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Facebook Addiction and Its Relationship with Narcissism, Self-Esteem, and Perfectionism in
Lebanese Adults

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FACEBOOK ADDICTION AND ITS RELATIONSHIP WITH NARCISSISM, SELF-
ESTEEM, AND PERFECTIONISM IN LEBANESE ADULTS

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DEDICATION

I would like to dedicate this thesis to my mother and close friend who gave me the most support throughout the process; thank you for being there!

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Table of Content

List of tables	vii
Abstract	viii
Chapters:	
1. Introduction	1
2. Literature Review	11
3. Methods.....	26
Participants.....	26
Materials.....	27
Procedure.....	31
4. Results.....	32
Reliability Testing.....	32
Hypothesis Testing.....	33
Additional Analysis.....	35
5. Discussion.....	39
Discussion of Findings.....	39
Clinical Implications.....	43
Limitations.....	44
References	45
Appendices	50
A. Title Page.....	50
B. Demographics.....	51
C. The Facebook Use Survey.....	52
D. Bergen Facebook Addiction Scale.....	54
E. The Narcissistic Personality Inventory.....	55
F. Rosenberg Self-Esteem Scale.....	58
G. The Perfectionism Inventory.....	59

List of Tables

Table 1: Cronbach's Alpha for the BFAS, Rosenberg Self-Esteem Scale, NPI-40 and Perfectionism Inventory	32
Table 2: Correlations between BFAS, NPI, RSE, PI, PI_SEP and PI_CPscores.....	33
Table 3: Gender Differences in Correlations.....	34
Table 4: Regression Analysis Model Summary	36
Table 5: Regression Analysis Coefficients.....	36
Table 6: ANOVA.....	37
Table 7: Correlations between Total NPI Scores, Status Updates, Posting Photos, Tagging Photos, Tagging Videos, Number of Friends, Likes, and Comments.	38

Abstract

The current study examined the relationship between Facebook addiction, narcissism, self-esteem, and perfectionism in Lebanese adults. The sample consisted of 138 participants who answered a survey that consisted of the following scales: a Facebook-Use Survey, The Bergen Facebook Addiction Scale, The Narcissistic Personality Inventory (NPI-40), The Rosenberg Self-Esteem Scale, and The Perfectionism Inventory. Results of the study showed a nonexistent relationship between narcissism and Facebook addiction; however among female participants there existed a significant positive correlation between narcissism and Facebook addiction. This positive relation goes in line with previous reviews, and it is possible that the gender difference is due to the larger amount of female participants than male participants. Results also showed a negative correlation between self-esteem and Facebook addiction, which was slightly stronger among the male participants. This also goes in line with previous studies. Finally, results showed no significant relationship between perfectionism as a whole and Facebook addiction, but there was a negative correlation between conscientious perfectionism and Facebook addiction. Perfectionism and Facebook addiction is a relatively new field; therefore, more extensive research is needed to understand the relation between both variables.

Facebook Addiction and Its Relationship with Narcissism, Self-Esteem, and Perfectionism in Lebanese Adults

Social-networking has become the new trend in our days; be it for communication, marketing, or simply entertainment, social-networking is a growing phenomenon that has changed the way we connect to and explore various cultures, the way we stay in touch with friends and family, and the way we are exposed to events and news worldwide. A vast number of people now virtually exist on the web; from young, middle-school aged adolescents to older, working adults; everyone has an online profile that can be globally accessed by just a click of a button. Those interested in photography are now able to edit and share their photos on sites such as Instagram and Flickr. Bloggers can now share their posts through Twitter and Tumblr. For those searching for a job, or simply interested in expanding their business connections, LinkedIn is the place where their entire occupational life can be summarized and made available for worldwide viewers. For those into music, SoundCloud is the answer to sharing pieces of songs they have created or simply love. Finally, for those who prefer a site that encompasses photos, videos, blogs, interests, music, movies, games, among other options, Facebook is the answer, which is the focus of this study.

The list of social networking sites (SNS) goes on and on, with new sites being created as more time goes by; and with the introduction of smart phones, SNS sites are now given a chance to take their exposure to the next level. People no longer have to wait until they have access to a computer; developers have created applications that allow people to access these sites on their phones; now they can carry around their virtual profiles everywhere they go. Facebook has been considered to be the most widely used SNS (Andreassen, Torsheim,

Brunborg & Pallesen, 2012). It was launched on the 4th of February 2004 by Mark Zuckerberg and other co-founders ("Facebook newsroom timeline," 2013). As of June 30, 2013, Facebook has 5,299 employees, 699 million daily active users, and 1.15 billion monthly active users, with 80% of these active users coming from outside the United States and Canada ("Facebook newsroom", 2013). Active users have been defined as people who, in the past 30 days, have logged on to Facebook and taken action using one of its features, such as liking or commenting (Brookson, 2013).

With these large numbers at hand, it comes as no surprise when people say that the world has become a smaller place. Still, taking into consideration all that has been said, not everyone is as open to applications such as Facebook. Some might focus more on some of its aspects while neglecting to use the other features; others might choose to stay away from social networking as a whole. So what factors play a role in the use of Facebook and what makes some of us "addicted" to such a site? Over the years many studies have been conducted in order to find relationships between certain personality factors and the use of social networking – it has been shown that there exists a relationship between narcissism and social networking (Pettijohn II, LaPiene, Pettijohn & Horting, 2012). Keeping in mind that there is a high relation between narcissism and self-esteem, literature has also shed light on the relationship between self-esteem and social networking (Ayas & Horzum, 2013).

Perfectionism, on the other hand, has not been highly researched in the field of social media use. There exists, however, a relationship between perfectionism and self-esteem (Lehmann & Konstam, 2011), so can this relationship also affect the use of social media? The following paragraphs provide a rationale for studying the relationship between the following

independent variables: narcissism, self-esteem, and perfectionism and the dependent variable, Facebook addiction.

Background of the Study

Internet/Facebook Addiction

Over the years, much research has been conducted on all sorts of behavioral addictions, ranging from workoholism to internet addiction (Andreassen, Torsheim, Brunborg & Pallesen, 2012). Addiction has been defined using six main characteristics: 1) Saliency – the activity takes over one’s mood and behavior. 2) Mood Modification – the activity is able to either positively or negatively affect one’s mood. 3) Tolerance – one must increasingly engage themselves in the same activity for it to have the same effect. 4) Withdrawal – the presence of negative feelings if the activity is no longer available. 5) Conflict – the activity begins to interfere with social functioning. 6) Relapse – the tendency to go back to old habits after being in control for a while (Andreassen, Torsheim, Brunborg & Pallesen, 2012).

According to Andreassen et al. (2012), internet addiction could be classified into three categories: gaming, sexual pre-occupation, and communication. Internet gaming includes a wide variety of games that allow you to play, online, with other players worldwide. In 2012, over one billion people were playing online games, the most popular being Massively Multiplayer Online Games (MMO) and Massively Multiplayer Online Role-Playing Games (MMORPG). MMOs offer users the chance to play online with many different players, with a wide variation in game content and player experience. MMORPGs, the preferred choice of online gaming, also includes many players all playing at the same time, but with these games each player creates an avatar of himself through which the game will be played (Kuss, 2013). Online sexual pre-occupation involves a tendency to surf the web for pornography and other

forms of sexual expression that are easily accessible online. Chat rooms and webcams are now being used to share personal sexual content, and many governments have expressed their concern regarding a link between these online sexual interactions and real-life sexual abuse (Stern & Handel, 2001).

Finally, communication, which is the emphasis of this study, involves all sorts of emailing and texting carried out in chat rooms, applications and social networking sites. Recently, the most common form of emailing and texting is taking place in SNSs such as Facebook (Andreassen, Torsheim, Brunborg & Pallesen, 2012). Another finding from a study conducted by Kesici & Sahinas, (as cited in Andreassen et al,2012), stated that students who were considered to be addicted to the internet used the service mostly for social reasons as opposed to non-addicted students. With that said, not much research has been conducted regarding Facebook addiction as opposed to internet addiction. So what factors play a role in fueling our tendency to be addicted to Facebook?

Narcissism and SNS/Facebook Addiction

Narcissism can be defined as “a pervasive pattern of grandiosity, need for admiration, and an exaggerated sense of self-importance” (Mehdizadeh, 2010, p.358). Narcissists are self-absorbed, and their actions are mainly fueled by this self-absorption. According to the DSM-IV the definition of narcissism refers to those that are characterized by their “lack of empathy...emotional coldness and lack of reciprocal interest”. Narcissism, however, can be categorized into 2 types; the grandiose type and the vulnerable type (Farber, 2012). Grandiose narcissists have a tendency to use others for their own benefit, therefore characteristics such as entitlement, exploitativeness and arrogance can be used to describe them. Vulnerable

narcissists, on the other hand, can be described as those who would go out of their way to satisfy other people in order to gain their approval; their need to be approved and validated by others is what characterizes them (Farber, 2012).

