

PERSONALITY TRAITS AND SELF-  
PRESENTATION ON FACEBOOK:  
A SYSTEMATIC REVIEW

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Personality Traits and Self-Presentation on Facebook:

A Systematic Review

By

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## DECLARATION

I, Doreen Yvonne Venter 214121372, hereby declare that the thesis for MA Clinical Psychology is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another university or for another qualification.

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Doreen Yvonne Venter

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## **Abstract**

The influence of the Internet and Computer Mediated Communication (CMC) on the ways in which individuals with different personality traits present themselves, has been brought into question increasingly as modern life requires more and more of an enmeshment with technology in everyday life. The presentation of the self on Facebook has been the focus of recent research, delivering results that vary and sometimes contradict common ideas of the effects of individuals' interaction via technology, especially in terms of how personality traits, as determined by the Five-factor model, impact self-presentation. A systematic review of the available literature was conducted, in order to bring about a consolidated description of the literature on the impact of personality traits on Facebook self-presentation. From 37 studies, the review found the motivation for Facebook use to be a mediating factor in the relationship between personality traits. Each personality trait in the Five-factor model impacts upon Facebook use, self-generated content, other-generated content, and the nature of the individual's self-disclosure in varied ways. Due to visible cues on users' profiles, some personality traits can be accurately detected by observers. The complexity and interrelatedness of variables involved in this relationship is highlighted by the findings of this review.

**Keywords:** Computer-mediated communication, dramaturgical theory of interaction, Facebook, five factor model of personality, image-management, online interaction, personality traits, self-presentation, Social networking sites.

## **Chapter 1: Introduction**

### **1.1 Overview of the Chapter**

An overview of the present study is provided in this chapter. The first section introduces the reader to the background information that is associated with the context of the study. In this section, the rationale behind the review is explored. Thereafter, the problem statement is specified and the research aims and objectives are discussed. The methodological process is briefly introduced in the next section. Additional information is provided in order to highlight definitions of key concepts in the review. This is followed by an outline of the chapters included in this study.

### **1.2 Context of the Review**

The constant emergence of new content and applications of the internet are evidence of its interrelatedness with the modern person's being. Everyday life is intertwined with the use of, and dependence on, technology through the utility of CMC, such as social media sites like Facebook. Though its use simplifies communication, and therefore business, interpersonal and other relations, there is an underpinning question of the impact CMC has on the individual and the way in which one presents oneself. Factors such as anonymity (G. Lang, 2012), visual and audio restraint, as well as disembodiment have enjoyed the attention of studies in relation to the presentation of the online self (Brignall & Van Valey, 2005). This body of knowledge contrasts the virtual self with the actual self in a comparison built around the difference between Face-to-Face (FtF) communication and CMC. This study will apply the Dramaturgical theory of Self-Presentation (Goffman, 1959) to investigate the body of knowledge that describes self-presentation on Facebook, as it relates to different personality traits.

Personality traits, as described by the Five-factor model of personality (P T Costa & McCrae, 2010), can impact upon the motivation for the use of Facebook (Ross et al., 2009). Furthermore, these traits can also impact the ways in which individuals present themselves online (Rosenberg & Egbert, 2011).

### **1.2.1 Rationale of the study.**

The purpose of this study is to explore and describe the presentation of the self on Facebook, by considering the personality traits of users. The study is theoretically embedded in Goffman's (1990) dramaturgical model of self-presentation as it relates to the theoretical analysis of interactive behaviour in relation to the intent and sincerity of expressed communication. Literature on the subject is reviewed to formulate a summative understanding of the body of available knowledge. It is then possible to align this understanding with the ways in which individuals self-present via Facebook and establish an understanding of these personality dynamics within the broader online environment. This includes trans-disciplinary applications within the field of cyber citizenship to areas such as Information Technology, law and policy-making, philosophy, education, as well as business management. No such a systematic review has been performed to date (EBSCOHost, 27 September 2014), and the necessity for this review is inherent in understanding the cyber psychological phenomena involved in self-presentation on social networks such as Facebook. As a contribution to the emerging field of cyber psychology, this review will inform research within many fields of the wider research theme of cyber citizenship.

Current research on the topic involves quantitative as well as qualitative studies on the phenomena evident in online interaction, as well as the impact thereof upon image-management (G. Lang, 2012; Lee, Ahn, & Kim, 2014; Robinson, 2007; Rui & Stefanone, 2013). Many of these studies focus on self-presentation on specific Social

Networking Sites (SNS) such as Facebook (e.g., Amichai-Hamburger & Vinitzsky, 2010; Gosling, et al., 2011; Mehdizadeh, 2010; Moore & McElroy, 2012; Ong, et al., 2011; Ross, et al., 2009). The mass of information that is becoming available on the topic brings forward the necessity for a review to make sense thereof. This study will provide a systematic review through the analysis and synthesis of all available content within the multidisciplinary field of Cyberpsychology that addresses the significant components of Personality Traits and Self-Presentation on Facebook.

### **1.2.2 Research Question and Sub-questions.**

In this study, the research question that is to be addressed by means of a systematic review of the available literature is as follows:

*How do personality traits impact upon the way in which individuals self-present on Facebook?*

Sub-questions and further elaboration on the aims and objectives of the study will be discussed in Chapter 3.

### **1.3 Methodology**

For the purposes of exploring and describing the impact of personality traits on self-presentation on Facebook, a systematic review has been utilised as a research methodology in this study. A systematic literature review is conducted by following several steps. This process starts with defining a research question and searching the literature based on the question. The studies are assessed for reliability and relevance before the results are combined and placed into context (Hemingway & Brereton, 2009).

## **1.4 Concept Definitions**

The following key concepts are used throughout the review and their application should be understood. Terms not included here may be found in the Glossary in Appendix I as on page 194.

### **1.4.1 Personality Trait.**

The Five Factor Model describes personality using five domains, namely: Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness (P T Costa & McCrae, 2010). These factors, or traits, are personality dispositions that are assumed to be temporally and contextually stable parts of the self (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997).

### **1.4.2 Self-Esteem.**

The level of value or worth with which one regards oneself (Harter, 1993). This is also referred to as self-worth and self-regard. The competence facet in the Conscientiousness domain of the NEO-PI-3 can give an indication of self-esteem in an individual (P T Costa & McCrae, 2010).

### **1.4.3 Contingencies of Self-Worth.**

Contingencies of Self-Worth encompass the outcomes on which an individual stakes his self-esteem. These can include certain conditions that have formed within the individual's personal frame of reference that determine the sense of self-worth. These conditions reside within domains including competency, competition, approval from others, family support, appearance, virtue, and God's love (Stefanone, Lackaff, & Rosen, 2011).

#### **1.4.4 Self-presentation.**

During interaction with others, individuals attempt to manage the image that is portrayed of themselves via the ways in which they present themselves. The individual does this by self-censorship, self-disclosure and other techniques that allow for them to be in control of the impression others form of them (Goffman, 1990). This is known as an attempt to manage impressions or images and self-portrayal.

#### **1.4.5 Facebook.**

An SNS that allows users to set up online profiles and connect with others using CMC through the use of text, graphics and other media included in *posts*, or published content (<http://www.facebook.com>).

#### **1.4.6 Dramaturgical model.**

Goffman (1990) describes the interaction between people through the metaphor of a theatrical performance. Elements of this performance explain the metaphor in terms of dramaturgical components. The *performer* is the person involved in interactions, as opposed to the *audience*, who are also at times the *respondents*. Their interactions take place within a *setting* on the *front stage* – where the audience sees all - which is entered into from the *backstage* – the place where the audience does not see the true self.

### **1.5 Delineation of Research**

The structure of the remainder of the review is as follows. In chapter 2 the focus is on providing an expanded knowledge on the topic of the review. This chapter begins by providing information about personality traits, self-presentation, and Facebook. Thereafter, it explores the relationships between personality and Facebook, Facebook and self-presentation, and finally personality and self-presentation on Facebook.

Chapter 3 provides an explanation of the research methodology that was utilised to conduct this review. This chapter elaborates on the context of the current review in terms of specific aims and objectives of the study. In order to allow for replication of this study, the methodology of the systematic review is further elaborated upon in detail.

In Chapter 4 the reader is provided with the findings of the present review. Firstly, the sample of the review is discussed. Secondly, themes that arose from the results are reported upon. The findings of the review are elaborated upon in relation to each domain of the Five-factor model, namely, Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness.

In Chapter 5 the conclusions, limitations, and recommendations for future research are discussed as derived from the study, as well as implications of the review for Psychology and other disciplines.

## **1.6 Concluding Remarks**

This chapter served as an introduction to the present review. The key elements of the study were highlighted, including the context of the review, problem statement, aims, and objectives of the study. The methodological approach that was employed was briefly discussed and concept definitions were provided for the key concepts in this study. A delineation of the chapters making up the study was provided to provide an overview of the study. The following chapter will elaborate upon the context of the research.



## **Chapter 2: Personality and Facebook Self-presentation**

### **2.1 Overview of the Chapter**

Facebook is a widely used platform that allows for a new form of self-presentation online. The functional elements of this SNS gratify its users in ways that depend on their individual characteristics (T. Ryan & Xenos, 2011). The personality traits that individuals present with will guide the following review in forming categories of traits in individuals to focus on in terms of their self-presentation. This literature review firstly addresses the personality traits that are often used in describing personality, and secondly brings the way in which Goffman's (1990) dramaturgical theory explains self-presentation into view. In the section thereafter, Facebook use is described as a social networking site and computer mediated communication in its own right.

After these three fundamental concepts are reviewed, personality traits in Facebook users is investigated, and Facebook itself is brought into question as a context that may impact presentation of the self via use of the site. Ryan and Xenos (2011) suggest that several of the Big Five personality factors are associated with the way in which individuals interact. Therefore, these factors will be used as a structure within which to best understand the self-presentation of individuals on Facebook.

The understanding of this self-presentation may add to the body of knowledge of the self, in order to support the understanding which may have the capability to unlock new potential in humans (Roepers & Higgins-D'Allesandro, 2007). More specifically, better understanding of the cyberself will contribute to the predictive capabilities of human behaviour on the Internet and can support efforts to shape this environment in terms of security and the integrity of content. To gain such an understanding of self-presentation, one must first explore the personality of an

individual and hone in on the behaviours, motives and characteristics involved in decision-making for image management.

## **2.2 Personality**

Personality is one of the structures that guide modern psychology's ability to understand and predict behaviour in individuals (Weiner & Greene, 2008). Personality involves the description, explanation and prediction of five W's in individuals: *Who* the person is; in *what* ways the person differs from others and how they are similar to others; *when* he develops to be who and what he is and when those descriptions are considered to be stable; *where* the person will display certain behaviours in response to environmental factors; and *why* the person's behaviour is considered to be normal or abnormal, among other things (Flett, 2007).

