna Parsons

Appendix C - Interview script used during interviews

Facebook allows users to browse through profiles of others, why would people do this?

- 1.1. Why do you think people are interested in what others share on their profile?
- 1.2. Do you think they are looking for specific information? If yes, what do you think they are looking for?
- 1.3. What reasons could people have for looking at profiles of people they don't know?
- 1.4. Do you know of anyone who has become acquainted with someone through facebook this way?
- 1.5. Do you think people check Facebook profiles of people they initially meet offline? What reasons would they have for doing so?

2. Facebook allows users to change their relationship status and these changes appear on the newsfeed. Have you noticed this feature on facebook before?

- 2.1 Why do you think that people choose to publicly announce their relationship status on facebook, when such information can be kept private?
- 2.2 Have you ever been surprised by someone's change in relationship status on facebook? If yes, can you tell me about it (but please don't mention the people involved by name)?
- 2.3 Do you know of anyone who has used this feature on facebook to break up with someone? If yes, could you tell me more about it (without mentioning names)?
- 2.4 How much attention do people pay to changes in relationship status on facebook?
- 2.5 Why do you think people are or are not interested in these relationship status updates?
- 2.6 Do you think people monitor these updates in order to search for potential romantic partners? Probe: is it possible that people monitor the relationship status of people to see if they are single or not?

3. Why do you think people search friends' photo albums?

3.1. What reasons would people have for sharing photos on facebook?

- 3.2. Why do you think people are or are not interested in the photos their friends display?
- 3.3. Have you ever been surprised by photos shared by a friend on facebook? If yes, can you tell me about it (but please don't mention the people involved by name)?
- 3.4. Do you think people are interested in the people who are in the photos? If so, why do you think they are?

4. Do you think people used Facebook for romantic reasons? If so, how?

- 4.1. What reasons would people have for using facebook for dating instead of an online dating site?
- 4.2. Have you heard of someone searching for dates or potential partners on facebook?
- 4.3. Have you heard of a situation where someone was approached through facebook for romantic reasons? If yes, can you tell me about it (but please don't mention the people involved by name)?
- 4.4. Have you heard of a situation where someone approached somebody they already know for a date through facebook?

Appendix D - Exercise one used during interviews

Does Facebook facilitate romantic relationships?

Please indicate on the scale from 1 - 10 how much or how little you think these elements of Facebook facilitate romantic relationships?

Photographs 'Activities and Interests' sections Leaving comments on the Facebook 'wall' Chat function Status updates Commenting on a status update The Newsfeed Checking in Games

Sharing Relationship status

1	2	3	4	5	6	7	8	9	10
Sharing "Interested in"									
1	2	3	4	5	6	7	8	9	10
Frien	d sugge	stions							
1	2	3	4	5	6	7	8	9	10
The ability to join Facebook Groups									
1	2	3	4	5	6	7	8	9	10
The ability to 'poke' someone									
1	2	3	4	5	6	7	8	9	10

Appendix E – Comments used for exercise two during interviews Heyy how u doin beautiful (:

i saw u on my ppl u may know tool i would love to know more abt u!

My marriage is over!!

mail me ur digits we do beers..

You left your Facebook logged on! Just wanted you to know how cute it is to see you flirting with massive amounts of girls. Kind of humiliating for me, really... but now you can feel my pain! I'm sorry i wasn't 'good enough' for you not to do that to me. Here's the thing, now you're single... so you can do whatever you want! :D

Hottie if ive ever seen one ♥

I'm sorry for sleeping with your girlfriend :(i sent you a farmville gift. Are we ok now?

I couldn't help but notice you recently went from being "in a relationship" to "single". I would just like to remind you, that nothing would piss off your exboyfriend more than if you had sex with me. Thank you for taking the time to read this message.

Woo back on the market, what you doin tonite girl?

Consent form

Research study title: The effect of information provided in a social network profile on romantic attraction

Please read this information on the research topic and click the button at the bottom of the page if you consent to taking part. You are asked to participate in this study which is designed to aid our understanding about online social networks and romantic attraction. If you agree to participate you will be asked to take part in an experiment, which will involve viewing a Facebook profile, then completing a questionnaire.

Voluntary participation

Participation is voluntary and you are free to decline to respond to any questions if you so wish. At any time you may withdraw your participation from the study without consequence.

Potential Risks

There are no foreseen potential risks to taking part in this study.

Confidentiality

The data collected will be kept strictly confidential and will only be available to the researcher and project supervisors. Under no circumstances will your name or any identifying characteristics be included in the final report.

Data

Data is being collected as part of a dissertation for an M.Sc. in Psychology at IADT. Data collected from this experiment will be stored on a password protected computer, and will not contain participant names.