Taking into consideration these traits, it is not unforeseen that social media can now serve as a platform that feeds these narcissistic traits in people. According to Mehdizadeh (2010), social networking sites such as Facebook offer narcissists a chance to develop shallow relationships with hundreds of people, have emotionless communication and utmost control over self-presentation. Furthermore, Mehdizadeh (2010) confirms this idea by stating that narcissists were more actively engaged in social networking where their main focus was on features that helped in self-promotion. These notions have been shown in the existence of a positive correlation between narcissism and the number of Facebook friends. Moreover, the self-esteem of a narcissist is heightened not by the quality of friends on their Facebook profile, but rather the quantity (Pettijohn II, LaPiene, Pettijohn & Horting, 2012).

Self-Esteem and SNS/Facebook Addiction

Literature has shown that internet addiction has a negative effect on one's social and personal life; signs of lowered self-esteem and a certain degree of social isolation have been found to be present in internet-addicted adolescents (Ayas & Horzum, 2013). Ayas and Horzum, in their article on the relation between depression, loneliness, self-esteem and internet addiction, conclude that low self-esteem generates an increase in internet use. To add to this concept, a study conducted on five hundred and seventeen students in Taiwan showed that low self-esteem is considered to be one of the risk factors of internet addiction. It is believed that this addiction comes out of a need to compensate, and once these students find a

positive experience online, an addiction begins to develop (Chih-Hung, Ju-Yu, Cheng-Fang, Huang-Chi & Ming-Jen, 2007). To be more specific, literature on this issue also shows that self-esteem is considered to be a predictive factor of SNS use (Wilson, Fornasier & White, 2010).

Contrary to the literature, however, Wilson et al.'s study on two hundred and one Australian university students yielded the opposite; there was no relation between self-esteem and SNS use/addiction. This was explained through the notion that self-esteem can either be increased or decreased depending on the feedback a person gets on his virtual profile; therefore people with both high and low self-esteem will use SNSs as a way to either maintain their high level of self-esteem through confirmatory comments from virtual people, or increase their self-esteem through these same comments (Wilson, Fornasier & White, 2010).

Perfectionism and SNS/Facebook Addiction

Perfectionism is defined as a personality trait characterized by a need for excellence, and a predisposition to be critically evaluative (Stoeber & Childs, 2010). Self-oriented perfectionism is the tendency to apply these characteristics to oneself, whereas socially prescribed perfectionism is the tendency to believe that others have set these high standards for oneself. Stoeber and Childs (2010) describe the socially prescribed perfectionist as that person who will be in a constant battle to meet these high standards as he is fearful of the evaluation and/or disapproval of others in case these standards were not achieved.

Socially prescribed perfectionism and perfectionistic self-presentation, which is defined as a form of perfectionistic expression through which a person attempts to appear impeccable by hiding their imperfections, have been shown to be correlated with negative

social feedback (Nepon, Flett, Hewitt & Molnar, 2011). To be more specific, a study conducted by Lehmann and Konstam (2011) showed that maladaptive perfectionism (characterized by fears of one's decisions and other's expectations of oneself) was significantly associated with problematic internet use, which was defined as internet or computer addiction. Not much research, however, has been done on perfectionism and the use of internet/social media. Keeping in mind the definition of a socially prescribed perfectionist and maladaptive perfectionism, one can assume that this high need for approval from others can affect the way they portray themselves online, therefore, more research in this field would hopefully shed more light on this topic.

Statement of the Problem

The aim of the current study was to identify the relationship between narcissism, self-esteem, perfectionism and the degree of Facebook addiction.

Parallel with research discussed above, regarding narcissism and Facebook addiction, this study predicted that there will be a positive relationship between both variables. Because a clear relationship exists between Facebook use intensity and narcissism, it could be predicted that when use intensity becomes addiction, the same relationship will still exist. In other words, there will be a

1. Positive correlation between narcissism and Facebook addiction.

In terms of the relationship between self-esteem and Facebook addiction and the different results found in literature pertaining to these two variables, that is, either a negative correlation or no correlation whatsoever, the author predicts that there will be a negative relationship between the two because of the following rationale: based on a personal

observation, many people are now turning to Facebook in order to receive validation from others by grabbing users' attention through the way they portray themselves. Our society is giving more attention to vanity, and those who cannot reach society's standards are turning to Facebook to either better portray themselves or to constantly look at others to learn from them (Chih-Hung, Ju-Yu, Cheng-Fang, Huang-Chi & Ming-Jen, 2007). Therefore, the author predicted that there will be a

2. Negative correlation between self-esteem and Facebook addiction.

Finally, the author predicted that a positive relationship will be found between maladaptive perfectionism and Facebook addiction since, as assumed and explained previously, this high need for approval from others can affect the way these addicted people portray themselves online. So, in other words, there will be a

3. Positive correlation between maladaptive perfectionism and Facebook addiction.

Implications/Significance of Research

Social networking has rapidly taken over our lives in a short amount of time. Ten years ago, this phenomenon did not exist and young people socially portrayed themselves differently and to a much more limited amount of people. Today, young adults share a big part of their lives on these social networking sites regardless of all the fears that are being discussed, especially regarding internet security and privacy. Lebanese adults and adolescents have become active social networking users and are now able to connect with anyone worldwide. So, since the internet is proving to be our future, why not shed more understanding on the factors that have allowed us to let the internet and social networking become such a big part of our lives? As a relatively newly researched field, more research

would help us achieve a clearer picture of this important social element that has affected the lives of so many of us. In situations where the presence of a Facebook addiction is doubted or confirmed, clinicians can have a more comprehensive understanding as to how to help manage this addiction or, in certain situations, predict it.

Overview of Methodology

Based on convenience sampling, 138 participants were gathered to complete the survey. These participants were Lebanese males and females, aged 18 years and above, presently living in Lebanon. The survey was distributed online through Facebook messages, and handed out on Haigazian University campus after getting approval from faculty members to do so. The survey contains basic demographic information such as age, gender, and occupation, followed by five questionnaires: the Facebook-Use self-generated Survey is used to assess each user's profile and Facebook activity; the Bergen Facebook Addiction Scale (BFAS) is used to measure Facebook addiction; the Narcissistic Personality Inventory (NPI-40) is used to measure the different sides of narcissism; the Rosenberg Self-Esteem Scale is used to measure global self-esteem; and finally the Perfectionism Inventory (PI) is used to measure the different aspects of perfectionism. Data analyses were conducted using SPSS 16.0.

Definition of Key Terms

Active Users: it is defined as those who, in the past 30 days, have logged on to Facebook and taken action using one of its features, such as liking or commenting (Brookson, 2013).

Social Networking Site (SNS): is defined as a web-based platform where users connect with other users electronically and are able to share their interaction with the public (Kittinger, Correia & Irons, 2012).

Facebook Addiction: is defined as the inability to control and limit the amount of time one spends on Facebook activities (Uysal, Satici & Akin, 2013).

Narcissism: it has been defined as a universal pattern of a heightened sense of grandness, need for approval, and pride. These characteristics have also been associated with positive self-views of one's intelligence, physical attractiveness, and authority (Mehdizadeh, 2010).

Self-Esteem: it has been defined as a positive or negative view/evaluation of one's self-worth or value (University of Maryland, 2014).

Perfectionism: it has been defined as a set of characteristics where one places high standards for oneself and becomes overly self-critical of their own performance, or others' (Broman-Fulks, Hill & Green, 2008).

CHAPTER 2

Literature Review

On February 4, 2004 Mark Zuckerberg launched the official webpage of Facebook and made it available to the public for use. Ever since then, Facebook's popularity has been growing, with more and more features being added. Student life has become almost absurd without the use of Facebook, with a lot of students basing their identities, social interaction, and network building on this relatively new tool (Debatin, Lovejoy, Horn & Hughes, 2009).

In fact, social networking sites (SNS) are offering users a chance in social interaction that seems impossible to achieve in the offline world, with more than nine hundred and fifty million active users on Facebook, making it the number one SNS worldwide (Stieger, Burger, Bohn & Voracek, 2013).

With any new phenomena, however, comes complications; in the case of Facebook, they include a threat to privacy and discrepancies between one's everyday social relationships in the real world and online social relationships (Debatin, Lovejoy, Horn & Hughes, 2009), among many others. These complications, for instance, are affecting romantic relationships in the offline world, and the evaluation of potential job candidates, in addition to an emergence of a new form of online stalking/harassment behavior; it is assumed that because of these complications a counter movement called virtual identity suicide emerged where people officially quit their online life (Stieger, Burger, Bohn & Voracek, 2013). This movement has gone as far as the development of applications such as The Suicide Machine (www.suicidemachine.org) or Seppukoo (www.seppukoo.com), which allow users to officially "ditch" their profile info making it inaccessible even through password change (Stieger, Burger, Bohn & Voracek, 2013).