In psychology, the distinction of that which is considered within the norm and pathological has been a long-standing question. In personality, this question is important since it aids in understanding the similarities and differences between individuals to better support mental health and wellbeing, by looking at how psychological systems are organized as a whole (Mayer, 2005). The perspectives approach to personality implies that conflicting views of personality are best consulted one by one, rather than attempting to reconcile or integrate them. Theories from several perspectives - such as psychodynamic, humanistic, behavioural, and social-cognitive - are considered valid for their respective applications in describing personality in differing promising ways (Mayer, 2005). The trait approach, as opposed to the type approach, was chosen as the unit of personality for the purpose of this review.

## **2.3 Personality Traits**

Allport (1937) described personality traits as continuous dimensions that apply to everyone. A person can be morphogenically described by looking at the entire person in terms of the individual's tendencies in behaviour. Traits can be considered as part of the personality within which they are contained, or in the light of their distribution in the population (Flett, 2007). A gradual acquisition of certain behaviours over the development of personality is implied by traits, as opposed to the type approach which will assume that behaviours arise from necessary conditions. For example, a person high in the trait extraversion may have learned a set of responses to social situations, while an extroverted type would assume that a set of situations activated the extrovert's social reaction type (McCrae & Costa, 2003). Each main trait may be seen as a summary of the more specific, facet traits that form its make-up (P T Costa & McCrae, 2010). As part of the understanding of traits, the environment and situational factors are acknowledged as part of the dynamism of the trait's activation (Flett, 2007; McCrae & Costa, 2003).

Due to its focus on degree, rather than kind, the trait approach specifies the description of individuals' emotional, interpersonal, experiential, attitudinal and motivational styles (P T Costa & McCrae, 2010). Instead of placing individuals into categories, it was deemed more suitable to address this review from a trait perspective, specifically utilising the Five-factor model (Digman, 1990).

### **2.3.1 The Five Factor model.**

The Five-factor model of personality (Digman, 1990) is a widely used model for the description of personality. It is based on five bipolar factors that an individual can be ranked on and according to which their personality can be evaluated (P T Costa & McCrae, 2010). A short description of the model and each of the domains follows.

Digman's (1990) model for personality is widely accepted by psychologists as a comprehensive representation of personality trait structure (P T Costa & McCrae, 2010; Flett, 2007; Mayer, 2005). This model was developed using a lexical approach that finds the analysis of natural language useful in characterizing personality traits (McCrae & Costa, 1997). The premise is used as a foundation for modern personality assessment materials such as the NEO Personality Inventory 3 (NEO-PI-3; Costa & McCrae, 2010), and the NEO Five Factor Inventory 3 (NEO-FFI-3), and is trusted by professional psychologists and psychometrists to guide their understanding of clients (Lynam & Widiger, 2001; McCrae & Costa, 1997; Widiger, Trull, Clarkin, Sanderson, & Costa, 1994).

The model suggests that personality traits, as described by the "Big Five", have links to behaviour and, at the most basic level, to the responses individuals choose in interactions (Digman, 1990). Therefore, it is a model that is appropriate to utilise for investigating self-presentation behaviour in individuals. The model describes five domains that characterise aspects of individuals' personality. On bipolar continuums, these domains describe an individual's position as a score that will be plotted between two extremes. It is important to acknowledge that these poles do not represent opposites, but rather points on a spectrum (McCrae & Costa, 2003). The factors of the 'Big Five' comprise of the following domains: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness (P T Costa & McCrae, 2010).

### ***2.3.1.1 Neuroticism***

Costa and McCrae (2010) describe the neuroticism domain as an individual's emotional stability on a continuum that ranges from emotional stability on one end-presented as calm, relaxed and even-tempered - to neuroticism – a susceptibility to psychological distress. A higher score on this domain has been associated with

elevated frequency of depression disorders, anxiety disorders, self-consciousness and angry hostility (Bienvenu et al., 2004). Generally, neuroticism represents proneness to experience unpleasant and disturbing emotions that correspondingly disturb thinking patterns and behaviour (McCrae & Costa, 2003).

### ***2.3.1.2 Extraversion***

The Extraversion domain involves a description of an individual's sociability, assertiveness, activity and talkativeness. On the one end of the continuum, introverts are more reserved, prefer to be alone, and independent. On the contrasting end, extraverts are sociable, energetic and generally upbeat. They also like excitement and stimulation (P T Costa & McCrae, 2010). In this trait, an individual is described in terms of interpersonal tendencies, as well as temperament (McCrae & Costa, 2003). Variables such as happiness, helpfulness and verbal creativity have been found to correlate positively with the trait of extraversion (Chamorro-Premuzic, 2007).

### ***2.3.1.3 Openness to experience***

The openness to experience dimension of personality describes an individual's openness or closeness in response to several aspects of life, including imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity and independence of judgement. On the one side of this continuum is conventionality, conservatism and inflexibility, or closedness, while the other side describes an individual who is more open, unconventional and tolerant of other views (P T Costa & McCrae, 2010). Openness to experience is the strongest of the personality traits to correlate with political attitudes with those scoring low in this trait featuring among the conservatives (Chamorro-Premuzic, 2007). Introspection and reflection are found to be the doings of those high in openness to experience (P T Costa & McCrae, 2010).

#### ***2.3.1.4 Agreeableness***

The agreeableness domain describes some interactional tendencies of individuals. Agreeableness on the one hand, describes a fundamentally compassionate person who is trusting, compliant and modest. The other side of this continuum describes a person as more antagonistic or egocentric in interactions, displaying scepticism and competitive tough-mindedness (P T Costa & McCrae, 2010). In combination with high extraversion, high scorers in agreeableness are found to be more prone to prosocial behaviour (Chamorro-Premuzic, 2007), especially empathy.

As part of agreeableness, the facet trait of modesty implies significant information about both humility and egocentrism in individuals. While higher scores indicate a humble assessment of abilities and self-importance (McCrae & Costa, 2003), low scorers in this facet are described as arrogant, conceited, or believing to be superior (P T Costa & McCrae, 2010; Widiger et al., 1994). Typically, a low scorer on this facet can also be described as narcissistic (McCrae & Costa, 2003).

#### ***2.3.1.5 Conscientiousness***

The conscientiousness domain has to do with the control of impulses as well as the directedness of an individual. A high scorer of conscientiousness is purposeful, determined, fastidious, and strong-willed. Low scorers are less exacting, and more casual, undirected and disorganized (P T Costa & McCrae, 2010). Low conscientiousness is predictive of adolescent conflict, substance abuse, criminal acts, and suicide attempts. Conscientiousness correlates negatively with antisocial behaviour, as it pertains to aspects like morality and self-control (Chamorro-Premuzic, 2007).

The Five-factor model has been criticized for its questionable utility in studying psychopathology. The PSY-5 model used in the Minnesota Multiphasic Personality Inventory 2 (MMPI 2) is suggested as an alternative for this purpose (Flett, 2007). However, to a certain degree, personality disorders can be detected with responsible use of the Five-factor model instruments (Lynam & Widiger, 2001). Mayer (2005) points out further limitations of the Five-factor model as it excludes traits such as locus of control, self-consciousness, intelligence and masculinity. Further criticism of the trait approach states that it may not be conducive to situational behaviour prediction, but merely general patterns of behaviour (Chamorro-Premuzic, 2007; Flett, 2007).

Nevertheless, the different personalities that can be described by these five domains can shed light on the reasons why individuals may differ in the way they monitor and/or manage impressions of themselves in their interactions (Rosenberg & Egbert, 2011; Rui & Stefanone, 2013). This is reflected in the ways in which individuals present themselves to others.

## **2.4 Self-presentation**

An important aspect of the self in understanding self-presentation behaviour is the need to enhance self-worth. This need is governed and supported by other aspects of the self, such as self-awareness or standards to which humans uphold themselves and which are required for them to survive (Lewis, 2011). Self-presentation serves as a tool to increase the likelihood of positive self-images and in so-doing, facilitates goal-attainment (Rui & Stefanone, 2013), in turn increasing self-worth. Therefore, it can be concluded that self-presentation plays a role in self-concept formation, and therefore self-worth. Lang (2012) calls the risks for the self-concept involved in self-

presentation, the ‘carryover-effect’. This may be related to the idea of the ‘looking glass self’ where self-concept is a result of how one thinks others perceives oneself (Cooley, 1922). This self-fulfilling prophecy indicates the impact that social interaction has on the formation of self and therefore the position of self-presentation within social interaction is highlighted.

#### **2.4.1 Goffman’s dramaturgical model.**

The dramaturgical model developed by Goffman (1990) describes human interaction and self-presentation as *performances* that take place within *settings* that can be equated to a stage act. The *performer*, his/her *audience* and their environment are all part of the *situation* created through their actions and interrelations. Both Cooley (1922) and Goffman (1990) referred to the self in relation to others. For Cooley, it is not the other person that forms the self, but rather the perception of the self and the imagined judgement that informs either the feeling of pride or shame in a person. The self is then conditioned to enhance or reject those aspects in question. Goffman (1990), on the other hand, referred to social awareness as the motivator for human behaviour. This shared focus during an *encounter* is what causes embarrassment or humiliation. These emotions impact the self, making it a social product. However, this is not absolute, since the *performer* also impacts the ways in which those in the *audience* perceives him/her (Yeung & Martin, 2003).

The age old use of masks in theatre ties in with this theory. Masks are used to show the audience a certain character, emotion or attribute in association with the performer. In doing so, the *performer* has control over the situation by deciding whether the mask they present is an accurate representation of their actual self, or whether a false self is presented. This disclosure is affected by several factors. The *performer* has a choice to present the self he wishes the audience to know, in order to



control the distance or vulnerability he associates with certain roles. For example, within the role of teacher, a woman may be stern when dealing with her school pupils. The same woman may present a more flexible and warm side with her own children. The roles that define the *situation* between the *performer* and the *audience* determine the level of disclosure, as well as the inferences that the audience makes of the performance. Goffman (1990) states that the audience is at a disadvantage within an interaction, because of the inferences they must make – taking what the performer presents at face value. It is only once they have the advantage of collecting collateral information from other sources, that they can assess the judgements made. The only cues they have during face to face interaction to help them make accurate inferences are those that are presented seemingly unconsciously. This will include body language, tone of voice, and other non-verbal cues as expected of socially-skilled persons to understand (Goffman, 1990).

The power-balance in an interaction, therefore, places some advantages in both the hands of the performer and the audience. The performer gains leverage by implicitly (or explicitly) projecting a definition of the situation, and by doing so, expecting others to treat her in the way that is appropriate for the type of person she presents herself to be. At the same time, the individual is required, morally, to be what she presents herself to be. While this may be, the audience is not left at the mercy of the performer's definition of the situation. The audience, as respondents, contribute to the definition of the interaction by virtue of their response and participation. The audience determines the role the performer needs to play, and constitutes an asymmetry in the communication process due to their awareness of the 'uncalculated' behaviour a performer may express (Goffman, 1990). The witness to a performer's presentation is likely to have an advantage over them, seeing that they are aware of the unintentional

behaviours that may betray the self being presented. A poker player may, for example, give away his bluff by an unintentional telling behaviour such as touching his nose.