This study has been approved by an IADT Ethics Committee. If you require further information on this research study please feel free to contact me at Jennaparsons@student.iadt.ie or my project supervisors Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Consent

I confirm that I have read and understand the information given above for the above study. I understand that my participation is voluntary and that I am free to withdraw at any time. I understand that data collected about me during this study will be anonymised before it is submitted for publication.

I agree to allow the data collected to be used for future research projects.

Appenaix G –	Demographic	information sneet usea auring experiment					
Age:							
Gender:	Male	Female					
Interested in:	Male	Female					
Relationship sta	tus:						
Single							
In a rela	In a relationship						
Engaged	Engaged						
Married	į						
Divorce	d						
Cohabiti	ing						
Widowe	ed						
Separate	Separated						
Other (p	lease specify)						
How often do yo	ou check your F	acebook profile?					
Several t	times a day						
Once a c	lay						
Several t	times a week						
Once a v	veek						
Less tha	n once a week						

Debrief

Thank you for taking part in this study. During the experiment you were requested to view a facebook profile and complete the romantic attraction scale. The purpose of this experiment was to examine the effect of information provided in a social network profile on romantic attraction. Your opinions will provide useful information which will further the understanding of development of romantic relationships on Facebook.

I would like to remind you that you have the right to withdraw your data from this study at any time. The data that has been collected will be kept strictly confidential; under no circumstances will your name or any identifying characteristics be included in the final report.

If you have any questions regarding this study, please feel free to ask the researcher at this time or contact at a later date on Jennaparsons@student.iadt.ie or the researcher's supervisors at Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Thanks again for your participation.

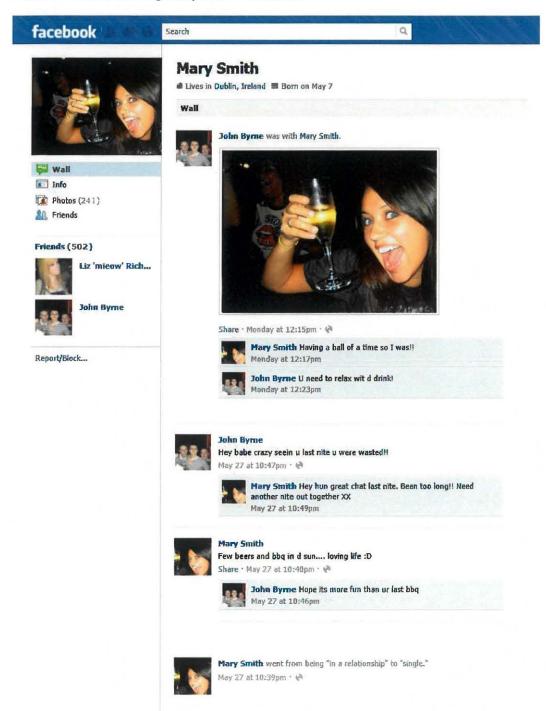
Jenna Parsons

$Appendix\ I-Romantic\ attraction\ scale\ used\ during\ experiment$									
How attractive do you find this person?									
1	2	3	4	5	6	7			
Not at al	1					Very			
How desirable would you find this person as a dating partner?									
1	2	3	4	5	6	7			
Not at all						Very			
How much would you actually like to date this person?									
1	2	3	4	5	6	7			
Not at all						Very			
How would you feel about yourself if you were dating this person?									
1	2	3	4	5	6	7			
Very bad		Very good							
How do you think your friends would feel about you if you were dating this person?									
1	2	3	4	5	6	7			
Disapprovin	g of me				Арр	roving of me			



Appendix K – Female profile depicting high number of friends with negative profile owner comments and positive friends' comments





Appendix M – Female profile depicting high number of friends with positive profile owner comments and positive friends' comments



Appendix N – Female profile depicting low number of friends with negative profile owner comments and negative friends' comments



Appendix O – Female profile depicting low number of friends with negative profile owner comments and positive friends' comments



Appendix P – Female profile depicting low number of friends with positive profile owner comments and negative friends' comments



Appendix Q – Female profile depicting low number of friends with positive owner comments and positive friends' comments



Appendix R – Male profile depicting low number of friends comments with positive owner comments and negative friends' comments



Appendix S – Male profile depicting high number of friends with negative profile owner comments and negative friends' comments



Appendix T — Male profile depicting high number of friends with positive profile owner comments and negative friends' comments



Appendix U- Male profile depicting low number of friends with negative profile owner comments and negative friends' comments



Appendix V – Male profile depicting high number of friends with negative profile owner comments and positive friends' comments



 $Appendix\ W-Male\ profile\ depicting\ high\ number\ of\ friends\ with\ positive\ profile\ owner\ comments\ and\ positive\ friends\ 'comments$



Appendix X – Male profile depicting low number of friends with negative profile owner comments and positive friends' comments



Appendix Y – Male profile depicting low number of friends with positive profile owner comments and positive friends' comments





Research study title: The effect of information provided in a social network profile on romantic attraction

Please read this information on the research topic and sign at the bottom of the next page if you consent to taking part. You are asked to participate in this study which is designed to aid our understanding about online social networks and romantic attraction. If you agree to participate you will be asked to complete a questionnaire.