With all that said, however, factors as to why people keep their online social life or get rid of it are still under study. Many have studied the relationship between certain personality factors and Facebook use; for example, a relationship between narcissism and social networking does exist (Pettijohn II, LaPiene, Pettijohn & Horting, 2012), in addition to a relationship between self-esteem and social networking (Ayas & Horzum, 2013), as well as one between perfectionism and internet use (Lehmann & Konstam, 2011). This study aimed at investigating the relationship between narcissism, self-esteem, perfectionism and Facebook addiction in the adult Lebanese population, in the hope of highlighting certain findings where research is still scarce.

Facebook Addiction

SNS addiction has been defined as a failure to control usage of SNS sites, such as Facebook, in a way that begins to interfere with one's personal daily functioning (Ryan, Chester, Reece & Xenos, 2014). Many psychologists and professionals in the field have recently become worried about the trend of misuse and overuse of social networking sites like Facebook, and the negative psychological, social, and physical effects they can have on users (Uysal, Satici & Akin, 2013); however, the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) did not include it as an addictive disorder despite the available growing literature, and its inclusion in the next DSM edition is contingent upon future research (Ryan, Chester, Reece & Xenos, 2014).

Three main psychological theories have been brought to light in order to explain the formation of SNS addiction (Griffiths, 2013). The cognitive behavioral model states that irregular use of SNS sites comes from maladaptive cognitions and is intensified by numerous

environmental factors, transforming it into an addictive behavior. The social skill model states that irregular use of SNS sites arises in people who lack self-presentational skills; online socialization is therefore preferred over real life interactions, transforming it into an addictive behavior. Finally, the socio-cognitive model states that irregular use of SNS sites arises from a mixture of positive outcomes, internet self-efficacy, and the inability to self-regulate internet use, transforming it into an addictive behavior (Griffiths, 2013). These three models state that addiction arises from individuals who are trying to escape stress, loneliness, and depression. Social networking offers positive rewards, which fuels their online engagement, which then produces real life problems such as real life relationships, work, and educational conflicts. These real life conflicts then produce more negative feelings, which push the user more towards online activity, leaving SNS addicts in a vicious cycle (Griffiths, 2013).

An article posted by PC Magazine (2012) stated that there could actually be a chemical explanation behind Facebook Addiction. A study conducted on 30 participants, aged 19-25 years old, measured physical reactions that were based on galvanic skin response, electroencephalogram, electromyography, and pupillary response, in addition to respiratory activity and blood pulse. Results showed that participants displayed physiological signs of positive affect while accessing their online profiles similar to those shown while playing an instrument or engaging in an artistic activity. All these biological signs that were tested showed that using Facebook can induce psychological and physiological reactions similar to those shown in any positive experience and heightened state of arousal (Horn, 2012).

A review of 9 studies measuring Facebook addiction showed that Facebook addiction was linked to psychological factors such as relationship dissatisfaction, depression, and anxiety (Ryan, Chester, Reece & Xenos, 2014), in addition to general happiness and

subjective vitality, which has been defined as a state of physical well-being characterized by a feeling of being alive and full of energy (Uysal, Satici & Akin, 2013). Facebook addiction was also linked to preference for online social interaction, mood alteration, poor self-regulation, negative outcomes, salience, loss of control, withdrawal, relapse, and tolerance (Ryan, Chester, Reece & Xenos, 2014).

Critics of the Facebook addiction field believe that it is not enough to speak about Facebook addiction; because Facebook offers many more features, it is important to develop a scale that measures social networking addiction in Facebook rather than Facebook addiction as a whole (Griffiths, 2012); to which came a response by Andreassen & Pallesen (2013) stating that although more research is needed, enough studies have shown that Facebook addiction is synonymous to social networking addiction.

One of these critics is Griffiths (2012), who published an article as a response to the development of the Bergen Facebook Addiction Scale (BFAS) by Andreassen et al. (2012). He starts off by saying that some researchers, because it is the most widely used tool for social networking, use the term “Facebook” as a synonym to social networking, where Facebook is only one tool out of many that falls under the SNS umbrella; therefore, researchers must be more specific in their measurement of SNS versus Facebook addiction, using the BFAS solely for Facebook and not social networking as a whole. In addition, although Facebook started off as a means for social communication, its features have expanded into other options such as online gaming; therefore Facebook addiction is no longer synonymous to social networking addiction because of the many different features it now offers alongside social networking (Griffiths, 2012). This also comes as a direct criticism to the BFAS itself because it does not

differentiate between someone addicted to Facebook's online games as opposed to someone addicted to constantly socializing on Facebook (Griffiths, 2012).

Along came a response by Andreassen & Pallesen (2013) to Griffiths (2012), stating that although Facebook does differ somewhat from other networking sites, they all share the same concept and therefore items on the BFAS could also be applied to any social networking site, simply exchanging the name "Facebook" with any other social networking site name would be enough. In addition, with regard to the notion that Facebook now has many other features that do not allow it to solely fall under the social networking site, Andreassen & Pallesen's (2013) response was that Facebook's first and foremost core is social networking and the BFAS was created to specifically measure its social networking features, which is why the scale is a reliable and valid tool that could be used to assess social networking addiction. To further highlight this point, a review of literature on Facebook addiction showed that Facebook addicts mainly used Facebook for social interaction, passing time, entertainment, companionship, and communication (Ryan, Chester, Reece & Xenos, 2014).

SNS Addiction and Narcissism

Narcissism has been defined as an exaggerated set of grandiose characteristics, a need to be well-regarded, and a heightened sense of self-value (Mehdizadeh, 2010). Narcissists view themselves as being highly intelligent, attractive, and an icon of authority. Social relationships for a narcissist are described as being superficial and empty, and only last for a short time, shifting based on when an opportunity for public glory presents itself. These relationships are merely used to serve the narcissistic characteristics; relationships are not maintained for their warmth or intimacy. Instead, relationships are used as a means to portray

themselves as popular and successful, and romantic partners are chosen based on levels of attractiveness and social status (Mehdizadeh, 2010).

SNSs have been described as a platform that offer narcissists both an opportunity and an audience to present themselves in the best and most controlled manner, especially since narcissism is linked to features of self-presentation that include frequency of status updates, or the quantity of self-promoting content presented (Kapidzic, 2013). Pettijohn et al. (2012) conducted a study on 200 undergraduate students from Ohio and South Carolina to investigate the relationship between Facebook use and narcissism. Participants' age ranged between 18 and 40 years, with 65% of the sample being females and the other 35% males. Although results showed no relationship between Facebook intensity and narcissism, people higher on the narcissism scale reported having more Facebook friends than others. Narcissists reported using Facebook as a means to meet new people, and because friendship contingent self-esteem was negatively correlated to narcissism, this leads to the notion that people higher on the narcissism scale develop their self-esteem based on the quantity of friends they have rather than the quality of friendships (Pettijohn II, LaPiene, Pettijohn & Horting, 2012). Pettijohn et al. (2012) called for future research in order to see how narcissism relates to areas such as the content of profile pictures and how they are rated, in addition to status update frequency.

Their call for research on those specific Facebook features was answered when Kapidzic (2013) conducted a study on 288 students aged from 18 to 25 years. The aim of this study was to investigate the relationship between narcissism and Facebook profile picture selection. Results showed that even after controlling for the age, Facebook use, and self-esteem of participants, narcissism was shown to be a predictor of motivation to change profile pictures based on attractiveness, in addition to selection of pictures that best highlight the

user's personality (Kapidzic, 2013). These findings support previous notions that state that people high on the narcissism scale have a grandiose perception of themselves in addition to the need to be noticed and affirmed by others (Kapidzic, 2013). Furthermore, the study found that there was no relationship between narcissism and profile picture selection based on social ties; meaning participants that scored high on narcissism did not choose pictures that highlighted their relationships with family and friends. This also supports the idea that narcissistic people do not seek emotional relationships and simply consider others as an audience for themselves (Kapidzic, 2013).

In line with previous research, Mehdizadeh's (2010) study on the relationship between narcissism and self-esteem on Facebook yielded similar findings. The study was conducted on 100 Facebook users, 50 males and 50 females, aged between 18 and 25 years. Results showed a positive correlation between narcissism and the number of times Facebook was checked per day, in addition to the amount of time spent on Facebook each time the user logged in. There was also a positive correlation between narcissism and self-promotional content in the areas of profile pictures, tagged pictures, status updates, and notes section (Mehdizadeh, 2010).

Finally, Molly Seligman, a senior at San Francisco University High School, published a paper titled "Facebook: Friend or Faux?" in the *Journal of Infant, Child and Adolescent Psychotherapy*. Molly interviewed 20 of her peers, asking them both qualitative and quantitative questions about their use and value of Facebook. Facebook was described, by all participants, as a tool that brings out the narcissism in us; "Recognizing in turn that all our friends can see what we do feeds our sense of narcissism, and so we spend time creating the perfect profile, crafting witty statuses, and acquiring countless friends... We choose our statuses based on what will garner the most "likes" and tag people in statuses to demonstrate

our deep connections with a select few to a common many.” (Seligman, 2011, p.418). It should not go unstated, however, that Facebook has its advantages, and in order to benefit from these advantages, one must find a healthy balance between the online and offline world (Seligman, 2011).