More than simply the self that a performer attempts to present, the picture that an audience may infer of the performer can be influenced by information that comes from others. Rui and Stefanone (2013) mention two ways in which the performer may manage the image of their self which these contributions may deliver. The first of these protective self-presentation measures are repudiative strategies. This is a 'not guilty' plea, denying claims others have made about them. The other strategy is subtractive, in the sense that they remove the claims made about them or they remove the connection between them and the claims (A. Smock, 2010). In FtF communication, one might deny having been at an event, or use phrases like "I don't know what you are talking about". On Facebook, one can easily remove associations with pictures or other content by 'untagging' oneself. Content can also be deleted or flagged for moderation or removal by website officials (C. Lang & Barton, 2015).

These strategies are some of the ways in which Facebook users may manipulate the images that are co-created on Facebook by them and their audience of 'friends'. According to Rosenberg and Egbert (2011) this self-presentation is a conscious effort to control selected behaviours to make a desired impression on one's audience. Individuals self-present and manage impressions in pursuit of goals such as influencing others as well as secondary goals that are interaction-oriented and self-oriented. Interaction-oriented goals include goals focussed on an individual's desire to maintain support from others by behaving socially appropriately. This means that the behaviour is used to keep others satisfied with the individual to gain social support and avoid social ridicule or punishment. For example, the expectation on Facebook is that a variety of posts will be made on a particular individual's page. If the same post

is repetitively shared, the Facebook audience will grow intolerant, and stop rewarding the user with ‘likes’ or even punish him by ‘unfollowing’ or ‘unfriending’ him. Self-oriented goals include goals that have to do with maintaining or increasing assets, and setting boundaries that are comfortable (Rosenberg & Egbert, 2011). For example, a Facebook user may share information to promote the sale of their car. Individuals manage impressions according to these goals, be it in FtF interactions, or on Facebook, however the *stage* on which one performs has an impact on the dynamics involved in the interaction (Goffman, 1990).

### **2.5 Facebook sets a new stage for interaction**

Facebook is a platform that is used for social interaction and the maintenance of social networks via CMCs. It also allows users to share and access information. There is a multitude of different ways in which a user can carry out these functions on Facebook, including writing quick notes, posting pictures, sending private messages, or simply editing a user profile that displays an individual’s personal and other information (Facebook, 2015).

Social Networking on Websites has shifted from being a parallel communication medium to being part of a culture, with cyberspace overlapping with the ‘real world’ (Thurlow, Lengel, & Tomic, 2004). Nearly every aspect of offline life has a counterpart online. An example of this overlap: the company that physically repairs vacuum cleaners has a website, and likely a Facebook page, on which consumers are able to either communicate with them, or get important information.

Thurlow, Lengel and Tomic (2004) make a comment about how the interaction with computers becomes a very human experience when individuals project their own fears or aspirations onto the opportunities technology has to offer. As in projective techniques used in psychotherapy, an individual projects their inner world onto the

ways in which they choose to use the SNSs like Facebook. A clue for psychologists to determine what inner workings lead to which behaviours can emerge from looking towards personalities of individuals who use Facebook, and how they do so.

## **2.6 Personality of a Facebook User**

An increasing amount of studies have focussed on the personalities of those individuals who make use of Facebook, be it for social or informational purposes (Błachnio, Przepiórka, & Rudnicka, 2013; Hong, Huang, Lin, & Chiu, 2014; Lambiotte, Quercia, Stillwell, Kosinski, & Crowcroft, 2012; T. Ryan & Xenos, 2011; Stieger, Burger, Bohn, & Voracek, 2013; Weibel, Wissmath, & Mast, 2010; Yesil, 2014; Zhang, Tang, & Leung, 2011). Certain traits have stood out among others in predicting Facebook use, while some traits determine the motivations or functions of Facebook use instead.

Sociability and Neuroticism have been found to be prominent factors that set Facebook users and -nonusers apart. Theoretically, individuals high in Neuroticism will seek social contact via Facebook to battle loneliness (Hughes, Rowe, Batey, & Lee, 2012). Previously, it has been found that Extraversion is not significantly correlated to Facebook use and it has been claimed that Extraverts do not use the Internet as a substitute for offline communication (Amiel, 2002). Ryan and Xenos (2011) found that more extraverted, narcissistic individuals would be more likely to use Facebook than introverts. This does not mean however, that extraverts use Facebook to foster popularity. Instead, they may use social media as a way to strengthen and extend offline relationships (Tosun & Lajunen, 2010). Popular online personalities, high in the trait of Extraversion and low in Neuroticism, are not significantly different from popular offline personalities (Lambiotte et al., 2012). High scores in Openness to experience, Agreeableness, and Conscientiousness have

also been found to be positively related to Facebook use in students in Selcuk, Turkey (Yesil, 2014). In the same study, Neuroticism and Extraversion did not significantly predict Facebook use – indicating the differences that culture and other factors may play in determining which personalities are more likely to use Facebook.

Not only is frequency or prevalence of Facebook use affected by personality traits, but the reasons for Facebook use may also differ according to personality. Different users utilise Facebook for different purposes. Higher scores on exhibitionism were associated with preference for photos and status updates, highlighting more self-promoting functions. Neuroticism is positively associated with use of the Wall, making more use of the communicative and monitoring functions of Facebook. A possible reason for this is that the use of the Wall offers worried users more time to formulate responses, therefore decreasing anxiety surrounding the possibility of unveiling personal information (Ross et al., 2009). Narcissistic users are found to participate in more self-promoting and superficial behaviour (T. Ryan & Xenos, 2011) such as posting pictures or opinions, browsing or commenting on others' posts.

In Taiwanese students, low self-esteem and a lack of self-confidence has been found to indicate less frequent Facebook use, while higher levels of loneliness was found to be a predictor of Facebook addiction (Hong et al., 2014). In response to addiction to Facebook use, another phenomenon amongst Facebook users is *virtual identity suicide*, or the act of quitting one's social network accounts. Here too, personality traits have been found to be positively correlative to the likelihood of quitting Facebook. These include higher conscientiousness and higher concern about privacy, while higher internet addiction scores also played a role (Stieger et al., 2013). Higher conscientiousness implies a greater concern over self-discipline and dutifulness, which may result in restricting the use of social media in order to retain

more time and resources for achievement-driven activities (P T Costa & McCrae, 2010).

As can be seen in the research about Facebook use, it is undoubtedly a tool that is being used for self-presentation purposes and can be aligned with the dramaturgical model to be seen as a new sort of *stage* on which the interaction occurs between individuals and their worlds.

## **2.7 Facebook and Self-presentation**

In keeping with the dramaturgical model, this review will take the point of view that the *stage* on which performances are carried out, has been changed along with technological developments such as computer mediated communication (CMC). The use of technology-based systems is the main ingredient to computer mediated interaction. The cyber-world which is created by the use of the cloud, so to speak, of information and resources accessible via the World Wide Web, drastically alters the ways in which individuals communicate (Robinson, 2007). This is done by the special attributes that make this *stage* different from ordinary FtF interactive settings. To be able to understand human behaviour within this setting, it is important to understand what these attributes are and how they will affect behaviour. Schouten, Valkenburg and Peter (2007) state the importance of the CMC user's perception of such attributes of internet-based communication as reduced non-verbal cues and controllability. Among others, these attributes will now be discussed in the context of some relevant theories, in order to form an understanding of the suggested *stage*, Facebook, on which CMC takes place. Two different positions are generally taken in terms of how CMC is perceived: One for, and one against the use of CMC. The negative position takes the stance that CMC lacks crucial qualities that are provided only by Face to

Face (FtF) interaction. The positive looks, rather, at the value that is added to communication via technology.

### **2.7.1 Theories of the negative position.**

A significant difference can be pointed out when the replacement *stage* - that is CMC on Facebook- is compared to FtF interaction. The idea that technology makes one less socially capable has been supported by theories of the negative position (Thurlow, Lengel, & Tomic, 2004), which blames the communication technologies for disabling growth in offline communities and inhibiting the development of social skills. These theories focus on the deficits of CMC. They emphasise which qualities are rich in FtF interaction and lack in CMC. These include the Social Presence model, the Reduced Cues theory and the Media Richness model. In these models, CMC is described as restrictive in terms of sensitivity, sociability, personality, warmth and visual cues, and therefore, provides less richness and closeness than FtF interaction (Thurlow, Lengel, & Tomic, 2004). In other words, the negative position is one that supports the notion that FtF exchanges demonstrate greater breadth, depth and richness of communication than CMC.

### **2.7.2 Theories of the positive position.**

The opposing, the Social Information Processing (SIP) model (Walther, 1992) challenges these claims and puts out a differing perspective regarding the new *stage* communicators are getting to know. The SIP model claims that the basic human need to bond and reach out to others transcends the format in which one communicates. Therefore, some compensatory moves help communicators to get the most out of the CMC platform. Walther (1992) found that interpersonal connection can be enhanced in the use of CMC via accessible methods such as the use of emoticons, altering expectations of interactions, time spent online and anticipation of future interactions.

Furthermore, Shaw and Gant (2002) found internet use to significantly increase self-esteem and perceived social support, while decreasing loneliness and depression. The research argues that internet chatting allows for increased willingness to share personal information, leading to increased frequency of intimate relationships that impact loneliness. Over time, this means that users' self-esteem is improved.

In light of these opposing positions, the attributes of CMC are not to be considered simply good or bad for communication. Rather, the goal is to assess how this environment impacts the presentation of the self. Therefore, this review focusses on only a few key aspects of CMC, including a) anonymity, b) disembodiment, c) visual and audio restraint, d) access to information, and e) multimedia network. It should be kept in mind that for each of these attributes, the extent of the user's knowledge of the CMC platform determines the ability to manipulate or compensate for effects thereof (Schouten, Valkenburg, & Peter, 2007).

### **2.7.3 Anonymity.**

The well-known line, 'on the internet, no one knows you're a dog', features often to warn both veteran and novice users that the internet is an environment that allows anyone to be anyone they want to be. This speaks to the presentation of self in a sense that anonymity provides a safeguard for the self to allow only that which is carefully selected and considered, prior to presentation, to be seen (Mehdizadeh, 2010). This provides a sense of safety and security for the *performer* who wishes to present the self in a way that makes them present in a certain way. This is done by choosing what to disclose about the self, and being in control of the process as opposed to the way in which the audience in an FtF setting will pay attention to nonverbal uncalculated responses that betray the intention of the *performer*. At the same time, this anonymity



can be the cause of some uncertainty in the *performer* about their role in a situation, because they cannot truly trust that the audience is what it claims to be. For example, many an email user has been fooled by scam emails that claim to be collecting information for security reasons with the deceitful intent to actually gain sensitive information about the user's banking details. Anonymity online has caused much distrust in ecommerce and personal interaction online, due to these types of scams. It allows any user of the internet to use the disembodiment the virtual world has to offer, as a *mask*.