Voluntary participation

Participation is voluntary and you are free to decline to respond to any questions if you so wish. At any time you may withdraw your participation from the study without consequence.

Potential Risks

There are no foreseen potential risks to taking part in this study.

Confidentiality

The data collected will be kept strictly confidential and will only be available to the researcher and project supervisors. Under no circumstances will your name or any identifying characteristics be included in the final report.

Data

Data is being collected as part of a dissertation for an M.Sc. in Psychology at IADT. Data collected from this experiment will be stored on a password protected computer, and will not contain participant names.

This study has been approved by the Technology and Psychology ethics committee. If you require further information on this research study please feel free to contact me at Jennaparsons@student.iadt.ie or my project supervisors

Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Consent

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time.

I agree to take part in this study.

I understand that data collected about me during this study will be anonymised before it is submitted for publication.

I agree to allow the data collected to be used for future research projects.

Appendix AA - The 44 item Big Five Inventory

The Big Five Inventory (BFI)

1

Disagree Strongly

Here are a number of characteristics that may or may not apply to you. For example, do you agree

that you are someone who likes to spend time with others? Please write a number next to each

statement to indicate the extent to which you agree or disagree with that statement.

Disagree a little	2						
Neither agree nor disagree	3						
Agree a little	4						
Agree Strongly	5						
	Someone Who						
1. Is talkat	ive						
2. Tends to find fault with others							
3. Does a thorough job							
4. Is depressed, blue							
5. Is origin	al, comes up with new ideas						
6. Is reserved							
7. Is helpful and unselfish with others							
8. Can be somewhat careless							
9. Is relaxed, handles stress well							
10. Is curious about many different things							
11. Is full of energy							
12. Starts quarrels with others							
13. Is a reliable worker							
14. Can be tense							
15. Is ingenious, a deep thinker							
16. Generates a lot of enthusiasm							
17. Has a forgiving nature							
	to be disorganized						
19. Worrie							
	active imagination						
21. Tends 1							
	rally trusting						
23. Tends t							
24. Is emotionally stable, not easily upset							
25. Is inver							
	assertive personality						
27. Can be cold and aloof							

28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited
32. Is considerate and kind to almost everyone
33. Does things efficiently
34. Remains calm in tense situations
35. Prefers work that is routine
36. Is outgoing, sociable
37. Is sometimes rude to others
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas
41. Has few artistic interests
42. Likes to cooperate with others
43. Is easily distracted
44. Is sophisticated in art, music, or literature

 $\label{eq:appendix BB-Questionnaire} \textit{Appendix BB-Questionnaire to determine what elements of Facebook is believed to facilitate romantic relationships}$

Does Facebook facilitate romantic relationships?

Photographs

Please indicate on the scale from 1 - 10 how much or how little you think these elements of Facebook facilitate romantic relationships?

'Activities and Interests' sections Leaving comments on the Facebook 'Timeline' Chat function Status updates Commenting on a status update The Newsfeed Checking in

Playing Games

1	2	3	4	5	6	7	8	9	10		
Games Invitations											
1	2	3	4	5	6	7	8	9	10		
Sharing Relationship status											
1	2	3	4	5	6	7	8 .	9	10		
Sharing "Interested in"											
1	2	3	4	5	6	7	8	9	10		
Friend suggestions											
1	2	3	4	5	6	7	8	9	10		
'People you may know' tool											
1	2	3	4	5	6	7	8	9	10		
The ability to join Facebook Groups											
1	2	3	4	5	6	7	8	9	10		

Appendix CC - Debrief form used in Study Three

Debrief form

Thank you for taking part in this study. During the experiment you were requested to rate how much or how little different elements of Facebook facilitate romantic attraction. You were also requested to complete a personality scale. The purpose of this questionnaire was to examine if Facebook facilitates romantic attraction and determine if personality type has an influence on peoples opinion of how Facebook facilitates romantic relationships. Your opinions will provide useful information which will further the understanding of development of romantic relationships on Facebook.

I would like to remind you that you have the right to withdraw your data from this study at any time. The data that has been collected will be kept strictly confidential; under no circumstances will your name or any identifying characteristics be included in the final report.

If you have any questions regarding this study, please feel free to ask the researcher at this time or contact at a later date on Jennaparsons@student.iadt.ie or the researcher's supervisors at Grainne.Kirwan@iadt.ie or Andrew.Power@iadt.ie

Thanks again for your participation.
Jenna Parsons