SNS Addiction and Self-Esteem

Self-esteem, defined as an overall evaluation of one’s self-worth, can be divided into implicit and explicit self-esteem. What differentiates between both is how conscious the evaluation is; whereas implicit self-esteem is a more automatic and unconscious process, explicit self-esteem happens on a more conscious level where more reflection and evaluation is actively taking place (Mehdizadeh, 2010). Although the general idea is that high self-esteem is the most favorable, it must be noted that not all high self-esteem leads to positive behavior; high self-esteem can also lead to maladaptive behaviors, bringing into light another distinction between secure high self-esteem and defensive high self-esteem (Stieger & Burger, 2010). In addition to all this, people can possess different levels of implicit and explicit self-esteem at the same time, leading to the categorization of self-esteem into three main groups: 1) secure self-esteem is when individuals have high levels of both implicit and explicit self-esteem, 2) damaged self-esteem is when individuals have high implicit but low explicit self-esteem; these individuals develop clinical disorders such as depression and bulimia. Finally 3) defensive self-esteem is when individuals have low implicit and high explicit self-esteem; these individuals react more defensively to social feedback and have higher levels of narcissism, anger, and nervousness (Stieger & Burger, 2010).

It is an important part of human nature to either maintain or increase one's "healthy" self-esteem, and this is done through presentations of one's self in a positive manner. SNSs such as Facebook now offer people an opportunity to positively present themselves to the public not only in the offline world, but also in the online one (Mehdizadeh, 2010).

Internet addiction has been found to be related to low explicit self-esteem, however its relation to implicit self-esteem still needs to be understood (Stieger & Burger, 2010). Stieger and Burger (2010) conducted the first study that investigates the relationship between internet addiction and implicit self-esteem. In their first study, they gathered a sample of 244 participants, with 57% being female. Among the factors measured were internet addiction, implicit self-esteem, and explicit self-esteem. Results showed that there was no correlation between implicit and explicit self-esteem, which goes in line with all other previous research. Furthermore, explicit self-esteem was shown to be the strongest predictor of internet addiction; internet addiction was highest in participants with damaged self-esteem (high implicit, low explicit self-esteem) than secure self-esteem (high implicit and explicit self-esteem), and participants with defensive self-esteem (low implicit, high explicit self-esteem) showed lower levels of addiction than those with secure self-esteem (Stieger & Burger, 2010).

To be more specific in the field of internet addiction, Mehdizadeh (2010) aimed to study the relationship between Facebook activity, narcissism, and self-esteem. Participants were divided into an equal number of male and female Facebook users, with a total of 100 users as the target sample. Results showed a negative correlation between self-esteem and the number of times Facebook was checked per day, in addition to a negative correlation between self-esteem and time spent on Facebook per session. When assessing the relationship between users' self-esteem and self-promotional content on Facebook, results showed a significant

negative correlation between self-esteem and self-promotion in the Main Photo section (Mehdizadeh, 2010).

Similarly, Chen & Lee (2013) found that recurrent Facebook use is associated with a greater level of distress via increased communication overload and reduced self-esteem. In their study on 594 university students, they hypothesized that a negative correlation exists between frequency of Facebook use and self-esteem, in addition to self-esteem being a mediating factor between Facebook use and psychological distress (Chen & Lee, 2013). Results showed that there exists a negative relationship between self-esteem and Facebook use; these results also added a new finding to the literature that further specified this relationship by showing that self-esteem acted as a mediating factor between communication overload and psychological distress, which was positively related to Facebook use. In other words, self-esteem played an important role in the relationship between Facebook use and psychological distress (Chen & Lee, 2013).

On the other hand, in their article on the effects of Facebook exposure on self-esteem, Gonzales and Hancock (2011) performed an experiment on 63 university students. These students were divided equally into 3 groups; 2 of these groups were control groups that were not exposed to any online profile, whereas participants in the experimental group were asked to access their online Facebook profiles. The Rosenberg Self-Esteem Scale was given to all participants; participants in the “Facebook stimulus” group were asked to answer the survey while being exposed to their Facebook profile; participants in the “objective self-awareness” group were asked to answer the survey while looking at themselves in a mirror; and finally participants in the “offline” control group were asked to just answer the survey without being exposed to anything. All participants were placed in the same room, one group at a time.

Results showed that the effects of selective self-presentation that is offered by the online world positively influences self-esteem levels, as opposed to objective self-awareness. In addition, participants who only viewed their own profile and did not look at other people's profiles reported higher levels of self-esteem than those who spent time viewing other profiles. Finally, participants who made changes to their profile during the experimental trial showed higher levels of self-esteem than those who did not make any changes. These findings suggested that the ability to select and modify how we portray ourselves to the world enhances our self-image as opposed to non-edited (mirror) images of our self. This study, in a way, goes against previous literature that stated that Facebook use is linked to low self-esteem (Gonzales & Hancock, 2011). Moreover, findings by Wilson et al. (2010), from their study on the different predictors of SNS use, showed that self-esteem had no influence on SNS use; all this information leaves more room for future research in order to clarify this relationship.

SNS Addiction and Perfectionism

Perfectionism has been defined as a set of personality traits characterized by striving for excellence and setting high standards for one's achievements, in addition to the tendency to be critical while evaluating one's behavior (Stoeber & Childs, 2010). More in depth research on perfectionism has shown that although the overall view of perfectionism is maladaptive, there exists both an ambiguous and a positive aspect to it (Stoeber & Childs, 2010).

Two approaches, therefore, have emerged in order to further define perfectionism; the dimensional approach states that perfectionism falls on a spectrum on which individuals are differentiated based on the degree of perfectionism present. The categorical approach

distinguishes between adaptive/positive and maladaptive/negative perfectionism; whereas negative perfectionists set unrealistic goals for themselves and are driven by fear of failure, positive perfectionists set realistic goals for themselves and are driven by positive reinforcement such as increased self-esteem and self-satisfaction (Broman-Fulks, Hill & Green, 2008). Although the majority of studies on perfectionism have adapted a categorical approach to perfectionism, the distinction between categorical and dimensional still needs further investigation because neither has been proven to be more accurate than the other (Broman-Fulks, Hill & Green, 2008). On this note, a study by Broman-Fulks et al. (2008) found that perfectionism is more accurately defined by the dimensional approach, and perfectionistic traits are more clearly seen as varying by degree rather than by category. This field, however, still needs further research.

Perfectionism has also been found to be defined using two main forms: 1) Socially prescribed perfectionism is defined as a set of traits where one believes that others have set high standards for oneself, and one must accomplish these standards in order to be recognized. It is characterized by a fear of losing acceptance from others and a concern over meeting these standards. This form of perfectionism has been shown to fall under maladaptive perfectionism, with positive correlations with low subjective well-being and psychological adjustment. 2) Self-oriented perfectionism is defined as a set of traits where struggling for perfection and being perfect are central. It involves setting extremely high standards for oneself, and is characterized by a strong drive, and a need, to be perfect. This form of perfectionism is still ambivalent regarding its categorization as adaptive or maladaptive perfectionism, with many studies showing its relation with both (Stoeber & Childs, 2010).

With regard to perfectionism and how it relates to internet use, Lehmann & Konstam (2011) conducted a study in order to investigate the relationship between perfectionism and problematic internet use. Problematic internet use (PIU), also known as internet addiction, involves the display of the following characteristics: 1) difficulty with everyday commitments such as school and home, 2) increased internet use with less enjoyment 3) agitation, irritability, and concern when not online, 4) the inability to manage frequency of internet use, and finally 5) continued use of the internet regardless of any social, physical, or psychological effects this continued use might have on oneself (Lehmann & Konstam, 2011). Lehmann & Konstam (2011) hypothesized that participants showing higher levels of maladaptive perfectionism would show greater levels of behaviors related PIU. A total of 486 adults, with an age range between 25 and 30 years, were gathered for the study. Results confirmed their hypothesis, showing a significant positive correlation between maladaptive perfectionism and PIU, and no relation between adaptive perfectionism and PIU. Studies have shown that children as young as 11 years old are displaying traits of maladaptive perfectionism, and young teenagers and adults are showing high levels of PIU, therefore, the relationship between maladaptive perfectionism and PIU must be further investigated (Lehmann & Konstam, 2011).

On a more specific note regarding internet addiction, the direct relationship between perfectionism and SNS use has not been studied yet, however, the relationship between factors correlated with SNS use and perfectionism have been studied; these factors include explicit self-esteem (Zeigler-Hill & Terry, 2007), and characteristics correlated to narcissism such as validation seeking, and rejection sensitivity (Flett, Besser, Hewitt, 2014).