#### **2.7.4 Disembodiment.**

The internet allows communication in a space that removes the communicator in body from the communication process. In FtF, the performer is dependent on his physical presence through his voice, body language and tone to manage his image (Goffman, 1990). In CMC, the presentation of the self is disembodied. The self is disassociated from the body and presents in a way that is dependent on the devices or media used to communicate, rather than physical presence. The recreation of the body via avatars or profile pictures implies the intention of not fully discarding the body, or the stigmas and cultural norms attached to bodies. The organizational purposes of stereotypical descriptors seem to outweigh the cumbersome social implications that accompany these labels. The offline body is simply swapped out for a, sometimes more comfortable, 'cyberbody' (Robinson, 2007). Therefore, this disembodiment can serve as a freedom from insecurities of the physical aspects that will inhibit behaviour in FtF interactions. For example, a man who is overweight may find it easier to speak to women online, where he expects them to get to know him for his personality before finding out he is overweight. While a relationship remains online, the cyberbody can be co-created by the interactive team, consisting of the *performer* and his *audience*,

and will likely be closer to ideal than not, through the use of avatars (Evans, 2012). Putting the *audience* at a disadvantage, the very nature of CMC means that the extent to which they perceive visual and audio cues in self-presentation is minimised.

### **2.7.5 Visual and audio restraint.**

Nonverbal cues that would be subtly or overtly expressed in FtF interactions are said to be lost in the text-based platform of the online environment. These are replaced, however, with a new emerging culture of web etiquette that allows certain inferences on the part of the *audience*. Emoticons aid in attempts to include emotion or tone in messages, and ‘hashtags’ or ‘tagging’ of contacts can imply a certain connection or context to a message (Derks, Bos, & Von Grumbkow, 2007).

### **2.7.6 Access to information.**

The *audience* regains the upper hand in this environment due to the easy access to both vast amounts of information online, and a huge social network community that can verify or disprove information provided by a *performer*. This network of users allows the sharing of ideas, warnings, instructions, and other information at the click of a button. Search engines simplify the word-of-mouth process in FtF interactions by providing a tool to do the work instead. The important factor to stay conscious of is that – as in the FtF method – the fact remains that individuals post false information online and one must trust the sources consulted in order to establish the integrity of the content (W. Kim, Jeong, & Lee, 2010).

### **2.7.7 Multimedia network.**

The multimedia functionality of the internet has made it possible to extend communication beyond simple text-based communication. News Feeds on Facebook include media from text, graphics, audio and video. SNS systems organise

information into symbolic systems that are understandable and help users to process large amounts of information (Fernandes, 1995). In some ways, SNS users document a journal that can be seen as a kind of rich digital journal, including statements of mental status, expressions of self-concept and pictures of experiences. In the new culture of online interaction, norms are determined and the *audience* is able to make judgements regarding, for instance, how often posts are made, what the content intends to present, how the content relates to the user's true self, and how the presentation fits in with the idea they have of this particular *performer* (McLaughlin & Vitak, 2012). Robinson (2007) furthermore states that most users will take on the challenge of determining authenticity and consistency in this regard, quite seriously by comparing the expressions, in Goffmanian terms, 'given' to the expressions that are 'given off'.

As the online environment continues to evolve, the above-mentioned aspects of CMC are ever-changing. In attempts to gain a personal, close and warm experience from this platform, users have found ways to let the system work for their needs, delivering a whole new bag of tricks (Robinson, 2007). Most websites which facilitate user interaction now require personalised registration verifications and login details before communication is allowed. This makes it more time consuming and tedious, albeit not impossible, to create an online self that, in its entirety, is not a presentation of the true self. The *mask* one puts on via SNS profiles is now made traceable, as it is connected to a working e-mail address, which will likely be associated with one's true offline identity. It is an on-going challenge for security to be maintained within this online environment, in terms of the difficulty of holding offline entities responsible for online behaviour (Benham et al., 2012). The use of multimedia and real-time

communication via Voice over Internet Protocol software such as Skype™, allow users to reconnect the physical body to the CMC interaction. In some cases, this aids some offline relationships that are hindered by physical constraints, to exist online. The availability of supporting media such as images and audio can also be manipulated to an extent that the naked eye or ear will not be able to discern the true self from the false self (Thurlow, Lengel, & Tomic, 2004).

Essentially, the complexities of the online environment allow the *performers* to make use of new *props* to present themselves. Their *masks* are now in the form of new media that include all domains of presence online. In terms of Goffman's (1990) *front stage* and *back stage*, *performers* are able to organise and manage their online image (Rui & Stefanone, 2013). For example, a frustrated banker may, for instance, maintain a very professional, yet publically accessible LinkedIn profile. At the same time she may keep her privacy settings on personal SNSs like Facebook tight, so as to allow only her friends to see her honest expressions of rebellious anti-consumerism. The access one has to self-monitoring, as with FtF interaction, allows a *performer* the freedom to manage parts of the self that one wishes to present to a particular audience.

Disclosure of a different self can also serve purposes of protection of the offline self by allowing true expression under the guise of an online persona or *mask*. This 'virtual self' is created in order to take part in virtual communities that provide support and are resourceful in facilitating growth in autonomy and improving self-concept (Suh, 2013). In fact, some individuals become quite attached to their virtual identity, or avatar, and live almost vicariously through the online persona that is created and controlled (Wolfendale, 2007). Furthermore, the use of Facebook has been found to activate the ideal self, in turn building confidence and having a positive impact on self-esteem (Gonzales, Hancock, Gonzales, Hancock, & Ph, 2011).

The extent of the freedom from the offline identity can enable behaviour that is in conflict with offline societal norms (Benham et al., 2012). Studies have shown that behaviour online can become deviant, experimental or in contrast to behaviour expected of certain types of individuals as presented offline (Suler & Phillips, 1998), though there seems to be no consensus of what is normal or abnormal on the evolving internet. A distinguished member of a religious group may, for example, indulge in racist remarks on open forums. Other deviant behaviour includes expressions of paedophilia, homophobia, sexism, aggression, or even mere rejection of social norms as seen in a user who might leave a conversation abruptly without reason (Brignall & Van Valey, 2005). Personality traits assist in guiding analysis of who will, or will not, engage in online self-presentation that is in line with expectations, and in either case, point out the nature of their self-presentation (Nguyen, Bin, & Campbell, 2012).

## **2.8 Personality's role in Self-Presentation on Facebook**

It is clear from the above that individuals use Facebook to self-present to a certain degree, and are more likely to disclose self-information on Facebook, than in person (B. Chen & Marcus, 2012; Christofides, Muise, & Desmarais, 2009; Qiu, Lin, Leung, & Tov, 2012). Qiu et. al. (2012) suggest that Facebook users are more likely to disclose their experience of positive emotions than negative emotional experiences.

Back et. al. (2010) suggest that individuals use their SNS profiles to display a reflection of their actual self, rather than an ideal self. Even so, there are different reasons why a Facebook user may choose to use Facebook, and there are different strategies that may be utilised in order to manage impressions on Facebook. The self-presentation tactics that are employed are associated with Rosenberg and Egbert's (2011) goals for impression management mentioned earlier. Content may be placed

on the user's, or their friends', profile(s) in an attempt to build and manage a certain image, or self-present.

This constructed image may be hindered by the content created by others. For the same reasons mentioned before, *performers* in CMC interaction may also engage in repudiative or subtractive strategies to manage their presentations online, however difficult this has become (Rui & Stefanone, 2013). This may manifest in the form of commenting online, on threads about the *performer* that were created by others, or in the actions of 'untagging' profiles or severing social network connections ('unfriending') in order to disconnect associations made between their own presented identity and content made available by another (Rui & Stefanone, 2013). In some ways, the dissolution of a relationship can be aligned with the same type of behaviour offline, but the ease and simplicity of clicking a button, versus having an FtF conversation, bring about the significance of the impact this disembodiment has on the value individuals add to relationships. The freedom to make spontaneous choices with little immediate consequences, can affect decision making processes and the perception of relationships greatly (Gershon, 2010).

Given this freedom provided by the CMC environment, the cyberself is expected to be somewhat different from the offline self, yet convey a truthful belief about a person (Ellison, Hancock, & Toma, 2012). There is a common understanding among online communicators that there will be false presentations of self (Toma, Hancock, & Ellison, 2008). This is quite clear in the expected embellishments one finds in online dating profiles regarding age, for instance. In a similar way to how Goffman (1990) explains FtF presentations of the self, online image-management aids *performers* in their task to maintain a positive image in the eyes of their Facebook *audience*. The new *stage* provides new tools, or *props* to support this process and suggests that the

emergence of the cyberself is impacted by the factors that define the system of communication, as discussed above (Lang, 2012). Furthermore, online community factors and personality traits of the *performer* also play a role in how one might manage impressions. The *cyberstage* is then, only one aspect of the *performance* in a given *situation*. Therefore, arguably, though sometimes devious and deceitful in intent, the self-presentations of Facebook users are not caused solely by the effects of the virtual environment of Facebook, but can be considered a manifestation of personality traits at play within the parameters set by Facebook. This conclusion points to the timelessness of Goffman's (1990) dramaturgical theory of interaction, and necessity of the application and possible review thereof in terms of its application to the digital age and in relation to personality traits.

The nature of self-presentation – breadth, depth, frequency and amount of information disclosed - is therefore often associated with personality traits that drive goals for impression management. While some impression management is generally applicable to all Facebook users, each personality trait predicts its own set of associated self-presentation strategies and tendencies. The following section describes the findings in literature on Facebook self-presentation for each respective trait in the Big 5. To conclude this review, a summary of these findings will be introduced as guidelines for the findings of the current review.

### **2.8.1 Neuroticism.**

Those high in neuroticism have been found to draw from social support by their perception that the virtual community accepts their ideal self. Thereby, the carryover effect can, in turn, impact on the self-concept providing safety and security.

So, neuroticism and introversion have been positively associated with presentation of a false self on Facebook (Michikyan, Dennis, & Subrahmanyam, 2014). Rosenberg

and Egbert (2011) also found that self-monitoring, expected of those high in the facet trait of Self-Consciousness, are more likely to present a more desirable image of themselves. Their impression management goals are more oriented towards interactions that dictate social appropriateness, especially if they are also high scorers on Agreeableness.

Neurotic persons may find comfort in the control they have over the presentation of the self, online. Seidman (2013) suggests that high levels of Neuroticism often lead to social difficulties which can be countered by a sense of belonging on Facebook via self-presentation. Neurotic individuals may use the safe space provided by Facebook as an opportunity to present a self that is inclusive of their ideal self. The more neurotic however, the less likely these individuals are to write 'Comments' on Facebook, a type of self-presentation behaviour and suggests that passive use of Facebook is more comfortable to them (Lee, Ahn, & Kim, 2014). Furthermore, low neuroticism is associated with a variety of topics, or greater breadth, of information disclosed (Hollenbaugh & Ferris, 2014).

### **2.8.2 Extraversion.**

High levels of Extraversion have been positively related to higher frequency of Facebook self-presentation behaviours such as updating statuses or uploading pictures. They are also more likely to click on self-presentational buttons like the 'like', 'share', or 'comment' buttons (Lee et al., 2014). Extraverts who use Facebook to develop online social networks disclose more intimate and personal information than other users (Hollenbaugh & Ferris, 2014), and more extraverted persons make an attempt to maintain an authentic representation of the true self in the online presence (Michikyan, Subrahmanyam, & Dennis, 2014). Unfortunately in possible employment



situations, this may count against the extravert. Stoughton et. al. (2013) found that reported substance abuse postings positively correlate with extraversion in students.