As previously mentioned, literature has shed light on a relationship between internet addiction and explicit self-esteem (Stieger & Burger, 2010); in addition, studies have also found a negative correlation between explicit self-esteem and maladaptive perfectionism, and a positive correlation between explicit self-esteem and adaptive perfectionism (Zeigler-Hill & Terry, 2007). To further study this notion, Zeigler-Hill & Terry (2007) gathered 563 participants in order to examine the relationship between explicit self-esteem and perfectionism while using implicit self-esteem as a moderating factor. Consistent with research, results found a negative correlation between explicit self-esteem and maladaptive perfectionism, and no correlation between adaptive and maladaptive perfectionism to implicit self-esteem; therefore, individuals displaying discrepant low self-esteem, also known as damaged self-esteem (low explicit and high implicit self-esteem) showed highest levels of maladaptive perfectionism (Zeigler-Hill & Terry, 2007). Similarly, internet addiction was shown to be the highest among participants showing high levels of damaged self-esteem (Stieger & Burger, 2010), so could this relation with damaged self-esteem influence a relation between maladaptive perfectionism and internet addiction?

On a different note, positive correlations have been found between socially prescribed perfectionism, perfectionistic self-promotion, the non-display of imperfections, and validation seeking (Flett, Besser & Hewitt, 2014). In their study of the relationship between perfectionism, validation seeking, and rejection sensitivity, Flett et al. (2014) found that socially prescribed perfectionism and perfectionistic self-presentation were linked with heightened levels of rejection sensitivity, and all of the perfectionism measures were associated with validation seeking. Similarly, in their study of the relation between perfectionism, social feedback, rumination, depression, and social anxiety, Nepon et al. (2011)

found that socially prescribed perfectionism and perfectionistic self-presentation were correlated with negative social feedback and rumination after certain actions, such as being embarrassed or ill-treated, took place. How could all these factors related to perfectionism affect the use of Facebook, and could it lead to a certain degree of addiction?

The present study aims to investigate the relationship between the degree of Facebook addiction, narcissism, self-esteem, and perfectionism in Lebanese adults. Parallel with research discussed above, it is predicted that there will be a positive relationship between narcissism and Facebook addiction. In addition, the presence of a negative correlation between self-esteem and Facebook addiction is hypothesized, as well as a positive correlation between maladaptive perfectionism and Facebook addiction.

CHAPTER 3

Method

Participants

A sample of 145 adults was gathered. Due to missing information, 7 questionnaires were removed; therefore, the final sample consisted of 138 Lebanese adults, all residing in Lebanon and fluent English speakers to ensure proper understanding of the questionnaire. The age range of the participants was between 18 and 52 years old, with a mean (M) of 23.43 and standard deviation (SD) of 5.7. There were 88 females (63.8%) and 50 males (36.2%), with occupations ranging from currently enrolled university students (49.3%) to various other professions (50.7%). Because of the almost-equal number of students and employed participants, occupation was divided into two categories; students were labeled as 1 and employed were labeled as 2.

All participants were Facebook users; 59.4% of participants had a Facebook account for 6-8 years, 45.7% spent an average of 0-1 hours per day on Facebook, 47.1% logged on to Facebook 1-3 times per day, 50.7% had less than 200 tagged photos, 65.2% posted 1-10 albums on their page, and 31.9% had more than 600 friends on their friends list. The highest reported Facebook activity was “Viewing Photos” ($M=3.7$; $SD=1.03$), followed by “Commenting” ($M=3.2$; $SD=0.9$), and the lowest reported Facebook activity was “Playing Games” ($M=1.5$; $SD=0.9$), followed by “RSVPing to Events” ($M=1.74$; $SD=0.99$).

In order to gather the participants, convenience sampling was used because of its easy and fast accessibility to subjects who are ready to respond to the questionnaire. Messages were sent through Facebook to 200 Facebook users, out of which approximately 70 replied. The rest of the participants were gathered from Haigazian University campus and random

locations such as coffee shops, offices, and the homes of friends and family. Consent was given orally for participants who answered the questionnaire by paper and pen, and participants who chose to send back the questionnaire through Facebook gave consent by doing so. Confidentiality was made clear in the description.

Materials

The questionnaire starts off with a title page that included a brief description of the study and contact information (see Appendix A). Demographic information included age, gender, and occupation, and whether or not the participant has a Facebook account (see Appendix B); this was followed by a description of the participant's Facebook profile and Facebook use, the Bergen Facebook Addiction Scale, the Narcissistic Personality Inventory, the Rosenberg Self-Esteem Scale, and finally the Perfectionism Inventory. The questionnaire was eight pages long, and needed an average of 15-20 minutes to complete.

Facebook-Use Survey

This survey was taken from the Junco Facebook Survey (2012), with a few modifications that were made to it. Sample items include: "On average, how much time do you spend on Facebook per day?" and "How many friends do you have on Facebook?" It also includes a section that assesses, using a 5-point Likert scale that ranges from never (1) to very frequently (5), how regularly features of Facebook are used. Sample items include: "Playing games (FarmVille, MafiaWars, etc.)" and "Posting Photos". In addition, a measure of the significance of "Likes" and "Comments" was also included using a 5-point Likert scale that ranges from highly insignificant (1) to highly significant (5). No reliability measures were

generated because this scale is only used to assess each person's personal Facebook experience (see Appendix C).

The Bergen Facebook Addiction Scale

The Bergen Facebook Addiction Scale (BFAS) was used. It contains 18 questions that relate to the 6 main characteristics of addiction, with three items that target each characteristic: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Participants answer using a 5-point Likert scale that ranges from very rarely (1) to very often (5). Sample items of each characteristic include: salience - "How often in the last year have you spent a lot of time thinking about Facebook or planned use of Facebook?", mood modification - "How often in the last year have you used Facebook in order to forget about personal problems?", tolerance - "How often in the last year have you felt an urge to use Facebook more and more?", relapse - "How often in the last year have you tried to cut down on the use of Facebook without success?", withdrawal - "How often in the last year have you become restless or troubled if you have been prohibited from using Facebook?", and conflict - "How often in the last year have you used Facebook so much that it has had a negative impact on your job/studies?". The higher the total score, the higher the degree of addiction. Internal consistency of the scale has been shown to be good, with a Cronbach's alpha of .83 (Andreassen, Torsheim, Brunborg & Pallesen, 2012) (see Appendix D).

The Narcissistic Personality Inventory

The Narcissistic Personality Inventory (NPI-40) was used. It contains a list of 40 items that relate to the 7 subscales of narcissism: authority, self-sufficiency, superiority,

exhibitionism, exploitativeness, vanity and entitlement. Each item contains 2 statements, a narcissistic and non-narcissistic response; participants mark the statement that best suits their personality. Sample items of each subscale include: authority - “A. I have a natural talent for influencing people” versus “B. I am not good at influencing people”, self-sufficiency - “A. If I feel competent I am willing to take responsibility for making decisions” versus “B. I like to take responsibility for making decisions”, superiority - “A. When people compliment me I sometimes get embarrassed” versus “B. I know that I am good because everybody keeps telling me so”, exhibitionism - “Modesty doesn't become me” versus “B. I am essentially a modest person”, exploitativeness - “A.I can usually talk my way out of anything” versus “B. I try to accept the consequences of my behavior”, vanity - “I don't particularly like to show off my body” versus “B. I like to show off my body”, and entitlement - “A. I insist upon getting the respect that is due me” versus “B. I usually get the respect that I deserve”. The higher the total score, the higher the degree of narcissism. Internal consistency for the whole scale has been shown to be good ($\alpha = .83$); internal consistency for the seven subscales have also been shown to be fair: authority ($\alpha = .73$), self-sufficiency ($\alpha = .50$), superiority ($\alpha = .54$), exhibitionism ($\alpha = .63$), exploitativeness ($\alpha = .52$), vanity ($\alpha = .64$), and entitlement ($\alpha = .50$) (Raskin & Terry, 1988) (see Appendix E).

The Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale was used. It contains 10 questions that relate to how one feels about oneself. The questions were answered using a 4-point Likert scale that ranges from strongly agree to strongly disagree. Sample items include: “I feel that I have a number of good qualities” and “I feel I do not have much to be proud of”. The higher the total score, the

higher the self-esteem. Internal consistency of the scale has been shown to be good, with a Cronbach's alpha ranging from .77 to .88 (Rosenberg, 1965) (see Appendix F).

The Perfectionism Inventory

The Perfectionism Inventory (PI) was used. It contains 59 questions that relate to the 8 different subscales of perfectionism; concern over mistakes, high standards for others, need for approval, organization, perceived parental pressure, planfulness, rumination, and striving for excellence. The participants answered using a 5-point Likert scale that ranges from strongly disagree (1) to strongly agree (5). Sample items of each subscale include: concern over mistakes - "If I make mistakes, people might think less of me", high standards for others - "I usually let people know when their work isn't up to my standards", need for approval - "I am over-sensitive to the comments of others", organization - "I am well-organized", perceived parental pressure - "I've always felt pressure from my parent(s) to be the best", planfulness - "I find myself planning many of my decisions", rumination - "If I make a mistake, my whole day is ruined", and striving for excellence - "I can't stand to do something halfway". The higher the total score, the higher the degree of perfectionism. Internal consistency for the whole scale has been shown to be very good ($\alpha = .83$); internal consistency for the eight subscales was also good: concern over mistakes ($\alpha = .86$), high standards for other ($\alpha = .83$), need for approval ($\alpha = .87$), organization ($\alpha = .91$), perceived parental pressure ($\alpha = .88$), planfulness ($\alpha = .86$), rumination ($\alpha = .87$), and striving for excellence ($\alpha = .85$) (Hill, Huelsman, Furr, Kibler, Vicente & Kennedy, 2004) (see Appendix G).

Procedure

First, a pilot study was conducted on a sample of 20 participants in order to confirm the reliability of scales. Once the pilot study was complete, minor changes were made to the questionnaire in general; these changes included the addition of two items: “How long have you had Facebook?” and “Rate how valuable *likes* and *comments* are to you on Facebook”, the general lay out form of the questionnaire also changed, starting out with information on Facebook use before moving to the other scales, and finally the omission of scale titles.

After changes were finalized, data collection began as of July 2014 and ended in November 2014. Data collection began by sending 200 messages to Facebook friends; the message included a description of the study, an emphasis on confidentiality, and an attached copy of the survey. Out of 200 Facebook friends, only 70 replied after constant reminders. Because the process of returning the questionnaire through Facebook was too slow and proved to return an insufficient number of participants, consent was achieved from Haigazian University faculty members to enter classes and take some of class time for students to answer the questionnaire. Hard copies were made and the questionnaire was given to students who agreed to fill it out; questionnaires were returned immediately upon completion and the author was present at all times in order to answer any questions. Similarly, family members, colleagues and people in random coffee shops were given hard copies and waited on to complete the questionnaire.

Data entry and analysis was done using SPSS 16.0.

CHAPTER 4

Results

Reliability Testing

In order to determine the internal consistency of each scale, Cronbach alpha was calculated. The table below presents a comparison between alpha coefficients from previous studies and alpha coefficients from the current study (See table 1).

Table 1

Cronbach's Alpha for the BFAS, NPI-40, RSE Scale, PI, and their subscales.

	Previous Cronbach's Alpha	Current Cronbach's Alpha
BFAS	.83	.94
NPI-40	.83	.78
Authority	.73	.62
Self-Sufficiency	.50	.39
Superiority	.54	.54
Exhibitionism	.63	.47
Exploitativeness	.52	.35
Vanity	.64	.47
Entitlement	.50	.27
RSE	.77 to .88	.79
PI	.83	.92
Concern Over Mistakes	.86	.74
High Standards for Others	.83	.78
Need for Approval	.87	.79
Organization	.91	.84
Perceived Parental Pressure	.88	.82
Planfulness	.86	.86
Rumination	.87	.72
Striving for Excellence	.85	.75

Subscales showing a coefficient $<.5$ were removed from further analyses; these included subscales only from the NPI-40: self-sufficiency, exhibitionism, entitlement, vanity, and exploitativeness.

Hypothesis Testing

Hypothesis 1: There is a positive correlation between narcissism and Facebook addiction.

Pearson's correlation was calculated between total narcissism scores and Facebook addiction scores. Results showed an insignificant correlation between narcissism and Facebook addiction ($r = 0.131, p = 0.127$) (see table 2). Therefore, Hypothesis 1 was not confirmed. Although not hypothesized, among female participants there existed a significant positive correlation between narcissism and Facebook addiction ($r = 0.202, p = 0.059$) (see table 3).

Table 2

Correlations between BFAS, NPI, RSE, and PI Total Scores, and PI_SEP and PI_CP scores

		TOTAL_NPI	TOTAL_RSE	TOTAL_PI	PI_SEP	PI_CP
TOTAL_BFAS	Pearson Correlation	.131	-0.194*	-.005	.133	-.161*
	Sig. (2-tailed)	.127	.023	.951	.120	.060
	N	138	138	138	138	138

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

Table 3

Gender Differences in Correlations between BFAS, NPI, RSE, and PI Total Scores, and PI_SEP and PI_CP scores

		TOTAL_NPI	TOTAL_RSE	TOTAL_PI	PI_SE	PI_CP
Females						
TOTAL_BFAS	Pearson Correlation	.202*	-.162	.017	.126	-.120
	Sig. (2-tailed)	.059	.131	.877	.242	.265
	N	88	88	88	88	88
Males						
TOTAL_BFAS	Pearson Correlation	.025	-.274*	-.094	.109	-.264*
	Sig. (2-tailed)	.866	.054	.518	.450	.064
	N	50	50	50	50	50

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

Hypothesis 2: There is a negative correlation between self-esteem and Facebook addiction.

Pearson's correlation was calculated between total self-esteem scores and Facebook addiction scores. Results showed a weak significant negative correlation between self-esteem and Facebook addiction with $r = -0.194$, $p = 0.023$ (see table 2). Therefore, hypothesis 2 was confirmed. Although not hypothesized, when comparing males and females, the male participants only showed a significant negative correlation between Facebook addiction and self-esteem ($r = -0.274$, $p = 0.054$) (see table 3)

Hypothesis 3: There is a positive correlation between maladaptive perfectionism and Facebook addiction.

Pearson's correlation was calculated between total perfectionism scores and Facebook addiction scores. Results showed no significant relationship between perfectionism as a whole and Facebook addiction ($r = -0.005, p = 0.951$) (see table 2). In addition, no gender differences were found. The self-evaluative perfectionism subscale (equivalent to maladaptive perfectionism) also showed no significant relationship with Facebook addiction ($r = 0.133, p = 0.120$) (see table 2) Therefore, Hypothesis 3 was not confirmed. A weak negative correlation was found, however, between conscientious perfectionism (can be both adaptive and maladaptive perfectionism) and Facebook addiction ($r = -0.161, p = 0.06$) (see table 2). Although not hypothesized, when comparing males and females, the male participants only showed a significant negative correlation between Facebook addiction and conscientious perfectionism with ($r = -0.264, p = 0.064$) (see table 3).

Additional Analysis

A regression analysis was conducted and results showed that age, gender, occupation, TOTAL_NPI, TOTAL_RSE, TOTAL_PI, and PI_CP accounted for 16.4% variance in TOTAL_BFAS ($R = 0.405, R Square = 0.164$). See table 4 for a model summary. The most significant predictors of BFAS are occupation ($B = 7.448, Sig = 0.012$), age ($B = -0.584, Sig = 0.027$), and PI_CP ($B = -1.8, Sig = 0.047$). NPI was on the border of significance and therefore can also be considered as a predicting factor, but to a slighter extent than the others ($B = 0.358, Sig = 0.057$). See table 5 for coefficients values. ANOVA shows that the

independent variables significantly predict variability in the dependent variable ($p < 0.005$).

See Table 6 for ANOVA results.

Table 4

Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405 ^a	.164	.115	11.653

Predictors: (Constant), TOTAL_NPI, TOTAL_PI, Occupation, Gender, TOTAL_RSE, Age, PI_CP

Table 5

Regression Analysis Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	36.441	10.084		3.614	.000
	Age	-.584	.260	-.274	-2.245	.027
	Gender	2.618	2.292	.101	1.142	.256
	Occupation	7.448	2.932	.298	2.540	.012
	PI_CP	-1.800	.897	-.336	-2.007	.047
	TOTAL_RSE	-.348	.304	-.120	-1.143	.255
	TOTAL_PI	.776	.498	.253	1.558	.122
	TOTAL_NPI	.358	.186	.180	1.922	.057

a. Dependent Variable: TOTAL_BFAS

Table 6ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3173.510	7	453.359	3.338	.003 ^a
	Residual	16160.222	119	135.800		
	Total	19333.732	126			

a. Predictors: (Constant), TOTAL_NPI, TOTAL_PI, Occupation, Gender, TOTAL_RSE, Age, PI_CP

b. Dependent Variable: TOTAL_BFAS

Additional analysis regarding the relationship between narcissism and the use of Facebook has shown positive Pearson's correlations between total narcissism scores and status updates ($r = 0.241$, $p = 0.004$), self-promoting content ($p < 0.05$), number of friends ($r = 0.192$, $p = 0.024$), and value of likes ($r = 0.240$, $p = 0.005$) and comments ($r = 0.231$, $p = 0.006$). Table 7 below shows a summary of these results.

Table 7

Correlations between Total NPI Scores, Status Updates, Posting Photos, Tagging Photos, Tagging Videos, Number of Friends, Likes, and Comments

		TOTAL_NPI
Number of Facebook Friends	Pearson Correlation	.192*
	Sig. (2-tailed)	.024
	N	138
Status Updates	Pearson Correlation	.241**
	Sig. (2-tailed)	.004
	N	138
Posting Photos	Pearson Correlation	.260**
	Sig. (2-tailed)	.002
	N	138
Tagging Photos	Pearson Correlation	.219**
	Sig. (2-tailed)	.010
	N	138
Tagging Videos	Pearson Correlation	.204*
	Sig. (2-tailed)	.016
	N	138
Likes	Pearson Correlation	.240**
	Sig. (2-tailed)	.005
	N	138
Comments	Pearson Correlation	.231**
	Sig. (2-tailed)	.006
	N	138

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

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

CHAPTER 5

Discussion

The present study sought to investigate the relationship between Facebook addiction, narcissism, self-esteem, and perfectionism. Results showed how each variable correlates with Facebook addiction: no relation between narcissism and Facebook addiction, a negative correlation between self-esteem and Facebook addiction, and a negative correlation between conscientious perfectionism and Facebook addiction. Additional analyses revealed how each variable correlates with specific uses of the various Facebook features.