Chen and Marcus (2012) looked closer at how extraverts self-present, and found that holding an individualistic or collectivistic self-construal played a part. Their results indicated that extraversion is positively related to the amount of information that is disclosed on Facebook, and that those who are low in extraversion while holding allocentric self-construal will disclose the most audience-relevant information. However, this group also disclosed the least honest information online and was less inclined to disclose information offline. Introverts may be expressing their need for exploration in response to self-doubt (Michikyan, Subrahmanyam, & Dennis, 2014), and so find it easier to express themselves in a less directly threatening environment, like Facebook.

### **2.8.3 Openness to experience.**

In contrast to Extraversion, Openness to experience is a negative predictor of clicking the 'Share' button (Lee et al., 2014), but more research is required to determine reasoning for this negative relationship. It may be specific to the content of the post being 'shared', as those people higher in Openness disclose more self-information on Facebook. Not surprisingly, Openness to experience also reflects the tendency of an individual to post a greater breadth of information (Hollenbaugh & Ferris, 2014).

### **2.8.4 Agreeableness.**

Agreeableness has been found to be positively related to the perceived ability to modify self-presentation on Facebook as it is positively related to the need to belong as well as public self-consciousness online (Seidman, 2013; Sun & Wu, 2012). This corresponds with the facet trait of Straightforwardness which may be high in an

Agreeable person, which implies their tendency to be sincere, frank, and ingenuous (P T Costa & McCrae, 2010). Self-reported Agreeableness has been positively correlated to the number of photos posted on Facebook as well as the emotional expression by one's Facebook friends. The approachability and likability of someone scoring high on Agreeableness allows more friends to post on their walls (Ivcevic & Ambady, 2013).

Low Agreeableness has been associated with self-disclosure of greater amounts, while high agreeableness was associated with greater depth in the information disclosed. Amount of disclosure is suggested to be associated with attention-seeking behaviour, while depth of information is motivated by the desire to meet new people (Hollenbaugh & Ferris, 2014). Ivcevic and Ambady (2013) support this and found that those lower on agreeableness have more back-and-forth conversations online. Those who are low in Agreeableness may be more likely to present with the calculating, strategic actions that are associated with Machiavellianism. These individuals have a higher likelihood of cheating and using false information. The goal for presenting a false self here is self-oriented and has to do with gaining resources or personal comfort (Rosenberg & Egbert, 2011). Not surprisingly, those with relatively low agreeableness and conscientiousness were found to display online badmouthing behaviour (Stoughton et al., 2013).

In the research, Narcissism was found to be a significant predictor of self-promotional and superficial self-presentational tactics on Facebook (Mehdizadeh, 2010). This can be done via self-promoting profile pictures in which the user looks physically attractive, status updates, notes and other photos that promote the user's positive traits (Kapidzic, 2013). In another study, Narcissism was positively associated with updating their status frequently (Lee et al., 2014). This behaviour attracts attention to

the individual and can trigger responses and admiration from other users in the form of ‘likes’ or admiration (Kapidzic, 2013).

### **2.8.5 Conscientiousness.**

Low conscientiousness is a good predictor of the amount of information disclosed via self-presentation, while high conscientiousness predicts a cautious approach to self-presentation (Hollenbaugh & Ferris, 2014; Seidman, 2013), including badmouthing behaviour (Stoughton et al., 2013). In fact, highly conscientious individuals are less likely to write ‘Comments’ (Lee et al., 2014), which supports Ryan and Xenos (2011) in their findings that these individuals spend less time using Facebook. Less conscientious individuals, who are motivated by the opportunity to foster new relationships on Facebook, may disclose information of greater depth (Hollenbaugh & Ferris, 2014).

## **2.9 Concluding Remarks**

The research that is available at present displays the rich interrelatedness of the ways individuals self-present with the personality traits they possess. In this chapter, the Dramaturgical model explained Goffman’s (1990) analogy of self-presentation and the current review introduced Facebook as a new stage on which to interact within this model. The specific characteristics of Facebook self-presentation were listed as in context of the advantages and disadvantages of online communication. Finally, personality was considered as an important factor as a part of this self-presentation on the Facebook platform and the Five-factor model of personality traits was used to begin to explore traits included in this study. The following chapter will provide an elaboration on the methodological approach that was employed in conducting this review.

## **Chapter 3: Research Methodology**

### **3.1 Chapter Overview**

The methodology of the present review is outlined in this chapter. Firstly, it provides a revision of the context of the research, including the research question, aims, and objectives, followed by a description of the implications of the review for cyberpsychology. It continues to clarify the methodological procedure that was followed to complete the review by describing the target population and then explaining the processes that were implemented. Trustworthiness of the review is discussed thereafter.

### **3.2 Context of the Research**

The growing field of cyberpsychology and the impact of self-presentation on subjective well-being (J. Kim & Lee, 2011) calls for a better understanding of the impact of personality on the ways individuals self-present on Facebook. This review aimed to gain insight into the dynamics involved between personality factors in individuals and their behaviour related to self-presentation on Facebook, by collating and evaluating the current available research. In this section, the problem statement and motivation for the study is elaborated on. Thereafter, an explanation of the aims and objectives follows, and the implications for psychology are explored.

#### **3.2.1 Problem formulation and motivation.**

The purpose of this study was to explore and describe the presentation of the self on Facebook, when considering the personality traits of users. The study is theoretically embedded in Goffman's (1990) dramaturgical model of self-presentation as it relates to the theoretical analysis of interactive behaviour in relation to the intent and sincerity of expressed communication, as well as the Five-factor model of

personality (Digman, 1990) as a widely accepted structure of personality. Literature on the subject was reviewed to formulate a summative understanding of the body of available knowledge. It was then possible to align this understanding with the ways in which individuals self-present via Facebook and establish an understanding of these personality dynamics within the broader online environment. This includes trans-disciplinary applications within the field of cyber citizenship to areas such as information technology, law and policy-making, philosophy, education as well as business management. No such a systematic review has been performed to date, and the necessity for this review is inherent in understanding the cyber psychological phenomena involved in self-presentation on social networks such as Facebook. As a contribution to the emerging field of cyberpsychology, this review may inform research within many fields of the wider theme of cyber citizenship. Therefore, the research question this review aims to address is: How does personality impact upon the way in which individuals self-present on Facebook?

### **3.2.2 Aims and Objectives.**

The aim of this study was explore and describe the presentation of self on the online environment of Facebook through the utilisation of the available literature by means of a systematic review. More specifically, the objectives of the research involved the exploration of personality, and each personality trait in the Five-factor model, and its effects on individuals' self-presentation on Facebook.

In more detail, the objectives were considered as the following research questions:

RQ1: How do personality traits impact upon the way in which individuals self-present on Facebook?

RQ1.1: How does the personality trait, Neuroticism, impact upon self-presentation on Facebook?

RQ1.2: How does the personality trait, Extraversion, impact upon self-presentation on Facebook?

RQ1.3: How does the personality trait, Openness to Experience, impact upon self-presentation on Facebook?

RQ1.4: How does the personality trait, Agreeableness, impact upon self-presentation on Facebook?

RQ1.5: How does the personality trait, Conscientiousness, impact upon self-presentation on Facebook?

The above research questions guided the themes that were considered during the meta-synthesis of the data from the results of the review's search.

### **3.2.3 Implications for Cyberpsychology.**

A collation of the available knowledge of how individuals manage impressions on Facebook within the normal and abnormal sense, may guide further studies in terms of analysing online self-presentation in relation to personality traits (Lee, Ahn, & Kim, 2014). It may also have predictive value in the moderation of content on Facebook, and aid the understanding of how personality traits relate to dishonest or deviant self-presentation in the online environment. This information can also provide valuable insights to inform an updated theory of self-presentation (Rosenberg & Egbert, 2011).

### **3.3 Research Method**

The study takes the form of a systematic review. This entails the systematic identification and analysis of research on a specified topic, in order to gather and integrate relevant findings to answer a specific research question, namely, how do

personality traits impact the way in which individuals self-present on Facebook? The findings were integrated in a methodical manner in order to minimise the risk of bias, by reporting upon the processes involved in analysis (Schlosser, 2007). The systematic nature of this kind of review intends to not only bring about a summarised compilation of the available research, but also to identify gaps or contradictions in that pool of data (Petticrew & Roberts, 2006). The method requires a clearly formulated research question, as above, in order to focus the identification of relevant and adequate studies to include. The quality of these articles was appraised by both the reviewer and an independent reviewer by utilising explicit methodology which resulted in an evaluation and interpretation of the research (G. Ryan, 2010). The details of the independent reviewer in question can be found in Appendix G.

Schlosser (2007) associates the quality of a systematic review with certain internationally accepted standards. These include that the protocol used is developed prior to the study and that this serves as a 'road map' by directing the procedures used in conducting the review. Such a protocol is listed in this section of the review report. Adherence to this protocol is of critical significance in avoiding bias. The procedure suggested by Hemingway and Brereton (2003) was used namely, defining an appropriate question or topic; searching the literature; assessing the studies; combining the results; and placing the results in context. Following a description of each section of this procedure, the trustworthiness measures used in the review are discussed in the following section.

### **3.3.1 Target Population.**

Keywords guided the search for appropriate data as part of the rigorous process of the systematic review. These search terms are documented below in table 4.1, and specified in Appendix A.

Self-Presentation		Personality Trait OR		
OR				
Image				
Management OR	AND	Five-factor Model OR	AND	Facebook
Impression				
Management				

**Table 4.1: Search terms used to collect data**

Due to the structure of the Five factor model of personality (P T Costa & McCrae, 2010), the initial search was followed by five additional searches, allowing the researcher to hone in on studies which include specific traits instead of general personality. This method supported the process of meta-synthesis that was guided by the five part model. In anticipation of the required themes for the synthesis of the data, as guided by the study's research questions, each trait was included as search terms. The narrower search terms were informed by the personality traits in the Five-factor model as below. The following keyword searches were used to collect data (See Table 4.2).

The sample of data was drawn from databases for journals, articles, as well as internet-based documents. The Millennium Web Catalog (as part of the greater South East Academic Libraries system) was used as a springboard to access the above-mentioned articles, as it allows access and powerful searches through various databases to available research and information.

The results of the search (n=469) were subjected to screening and inclusion criteria to ultimately include N=37 articles for review. The details of this screening process can be found in Chapter 4 in the Research Output section



Self-Presentation		Openness to		
OR		Experience		
		OR		
		Conscientiousness		
		OR		
Image	AND	Extraversion	AND	Facebook
Management OR		OR		
		Agreeableness		
Impression		OR		
Management		Neuroticism		

**Table 4.2: Additional search terms to collect data**

Resources were located at the EBSCOHost online referencing system, which includes several databases such as Academic Search Complete, Communication and Mass Media Complete, MasterFile Premier, PsychInfo as well as the EBSCOHost eBook Collection and E-Journals section. Furthermore, databases including Taylor and Francis Online, ScienceDirect, and SAGE, were used to find additional resources.

The data was collected on the 7 August 2015 as described below, explicit inclusion and exclusion criteria were applied to determine the studies used. Moher et. al. (2009) suggest the use of the PRISMA flowchart to document the identification, screening, eligibility and inclusion of records (Appendix F). This process and criteria are described in the following section that explains the procedure followed to complete the review.

### **3.3.2 Procedure.**

A systematic review requires accuracy and clear structure (Wardlaw, 2010) in order to ensure that a succinct description of the large quantity of data is presented in a way that is useful. The following steps allowed the reviewer to follow a methodical approach (Hemingway & Brereton, 2009):

### ***3.3.2.1 Defining a question.***

Hemingway and Brereton (2009) emphasise the need for a clear statement of objectives for a review. Defining a specific research question involves the formulation of a hypothesis and the investigation into whether this research is actually required. Petticrew and Roberts (2006) agree that specifying the question the review aims to answer is a fundamental step, which provides guidance for the review.

The aims and objectives for the review were outlined in detail and the focus of the study was directed by these goals. The purpose of the review was inherent in deciding on the topic in question, and therefore the rationale for the study was important when formulating and defining a research question. Specific questions were included in the initial phase of the review in order to guide searches and criteria for including or excluding articles. Furthermore, the clearly delimited research question is also mentioned as an important appraisal consideration. This is used to reliably select relevant sources (Schlosser, 2007).

For this study, a hypothesis was formulated that stated that personality traits would have a significant impact upon Facebook self-presentation in different ways. The research question that guided this study was: *RQ1. How do personality traits impact the way in which individuals self-present on Facebook?* As mentioned above, the following distinctive sub-questions were included to further guide the themes of the review:

How does the personality trait, Neuroticism, impact upon self-presentation on Facebook?

How does the personality trait, Extraversion, impact upon self-presentation on Facebook?

How does the personality trait, Openness, impact upon self-presentation on Facebook?

How does the personality trait, Agreeableness, impact self-presentation on Facebook?

How does the personality trait, Conscientiousness, impact upon self-presentation on Facebook?

### ***3.3.2.2 Searching the literature.***

During this phase, as mentioned above, the research question directed the search for literature to include in the review. Literature was found via databases that include general databases as well as specified databases for the Communication Sciences and Psychology. A systematic approach ensured the organised and methodical selection of keywords and searches for relevant literature. Keywords were based on the concepts involved in the research questions and mentioned earlier.

At this stage, screening of the results entailed the selection of relevant articles for use in the review. Key authors in both fields of Computer Mediated Communication and the Psychology of self-presentation were consulted. All the recent, available research on the topic was identified and included including all sources of peer-reviewed published studies published from 2005 onwards, as well as, unpublished work in the field that was available at the time of the search. Facebook, as part of the internet, is a constantly changing environment, which emphasises the importance of utilising recent research rather than studies from the late nineties (Facebook, 2015). In an attempt to minimise publication and researcher bias, a systematic and thorough selection of articles was applied throughout the review.

This process included pre-determining a keyword list (Appendix A) that guided searches. An extensive literature search requires a multi-dimensional search method.

Therefore, articles were sought via the Nelson Mandela Metropolitan University's online catalogues and these searches were supplemented with external searches. Reference lists of relevant articles were consulted and, as necessary, the inter-library loan system was accessed via the NMMU Library. The initial list of keywords is attached in Appendix A and was amended according to the needs of the research study.

The keywords were used in combinations as illustrated in the three presented columns in table 4.2 and Appendix A. Each search contained the keyword 'Facebook' and a synonym for the keyword 'self-presentation', i.e. Impression or image management. The search was then amended each time with either the term 'five-factor model', 'personality trait' or with each of the personality factors involved, for example 'Agreeableness'.

The sample returned by this search was documented in Appendix B as a list of articles. Schlosser (2007) suggests that the studies be located in a way that minimises publishing bias – where positive results are more likely to be published – as well as language bias and reviewer subjectivity or source selection bias. Through documentation of every step of the process and by the use of a chart, the systematic requirements of this review were supported to avoid, as far as possible, publication, researcher and language biases, as well as minimise clerical error. Further elaboration how these biases were minimised follows in the trustworthiness section at the end of this chapter.

Each article was given a unique reference identification code for use during the review before the sample of selected studies was narrowed down according to the screening criteria.

### ***3.3.2.3 Assessing the studies.***

Literature was included on basis of content and by use of the screening form with inclusion criteria (Appendix C). The review included both South African and international content, due to the emerging nature of the topic locally, but also so as not to dismiss the vast sources of information available internationally. Both quantitative and qualitative studies were included. The reviewer selected the items with information specific to Facebook self-presentation, including the motives and behaviours associated with image- or impression management, excluding literature where the focus is on only the use of Facebook. Furthermore, only articles that refer to Facebook were included in this review, excluding other SNS platforms like Twitter and Instagram. Research that approaches personality from a type perspective was excluded, while only personality traits from the Five Factor model were addressed. International and South African studies were included in the review sample, as were Qualitative studies, (n=3) Quantitative studies (n=32), and reviews (n=2).

Further assessment of the included studies served to check for the eligibility and analysis of the content. Strength of evidence provided by the studies must be assessed to ensure that those included are adequately relevant to contribute to the review's findings (Hemingway & Brereton, 2009). A critical appraisal framework was utilised in the assessment of methodological quality and poor quality studies were excluded, yet reported (Guba, 1981; Hemingway & Brereton, 2009). The use of Critical Appraisal Skills Programme checklists are suggested to answer questions in order to establish if requirements of validity, reliable results, and relevance are met (Burls, 2009). Such a checklist has been adapted to ensure trustworthiness in Guba's (1981) terms, for use in this review and is included in Appendix D.

In addition, an independent reviewer with expertise in the field of cyber psychology research assessed the quality of the studies included in the review. After exclusion of poor quality items, the narrowed sample of included items was documented in Appendix E. A summary of the full screening process - from initial search to the included items - is included in the PRISMA flowchart in Appendix F.

#### ***3.3.2.4 Combining the results.***

With the purpose of the review being to aggregate the findings of all the available research, it is essential for the process to involve evidence synthesis. The evidence is strengthened through a process of bringing together many different interpretations into a single interpretation that points out common features, themes and differences in the research (Barker, 2013). Hemingway and Brereton (2009) suggest meta-synthesis as the technique to use with a sample of non-homogenous qualitative data. Here, a data extraction form (Appendix G) was used to scrutinise the content of articles in order to identify themes in the available research. This grid required information such as the outcomes of the studies, the research design, the sample used, as well as, limitations of each study (Center for Reviews and Dissemination, 2009). Various studies were included into a grid, or database, that guided the structure of the review.

Findings were broken down, examined and essential information was transformed into the results of this review. Therefore, meta-synthesis assisted the reviewer in interpreting the available research in order to bring about the themes that arose, as described below. Noblit and Hare (1988) described 3 stages to the analytical process: The reciprocal stage – recognising themes and ideas that recur; the refutational stage – recognising ideas that go against the common themes; and the line of argument – summary and expression of findings in a statement. These fundamental goals guided the analysis of the collected content.

Petticrew and Roberts' (2006) suggestion of grouping studies according to certain categories was used. The category selected to suit this review was the Big Five personality trait in question. This was done in order to illustrate where the strongest evidence lies regarding each personality trait that was included in the review. Thereafter, themes were identified and discussed according to thematic headings, also guided and structured first by the Big Five personality trait, then by themes that were more general. Such a thematic content analysis was used to describe the current body of knowledge in the context of the research question. This provided information about the specific themes and informed the more general conclusions that were made across all findings.

Elamin, et al. (2009) suggest that the use of database software simplifies the process of data extraction by allowing for the versatility, management, presentation, storage and retrieval of data. The reviewer made use of an electronic data extraction form to compile the database when conducting the review.

The reviewer organised the included articles digitally, while annotations were made and coding was done in order to optimise the analysis process. The purpose for the use of software support was to enable the reviewer to make use of the efficiency and accuracy of computerized processes. An independent coder rated an adequate representation of the included studies in order to facilitate appropriate inter-rater agreement levels to facilitate the reliability of the coding process.

#### ***3.3.2.5 Placing the results in context.***

The end-result of the review is to disseminate the results once placed in context. A concise summary of the findings was used to describe the currently available research, and to recommend future studies, as found in chapter 4 and 5. In this final step, the

aim is to facilitate the reader's insight and understanding of the subject and to present limitations, as well as, validity of the claims made (G. Ryan, 2010).

### **3.3.3 Trustworthiness.**

The value of a systematic review lies in its rigour. Unless it is thorough and fair, its scientific application value is limited. Therefore, the trustworthiness of such a review is paramount, and refers to the purposeful anticipation and minimising of any possible biases, plagiarism, invalidity and unreliability. This section addresses the methods employed to ensure trustworthiness in this review. To ensure trustworthiness the following aspects of the review process were emphasised: credibility, transferability, dependability, and confirmability (Guba, 1981).

#### ***3.3.3.1 Credibility.***

Credibility has to do with the internal validity of the method used. The research method of performing a systematic review has been established as a reliable and high quality form of research due to its transparency, rigour, and replication value (Wiffen, 2011). Various data sources were used to conduct the review, including all databases the researcher had access to at the time of the review. This enhances the sense of congruence with the reality of the data reviewed (Shenton, 2004). To generate inter-rater data and to facilitate the reliability of the coding process, an independent coder rated an adequate representation of the included studies (Schlosser, 2007).

Disagreement and consensus data from the inter-rater communications were documented along with any resolutions of disagreements and the consensus-building processes that were utilised (see Appendix G).



### ***3.3.3.2 Transferability.***

One of the aspects of trustworthiness is the scope of a review that was interpreted as a set of criteria that were carefully considered. Inclusion criteria for the studies that were reviewed aimed to retain heterogeneity in the sample in order to enhance external validity (Shenton, 2004). The reader is informed in this chapter about the scope of the review, as well as any restrictions that may have impacted the data-collection process. Furthermore, the methods and time-period of data collection was described. This information is made available to the reader in an attempt to ensure that the context of the research methodology is understood. Guba (1981) suggests collecting thick descriptive data, as was done during the data extraction from the qualitative and quantitative studies included in this review. The findings of this review consulted international research, but are delivered with context-relevance in mind.

### ***3.3.3.3 Dependability.***

In order for this review to be reliable, systematic documentation of the process is included in order for the study to be replicated. For every action the researcher took to complete the study, documentation is provided to ensure that there is an audit trail for the stability of the study to be checked (Guba, 1981). In keeping with the close ties between credibility and reliability, the independent reviewer also contributed to dependability as suggested by Shenton (2004). Furthermore, the effectiveness of the data-gathering process was evaluated in the discussion section in order to provide a reflective appraisal of the project.

### ***3.3.3.4 Confirmability.***

Audit trails for the data gathering process as well as the thematic analysis process have been included in the study to allow for future researchers to trace the course of the research step-by-step. For a systematic review of the available literature, ethical

considerations included the constant monitoring of possible biases that may impact the reliability and objectivity of the study. As mentioned above, risks of researcher bias must be minimised by making use of a systematic and specified method.

Furthermore, to minimize publishing bias, the principle of including unpublished literature is followed. The researcher avoided these bias pitfalls by making use of the structured methodology and procedure as set out above (Center for Reviews and Dissemination, 2009).