Internal consistencies of all the scales used in this study were very good, with the exception of 5 out of 7 subscales in the NPI-40 that needed to be disregarded due to their Cronbach alpha being less than .5. These subscales, however, were not directly related to the study and so their exclusion had no effect. Total Cronbach alpha for NPI-40 as a whole was good and therefore not excluded from analyses.

Results of the current study found no relation between total narcissism scores and Facebook addiction scores for the sample as a whole. This was further shown in the lack of any relationship between narcissism, and the amount of time spent on Facebook, and the number of times Facebook is checked per day. The literature regarding these variables is still unclear; whereas some studies are showing a relationship between narcissism and Facebook use, others are not. In their study on the relationships between Facebook intensity, friendship contingent self-esteem, and personality in U.S. college students, Pettijohn et al. (2012) also found no existing relationship between Facebook use intensity and narcissism, whereas Mehdizadeh's (2010) study showed a positive correlation between these two variables in the form of the number of times Facebook was checked per day and the amount of time spent on

Facebook each time the user logged in. In the current study, this relationship existed in the form of a weak positive correlation among female participants only, creating a gender difference regarding narcissism and Facebook addiction. Previous literature regarding the correlation between these two variables was more focused on Facebook intensity rather than Facebook addiction. A distinction, therefore, is drawn between how intensely someone uses Facebook, and whether or not this person is addicted to Facebook. The Bergen Facebook Addiction Scale draws on the 6 main characteristics of addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse (Andreassen, Torsheim, Brunborg & Pallesen, 2012). Facebook intensity use is more inclined towards assessing emotional connection and frequency of Facebook use, in addition to assessing features such as number of friends (Pettijohn II, LaPiene, Pettijohn & Horting, 2012). It is possible therefore, that narcissism is related to Facebook intensity rather than Facebook addiction. This is found in the results from the additional analysis of the present data, which revealed similar findings to the ones of Pettijohn et al. (2012), among others, in the more specific areas of Facebook use. Although weak, there was a statistically significant positive correlation between levels of narcissism and number of Facebook friends, status updates, posting/tagging photos, tagging videos, in addition to the value placed on likes and comments. Pettijohn et al. (2012) also found that the narcissistic individuals reported having more Facebook friends than the less narcissistic people; for them it was considered a platform through which they could meet new people online. In her study on the relationship between narcissism and self-esteem on Facebook, Mehdizadeh (2010) also found a positive correlation between levels of narcissism and self-promotional content that includes status updates and photos section. All these findings feed back to the characteristics of a narcissist, who has been defined as someone with

a heightened sense of grandness, need for approval, and pride (Mehdizadeh, 2010). We can then conclude that the relationship between narcissism and Facebook is based on use/intensity rather than addiction.

In line with previous findings, the current study revealed a negative correlation between self-esteem and Facebook addiction, which was shown to be higher in males than in females. To be more specific, the Rosenberg Self-Esteem Scale is used to measure explicit self-esteem, which throughout literature has been known to be negatively correlated to internet addiction in general. In this study, explicit self-esteem has been shown to be negatively correlated with a more specific form of internet addiction, Facebook. Griffiths (2013) posed three different models in order to explain SNS addiction. In their own terms, all three models state that SNS addiction emerges from a need to escape negative emotions that emerge in our everyday lives. SNS platforms offer this escape and give people an opportunity to experience positive interaction, hence the emergence of an addiction (Griffiths, 2013). Among these negative emotions that are experienced in our everyday lives are the emotions that come with a lowered self-esteem; users with low self-esteem find a positive experience on Facebook through its many features that offer both interaction and social feedback, which explains the current findings.

In this study, maladaptive perfectionism is equivalent to the self-evaluative perfectionism subscale (PI_SEP) of the Perfectionism Inventory. The self-evaluative perfectionism subscale includes scores for concern over mistakes, need for approval, perceived parental pressure, and rumination. These subscales fall directly in line with the characteristics of a socially prescribed perfectionist, which includes the belief that others have set high standards for oneself, a fear of losing acceptance from others and a concern over

meeting these standards. This form of perfectionism has been shown to fall under maladaptive perfectionism (Stoeber & Childs, 2010). Interestingly, and contrary to previous findings, there existed no relationship between the self-evaluative perfectionism subscale, or maladaptive perfectionism, and Facebook addiction. There also was no relation between perfectionism as a whole and Facebook addiction. There was, however, a weak significant negative correlation between conscientious perfectionism (PI_CP) and Facebook addiction. Conscientious perfectionism includes the sum of the following subscales: high standards for others, organization, planfulness, and striving for excellence. All these subscales fit the definition of a self-oriented perfectionist, who is characterized by setting extremely high standards for oneself, a strong drive, and a need to be perfect. Studies have shown that this form of perfectionism can either be adaptive or maladaptive (Stoeber & Childs, 2010), which can lead to different interpretations of the results. Perfectionism and problematic internet use, or internet addiction, has been studied (Lehmann & Konstam, 2011); no studies have been done regarding perfectionism and SNS addiction. Results, therefore, can be explained by the notion that internet addiction and Facebook addiction are two very different fields. Although Facebook addiction can be considered as a subcategory of internet addiction, internet addiction as a whole has many other features that one can be addicted to. According to the results of this study and results found with internet addiction, perfectionism interacts more with the latter. The field of perfectionism as a whole is still unclear and more research is needed in order to determine whether perfectionism can be categorized into groups such as maladaptive and adaptive, or whether it should be measured on a spectrum based on severity; the distinction between categorical and dimensional still needs further investigation because

neither has been proven to be more accurate than the other (Broman-Fulks, Hill & Green, 2008).

Finally, the additional regressions analysis of the results of this study, not based on predicted hypotheses, showed that the most significant predictors of Facebook addiction are occupation, age, which was negatively correlated to Facebook addiction, and conscientious perfectionism. Self-evaluative perfectionism was excluded from this analysis because it yielded the same results as total perfectionism, and both were insignificant. Narcissism was on the border of being significant, and therefore can still be considered as a predictor of Facebook addiction. Future research on this topic could include other factors, such as personality and social factors, which could have a greater influence on Facebook addiction.

Clinical Implications

Social networking has rapidly taken over our lives in a short amount of time. Eleven years ago, this phenomenon did not exist and we socially portrayed ourselves differently and to a much more limited amount of people. Today, young adults share a big part of their lives on these social networking sites regardless of all the fears that are being discussed, especially regarding internet security and privacy. Lebanese adults and adolescents have become active social networking users and are now able to connect with anyone worldwide.

The current study has shown that a sample from the Lebanese adults population have different levels of self-esteem, narcissism, and perfectionism coming into play with their use and addiction levels to Facebook. For practicing therapists that encounter patients with either one of the variables studied, it would be a crucial part of therapy to see if Facebook, or any

other SNS platform, is acting in any way to maintain unhealthy social patterns. More specifically, factors such as low self-esteem have been found to be directly related to Facebook addiction, and therefore must be taken into account. Practitioners must also be aware to draw the distinction between Facebook addiction and Facebook use intensity. Finally, further study of this field can lead to prevention strategies and awareness in the young Lebanese youth regarding pitfalls and consequences of unhealthy SNS use.

As a relatively newly researched field, more research would help achieve a clearer picture of this important social element that has affected the lives of so many.

Limitations

The study was based on convenient sampling, and therefore the results cannot be generalized to the Lebanese population. In addition, the mean age of the sample was relatively young; a more diverse age range would have been more helpful to achieve a clearer understanding of how age might play a role in the interaction among the variables being studied.

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Appendix A**Title Page**

I am an MA student at Haigazian University doing my thesis on how different attitudes and personalities relate to the use of Facebook. Below is a survey with different questionnaires that measures these attitudes and personalities. I would appreciate it if you could take 15 minutes of your time to fill them out. Please do not skip any items and answer with full honesty. The survey is anonymous so I will not know which survey belongs to whom. Once you have filled them out, send it back to me at elkhoury.hala@gmail.com.

Once my thesis has been completed and defended, if anyone would like to know the results, or for any further questions please do not hesitate to ask.

Your time is highly appreciated!

Appendix B
Demographics

Age: _____

Gender: **F** **M**

Occupation: _____

Do you have a Facebook account? **Y** **N**

If yes, go on to the next questionnaires...

Appendix C

The Facebook Use Survey

Answer the following questions by choosing the option that fits you best.