### **3.4 Concluding Remarks**

A systematic review requires a well-documented process that aims to address a distinct research question, specified methods of collecting, appraising and synthesising data in order to provide trustworthy accounts of the available literature on the topic (G. Ryan, 2010). This chapter provided an overview of the methods employed to carry out such a review, including the motivation for conducting this review, the specific aims and objectives, a description of the data included, the procedure followed, as well as the measures taken to ensure trustworthiness of the review. The findings of this systematic review are reported and discussed in the following chapter.

## Chapter 4: Findings and Discussion

### 4.1 Overview of the Chapter

The present review has aimed to explore and describe the impact of personality traits on the self-presentation of individuals that use Facebook, by collating the available research on the topic. The findings of the review are discussed in this chapter by referring first, to the results emerging in the review, as well as a description thereof. Secondly, the themes that emerged from the review process are introduced and elaborated upon. Thereafter, the findings on personality traits are presented in relation to Facebook self-presentation, guided by the emergent themes. The research questions as described in Chapter 3 are addressed by these findings. This review aims to answer the main research question, that is: *How do personality traits impact upon the way in which individuals self-present on Facebook?*

The findings related to each of the five personality traits that were considered as part of the Five-factor model, namely, Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness are then discussed. The emergent themes guide the review in terms of each domain in order to address the following sub-questions:

How does the personality trait, Neuroticism, impact upon self-presentation on Facebook?

How does the personality trait, Extraversion, impact upon self-presentation on Facebook?

How does the personality trait, Openness, impact upon self-presentation on Facebook?

How does the personality trait, Agreeableness, impact self-presentation on Facebook?

How does the personality trait, Conscientiousness, impact upon self-presentation on Facebook?

## **4.2 Research Output**

The present study reviewed 37 published articles (N=37) as part of the sample. The initial keyword search (Appendix A) yielded 469 results (Appendix B), of which 461 were screened and subjected to inclusion criteria, while 8 studies were not available as documents to study. Articles were checked for relevance and duplicates were removed, and the results were narrowed to 72 studies. The inclusion criteria, as specified in Chapter 3 were applied to these articles (Appendix C), and the results were reduced to 37 studies. Therefore, 432 studies were excluded based on their relevance and the inclusion criteria. The selection process is illustrated in a flowchart in Appendix F. The list of 37 articles was compiled (Appendix E) and a data extraction form (Appendix G) was utilised to assist in collating the relevant data to be reviewed.

## **4.3 Description of the Included Studies**

Due to the specific inclusion criteria which was applied to all of the results in this review, all 37 articles contain relevant data regarding the main aim of the review, that is, to explore and describe how personality traits impact upon the way in which individuals self-present on Facebook by means of a systematic review. To address the sub-objectives, each personality trait was considered separately. All but one of the included articles provided data on Extraversion (n=36). The majority of the included articles provided data on Neuroticism (n=34), and Agreeableness (n=35). Fewer of the articles provided data on Openness to Experience (n=20) and Conscientiousness (n=19). All the articles were published in English between 2008

and 2015. Quantitative studies (n=32) and Qualitative studies (n=3) were included, as well as reviews (n=2).

#### **4.4 Emergent Themes**

When addressing the aim of exploring and describing the ways personality traits have an impact upon self-presentation on Facebook, seven themes emerged from the review of the sample data. The themes appear to address different aspects of self-presentation that are addressed in the literature on the topic. Literature has indicated the need for systematic research to be conducted on self-presentation on Facebook in relation to personality traits in order to further understand the relationship between the online self and the offline individual (Mehdizadeh, 2010).

To answer the research questions posed in Chapter 3, the review required a systematic approach. In an attempt to better understand the impact of personality traits upon self-presentation, several aspects of this relationship emerged. Guided by the literature, the following themes of self-presentation arose:

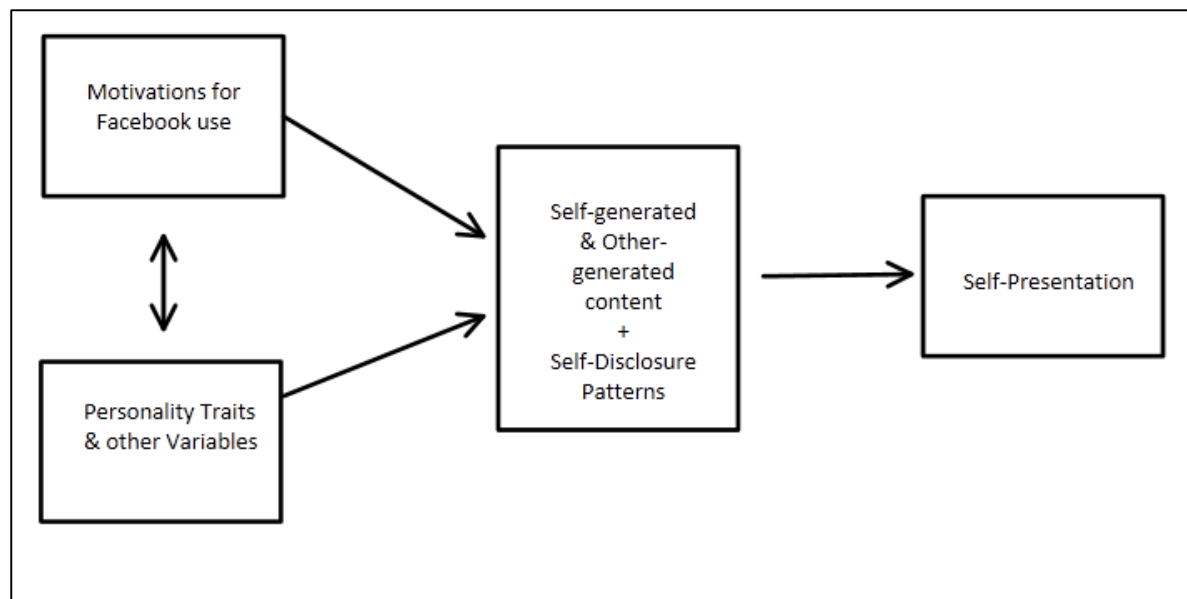
##### **4.4.1 Motivation for Facebook use: a path toward self-presentation.**

Goffman (1959) suggested that self-presentation is motivated by the seeking of approval and the avoidance of disapproval. It appears that Facebook is used to support these motives of self-presentation. Nadkarni and Hoffman (2012) proposed the need for belonging and the need for self-presentation as the two main motivations for Facebook use. Facebook profiles seem to be shaped and motivated by the need for self-presentation, while the need for belonging has to do with variables such as self-esteem and self-worth, and is impacted upon by cultural variable such as collectivism and individualism (B. Chen & Marcus, 2012). These factors are suggested to have an impact upon subjective well-being, and along with self-presentation, impacts the ways in which a user will make use of Facebook. These needs can guide users' specific

behaviours, such as the choice of profile photo and the number of friend connections, which are in line with the user's desired impression formation (Nadkarni & Hofmann, 2012).

The need for belonging and need for self-presentation are influenced by factors such as personality traits, cultural background, and sociodemographic variables. The factors also direct four more specific motives for Facebook use, namely information, entertainment, social interaction, and personal identity (Błachnio et al., 2013).

Motivation and personality traits have been found to both independently, and in mediation, determine the ways in which individuals use Facebook. There seems to be an agreement that an individual's personality will partially determine the motivation for Facebook use, which in turn, impacts upon the individual's Facebook behaviours (Michikyan, Subrahmanyam, & Dennis, 2014; Seidman, 2013). Sun and Wu (2012) proposed that the perception of the ability to manage impressions is similarly driven by motivating forces, including the need to socialize or belong, the trusting intention of others, and perceived self-efficacy. Their study found that personality traits served as antecedents for the above motivations for self-presentation. It can be said that the extent of an individuals' self-presentation is determined by the goals for Facebook usage, which is precipitated by the personality traits of the individual (S. S. Wang, 2013).



**Figure 5.1 – Relationship path between motivation for Facebook use, personality traits and self-presentation on Facebook.**

In this review, the importance of a broader view of the subject is emphasized. The bigger picture suggests that more factors are involved than just personality. A model suggested by the reviewer can be found in Figure 5.1 above. Motivation for Facebook use was one of the main mediators identified in this review, interacting with personality traits and self-presentation on Facebook (Nadkarni & Hofmann, 2012; Seidman, 2013). While the utility of investigating the motives for Facebook use is important, the measurable aspects of Facebook use may assist in beginning to discover differences in self-presentation on Facebook among individuals with different levels of personality traits.

#### **4.4.2 Facebook use.**

Facebook use was considered in relation to self-presentation. For each of the personality traits, the impact upon frequency of Facebook use was considered, as was the time spent on Facebook. It must be kept in mind that time spent on Facebook will not always reflect the use of Facebook, since there is a tendency for some people to use Facebook to merely keep up with others, rather than actually generating content

that can be detected as ‘use’ (Moore & McElroy, 2012). The lay-term for this passive use of Facebook is *lurking* or *creeping* (Krasnova, Wenninger, Widjaja, & Buxmann, 2013). Because Facebook is a social networking platform, the number of friends a user has was also considered as a construct that provides information about Facebook use.

The self-presentation an individual may engage in is manifested in the content that is generated by the user himself or others, in the patterns of the nature or amount of that content, and the management thereof. How users use Facebook also plays a role. The different features that are utilised on Facebook have different implications for self-presentation, and bring into consideration aspects of subtlety of self-presentation, ease of use of features, and other choices made when using one feature over another (A. D. Smock, Ellison, Lampe, & Yvette, 2011). For the purposes of this review, the reviewer categorised the content found on the Facebook profiles of users into two categories based on the source of the content, namely, self-generated content vs. other-generated content.

#### **4.4.3 Self-generated content.**

Self-generated content includes the static information that is strategically placed on a user’s profile, for example, on the About Me or Information Pages. Included here are broadcast content (i.e. photos and status updates), directed content (private messages, or wall posts), and response actions toward others’ content (comments, tagging or untagging, likes, and shares). In this review, the choices made by users to make use of features referred to above will give information on the ways in which different personality traits impact on self-presentational choices in the Facebook environment.

Self-generated content can then be brought into line with the dramaturgical (Goffman, 1959) expression that is *given*, and is explicit information that is posted



with the intent of managing one's impression to a lesser or greater extent. Self-generated content can also exude, or *give off*, implicit information, for example, the background to a photograph can give clues to the audience of a user's location, even if one does not use the *check-in* feature to log location information (Qiu, Lu, Yang, Qu, & Zhu, 2015). The *given off* expressions can originate from information that is not directly generated by the user, but contributes to the user's impression by association. This review referred to this information as other-generated content.

#### **4.4.4 Other-generated content.**

In the Facebook environment, a user's social network co-creates the content that is available to explore. This means that other users and the Facebook system can contribute to the impression that is formed of a specific user. Other-generated content includes the responses received to a user's content (received comments, likes, and shares), number of friends, as well as the consumption behaviours of others' content on Facebook by lurking. System-generated content is also included in other-generated, but minimal mention is made of it in this review due to poor representation thereof within the data. Users' level of self-disclosure and personality can be rated by observing both self- and other-generated content on users' profiles (Marriott & Buchanan, 2014; Ong et al., 2011).