1. How long have you had Facebook?
 - a. 0-2 years
 - b. 3-5 years
 - c. 6-8 years
 - d. 9-10 years
2. On average, how much time do you spend on Facebook per day?
 - a. 0-1 hours
 - b. 1-2 hours
 - c. 2-3 hours
 - d. More than 3 hours
3. On average, how many times per day do you log on to Facebook?
 - a. 1-3 times
 - b. 3-5 times
 - c. 5-7 times
 - d. More than 7 times
4. How many photos are you tagged in on Facebook?
 - a. Less than 200
 - b. 200-700
 - c. 700-1200
 - d. More than 1200
5. How many albums have you uploaded on to Facebook?
 - a. None
 - b. 1-10
 - c. 10-20
 - d. More than 20

6. How many friends do you have on Facebook?

- a. Less than 200
- b. 200-400
- c. 400-600
- d. More than 600

Using the given scale, rate how frequently you use the following Facebook features.

	1 Never	2 Rarely	3 Sometimes	4 Somewhat Frequently	5 Very Frequently
Playing games (FarmVille, MafiaWars, etc.)	1	2	3	4	5
Posting status updates	1	2	3	4	5
Sharing links	1	2	3	4	5
Sending private messages	1	2	3	4	5
Commenting (on statuses, photos, wall posts...)	1	2	3	4	5
Chatting on Facebook Chat	1	2	3	4	5
Checking to see what someone is up to	1	2	3	4	5
Creating or RSVPing to events	1	2	3	4	5
Posting photos	1	2	3	4	5
Tagging photos	1	2	3	4	5
Viewing photos	1	2	3	4	5
Posting videos	1	2	3	4	5
Tagging videos	1	2	3	4	5
Viewing videos	1	2	3	4	5

Using the given scale, rate how valuable “likes” and “comments” are to you on Facebook.

	1 Highly Insignificant	2 Moderately Insignificant	3 Neutral	4 Moderately Significant	5 Highly Significant
Likes	1	2	3	4	5
Comments	1	2	3	4	5

Appendix D

Bergen Facebook Addiction Scale

Using the given scale, how often have you done the following during the last year?

- | 1 | 2 | 3 | 4 | 5 |
|--------------------|---------------|------------------|--------------|-------------------|
| Very Rarely | Rarely | Sometimes | Often | Very Often |
1. Spent a lot of time thinking about Facebook or planned use of Facebook? ____
 2. Thought about how you could free more time to spend on Facebook? ____
 3. Thought a lot about what has happened on Facebook recently? ____
 4. Spent more time on Facebook than initially intended? ____
 5. Felt an urge to use Facebook more and more? ____
 6. Felt that you had to use Facebook more and more in order to get the same pleasure from it? ____
 7. Used Facebook in order to forget about personal problems? ____
 8. Used Facebook to reduce feelings of guilt, anxiety, helplessness, and depression? ____
 9. Used Facebook in order to reduce restlessness? ____
 10. Experienced that others have told you to reduce your use of Facebook but not listened to them? ____
 11. Tried to cut down on the use of Facebook without success? ____
 12. Decided to use Facebook less frequently, but not managed to do so? ____
 13. Become restless or troubled if you have been prohibited from using Facebook? ____
 14. Become irritable if you have been prohibited from using Facebook? ____
 15. Felt bad if you, for different reasons, could not log on to Facebook for some time? ____
 16. Used Facebook so much that it has had a negative impact on your job/studies? ____
 17. Given less priority to hobbies, leisure activities, and exercise because of Facebook? ____
 18. Ignored your partner, family members, or friends because of Facebook? ____

12. A. I like to have authority over other people. 12. _____
B. I don't mind following orders.
13. A. I find it easy to manipulate people. 13. _____
B. I don't like it when I find myself manipulating people.
14. A. I insist upon getting the respect that is due me. 14. _____
B. I usually get the respect that I deserve.
15. A. I don't particularly like to show off my body. 15. _____
B. I like to show off my body.
16. A. I can read people like a book. 16. _____
B. People are sometimes hard to understand.
17. A. If I feel competent I am willing to take responsibility for making decisions. 17.____
B. I like to take responsibility for making decisions.
18. A. I just want to be reasonably happy. 18. _____
B. I want to amount to something in the eyes of the world.
19. A. My body is nothing special. 19. _____
B. I like to look at my body.
20. A. I try not to be a show off. 20. _____
B. I will usually show off if I get the chance.
21. A. I always know what I am doing. 21. _____
B. Sometimes I am not sure of what I am doing.
22. A. I sometimes depend on people to get things done. 22. _____
B. I rarely depend on anyone else to get things done.
23. A. Sometimes I tell good stories. 23. _____
B. Everybody likes to hear my stories.
24. A. I expect a great deal from other people. 24. _____
B. I like to do things for other people.
25. A. I will never be satisfied until I get all that I deserve. 25. _____
B. I take my satisfactions as they come.
26. A. Compliments embarrass me. 26. _____
B. I like to be complimented.

27. A. I have a strong will to power. 27. _____
B. Power for its own sake doesn't interest me.
28. A. I don't care about new fads and fashions. 28. _____
B. I like to start new fads and fashions.
29. A. I like to look at myself in the mirror. 29. _____
B. I am not particularly interested in looking at myself in the mirror.
30. A. I really like to be the center of attention. 30. _____
B. It makes me uncomfortable to be the center of attention.
31. A. I can live my life in any way I want to. 31. _____
B. People can't always live their lives in terms of what they want.
32. A. Being an authority doesn't mean that much to me. 32. _____
B. People always seem to recognize my authority.
33. A. I would prefer to be a leader. 33. _____
B. It makes little difference to me whether I am a leader or not.
34. A. I am going to be a great person. 34. _____
B. I hope I am going to be successful.
35. A. People sometimes believe what I tell them. 35. _____
B. I can make anybody believe anything I want them to.
36. A. I am a born leader. 36. _____
B. Leadership is a quality that takes a long time to develop.
37. A. I wish somebody would someday write my biography. 37. _____
B. I don't like people to pry into my life for any reason.
38. A. I get upset when people don't notice how I look when I go out in public. 38. _____
B. I don't mind blending into the crowd when I go out in public.
39. A. I am more capable than other people. 39. _____
B. There is a lot that I can learn from other people.
40. A. I am much like everybody else. 40. _____
B. I am an extraordinary person.

Appendix F

The Rosenberg Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree with the statement, circle SA. If you agree, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

- | | | | | | |
|-----|--|----|---|---|----|
| 1. | On the whole, I am satisfied with myself. | SA | A | D | SD |
| 2. | At times, I think I am no good at all. | SA | A | D | SD |
| 3. | I feel that I have a number of good qualities. | SA | A | D | SD |
| 4. | I am able to do things as well as most other people. | SA | A | D | SD |
| 5. | I feel I do not have much to be proud of. | SA | A | D | SD |
| 6. | I certainly feel useless at times. | SA | A | D | SD |
| 7. | I feel that I'm a person of worth, at least on an equal plane with others. | SA | A | D | SD |
| 8. | I wish I could have more respect for myself. | SA | A | D | SD |
| 9. | All in all, I am inclined to feel that I am a failure. | SA | A | D | SD |
| 10. | I take a positive attitude toward myself. | SA | A | D | SD |

Appendix G

The Perfectionism Inventory

Please use the following options to rate how much you agree with each statement.

- | | 1 | 2 | 3 | 4 | 5 |
|-----|------------------------------|------------------------------|---------------------------------------|---------------------------|-----------------------|
| | Strongly
Disagree | Disagree
Somewhat | Neither Agree
Nor Disagree | Agree
Somewhat | Strongly Agree |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
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| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |
| 31. | | | | | |
| 32. | | | | | |

33. I drive myself rigorously to achieve high standards. ____
34. I often don't say anything, because I'm scared I might say the wrong thing. ____
35. I am frequently aggravated by the lazy or sloppy work of others. ____
36. I clean my home often. ____
37. I need time to think up a plan before I take action. ____
38. If I mess up on one thing, people might start questioning everything I do. ____
39. Growing up, I felt a lot of pressure to do everything right. ____
40. When I make an error, I generally can't stop thinking about it. ____
41. I must achieve excellence in everything I do. ____
42. I am self-conscious about what others think of me. ____
43. I have little tolerance for other people's careless mistakes. ____
44. I make sure to put things away as soon as I'm done using them. ____
45. I tend to deliberate before making up my mind. ____
46. To me, a mistake equals failure. ____
47. My parent(s) put a lot of pressure on me to succeed. ____
48. I often obsess over some of the things I have done. ____
49. I am often concerned that people will take what I say the wrong way. ____
50. I often get frustrated over other people's mistakes. ____
51. My closet is neat and organized. ____
52. I usually don't make decisions on the spot. ____
53. Making mistakes is a sign of stupidity. ____
54. I always felt that my parent(s) wanted me to be perfect. ____
55. After I turn a project in, I can't stop thinking of how it could have been better. ____
56. My workspace is generally organized. ____
57. If I make a serious mistake, I feel like I'm less of a person. ____
58. My parent(s) have expected nothing but my best. ____
59. I spend a great deal of time worrying about other people's opinion of me. ____