Other-generated content contributes to the implicitly expressed information surrounding a user (C. Lang & Barton, 2015) and can be likened to Goffman's (1959) 'given off' information about the self. For example, the number of friends a user has may not be actively managed, but observers may make assumptions based on this information, for instance, about their level of Extraversion (Hall, Pennington, & Lueders, 2013). Users manage other-generated content as a part of impression management via repudiative strategies and subtractive techniques such as making

comments, untagging themselves from pictures, or deleting posts (C. Lang & Barton, 2015).

The nature of the content, for example, an embarrassing picture of the user as opposed to a regular picture of the user, will likely guide a user's decision to manage other-generated content, depending on whether the content supports or contradicts the user's intended self-presentation. While the frequency of use of different types of features on Facebook is valuable to investigate, the nature of the self-disclosure gives more richness to the understanding of how individuals self-present. If the features on Facebook are the *props* that users use to present their character, then the nature of self-disclosure may reflect the character of the actor's expressions to fit into Goffman's (1990) dramaturgical model.

#### **4.4.5 Nature of self-disclosure.**

While the dramaturgical model (Goffman, 1990) of self-presentation was used to conceptualise this review's understanding of self-presentation, the literature suggests that exploration of the relationship between personality traits and self-presentation in a Facebook context requires investigation into the specific factors involved in self-presentation.

On Facebook, self-disclosure has been considered in terms of amount, depth, breadth, intensity, intent, honesty and valence (Hollenbaugh & Ferris, 2014, 2015). Each of these factors is discussed here, in reference to content that is generated and published by the user. Furthermore, each of the features that are utilized on Facebook play a role in self-presentation, while other- or system-generated content and the management thereof gives more information on how users manage impressions.

#### **4.4.5.1 Amount.**

Amount of disclosure is the dimension that describes the number of self-disclosures made on Facebook, and is a concrete and measurable construct (Hollenbaugh & Ferris, 2014). This construct is measured as the frequency of status updates or of posts on a thread (Mehl & Eid, 2014; Ong et al., 2011). This construct is not to be confused with the frequency of Facebook use, which may refer to time spent simply browsing, or using communicative functions of Facebook, rather than generating or managing content (McKinney, Kelly, & Duran, 2012).

#### **4.4.5.2 Depth and breadth.**

Depth of disclosure refers to the extent to which the content of the disclosure is intimate or personal, while breadth of disclosure describes the variety of the topics that are included in the disclosures (Hollenbaugh & Ferris, 2014).

#### **4.4.5.3 Intensity.**

Intensity is described as the emotional attachment to Facebook when it is used for self-presentational purposes and can be determined by investigating the extent to which Facebook is integrated into the daily activities of the user (Sun & Wu, 2012). The concept of intensity also applies to self-disclosure in the form of *check-in* on Facebook (see Glossary in Appendix I), and refers to the extent to which a user engages in checking in (S. S. Wang & Stefanone, 2013; S. S. Wang, 2013). The act of checking in implies a greater sense of integration of Facebook into daily activities, by sharing information about the user's whereabouts and activities.

#### **4.4.5.4 Intent.**

Intent refers to the extent to which users are aware of the communication of personal information (Hollenbaugh & Ferris, 2015; Wheelless, 1978). This construct

has not been widely studied (Hollenbaugh & Ferris, 2015). Therefore it has been included in this review to possibly shed some light onto its role in self-disclosure on Facebook.

#### **4.4.5.5 Honesty.**

The honesty or accuracy dimension of self-disclosures refers to the authenticity and truthfulness of the content that is posted. As a construct independent from Facebook, honesty is associated with the personality trait of Conscientiousness (P T Costa & McCrae, 2010). The question of authenticity in users' self-presentation has been the guide of several studies since the use of SNS took off. It is considered in different forms, including high levels of honesty of explicit self-disclosures in content and an overall consideration of the self that is presented – ideal, actual, or false self (Back et al., 2010; Marriott & Buchanan, 2014; Michikyan, Dennis, et al., 2014; Seidman, 2013).

#### **4.4.5.6 Valence.**

Lastly, valence has to do with the extent to which positivity is included in self-disclosures (Hollenbaugh & Ferris, 2015). Again, this construct is applied to different features of self-presentation. Hollenbaugh and Ferris (2015) considered valence of Facebook posts, while Qiu et. Al. (2015) focussed on the emotional positivity displayed in *selfies* in relation to personality traits.

From the self-presentation behaviours of individuals, certain cues become associated with each personality trait and possibly enable observers to accurately detect and estimate the trait in users.

#### 4.4.6 Accuracy of personality detection.

Goffman (1959) refers to self-presentation in two parts, including the presentation that is expressed by the *actor*, and the presentation that is perceived by the *audience*. In the Facebook environment, self-presentation reflects these two parts as well. Users are able to self-present by use of their self-generated and other-generated content, while their friends and other observers perceive the presentation in a certain way. Therefore, there is significant value in this review to attempt to understand how these two parts interact. In other words, it attempts to answer the question: Is the personality that is impacting upon self-presentation perceivable by observing only the self-presentation displayed on a user's Facebook profile? Here, the *audience* can check in with the information that is both *given* and *given off*, in order to make assumptions about the impression they form of the communicator (Goffman, 1959).

The idea that authentic personality can be reflected by users' Facebook profile pages was supported through the utilisation of cues found in profile pictures, status updates, and other segments of user-generated content (Eftekhar, Fullwood, & Morris, 2014; Hall et al., 2013; Nadkarni & Hofmann, 2012; Qiu et al., 2015; Wu, Chang, & Yuan, 2014). These studies also found that online observers could rate a user's personality traits similarly to a self-rating on most traits, even in cases of zero-acquaintance.

Certain personality traits have shown to be revealed through cues left by users either consciously or unconsciously. Observers detect and estimate traits in users by looking at their Facebook profiles (Back et al., 2010; Buffardi & Campbell, 2008; Hall et al., 2013; Hall & Pennington, 2013; Marriott & Buchanan, 2014; Qiu et al., 2015). These cues can be misleading at times, since observers can utilise incorrect cues for estimating and rating traits, and neglect to utilise the cues that do leave clues

about users' personality (Hall et al., 2013; Qiu et al., 2015). The diagnostic cues and the observers' ability to accurately detect the trait from the Facebook profiles they peruse, are briefly reported for each personality trait. While it appears to be significant to address the visibility of personality traits from the self-presentation strategies in Facebook profiles, integration of relationships between more specific and complex aspects of personality and self-presentation is also regarded as significant

#### **4.4.7 Interrelatedness, complexity and specificity of the variables.**

Combinations of the Big-5 traits have been considered on two-dimensional planes, for example, the affective plane where Neuroticism and Extraversion levels are considered together (P T Costa & McCrae, 2010). In this review, some findings were based on combinations of traits that make up a broader view of an individual by considering more than one dimension of their personality (Hollenbaugh & Ferris, 2015) .

In addition, the facet traits of the five main domains may be considered as separate and meaningful constructs of their own accord, in relation to Facebook self-presentation variables. Sun and Wu (2012) suggested that the five broad domains described in the Five-factor model may be too abstract and broad to understand specific behaviours on Facebook, and recommended the use of more concrete, specific personality facets. The information available from the consideration of facet trait scores can be valuable in interpreting constructs and behaviours (P T Costa & McCrae, 2010). Few studies included in this review provided such a close view of individuals' personality traits (Błachnio et al., 2013; Fernandez, Levinson, & Rodebaugh, 2012; Hollenbaugh & Ferris, 2014; Krämer & Winter, 2008; Nadkarni & Hofmann, 2012). This may be a feasible reason for some of the inconsistencies in the results from study to study, as found in this review.

In the same way, looking at the generalized use of Facebook may not be as useful as specifying the tools that are available on Facebook (A. D. Smock et al., 2011). When the specific aspects of Facebook use were considered, the results from Moore and McElroy (2012) found that different parts of Facebook are impacted upon by personality in unique ways. For instance, the number of photos uploaded was not significantly predicted by the personality traits of the user, but personality explained significant portions of the variance for time spent using Facebook, the actual number of Facebook friends, the amount of self-generated postings and postings about others, and user perceptions of regret over inappropriate Facebook content (Bodroža & Jovanović, 2015; Moore & McElroy, 2012). The specific content that is posted onto Facebook, and its meaning, is suggested to form part of future qualitative studies, rather than just the objective measures and reported frequency of use of different features available on Facebook (Seidman, 2013). Some authors suggested the importance of studying actual Facebook usage, rather than self-reports of Facebook usage in order to collect more reliable data (Bodroža & Jovanović, 2015; Moore & McElroy, 2012).

While individuals possess unique and complex combinations of personality trait levels (P T Costa & McCrae, 2010), considering each trait separately provides information about how personality traits impact upon self-presentational behaviour. The five domains of personality that guided this review bring into view the results of the literature in relation to each of them.

#### **4.5 Findings**

In order to address the research question *RQ1: How do personality traits impact upon the way in which individuals self-present on Facebook?*, the current review

investigated the available literature in terms of its contribution to better understanding the impact that personality traits have on Facebook self-presentation.

Personality has been identified by numerous studies to have an impact upon the ways individuals self-present on Facebook (Amichai-Hamburger & Vinitzky, 2010; Back et al., 2010; Błachnio et al., 2013; Hollenbaugh & Ferris, 2014; Marriott & Buchanan, 2014; S. S. Wang, 2013). Self-presentation was found to be characteristic of those with lower levels of Agreeableness and Neuroticism, and higher levels of Openness to Experience (Bodroža & Jovanović, 2015). Low to moderate relationships between personality traits and Facebook self-presentation suggested that more specific variables are to be considered when attempting to explain and understand how self-presentation is determined (Bodroža & Jovanović, 2015). For example, specific factors such as narcissism and shyness have been suggested to be influential in self-presentational activity on Facebook (Ross et al., 2009). Other variables that require further review include age (C. Lang & Barton, 2015; Qiu et al., 2015), gender (C. Lang & Barton, 2015; Mehdizadeh, 2010; Moore & McElroy, 2012; Nadkarni & Hofmann, 2012; Qiu et al., 2015), Facebook experience (Eftekhar et al., 2014; Moore & McElroy, 2012), self-esteem (Błachnio et al., 2013; Hollenbaugh & Ferris, 2014; Krämer & Winter, 2008; Nadkarni & Hofmann, 2012), self-efficacy (Błachnio et al., 2013), and self-objectification (Fox & Rooney, 2015).

For each personality domain included in the Five-factor model, the findings are presented and discussed in relation to the themes that have emerged in the review. The personality domains are Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Each section below aims to address the research objectives pointed out above, in relation to each trait domain.



#### **4.5.1 Neuroticism.**

*How does the personality trait, Neuroticism, impact upon self-presentation on Facebook?*

The Neuroticism domain refers to the users' level of emotional stability. High levels of Neuroticism would indicate a tendency to be anxious or emotionally unstable when compared to low levels of Neuroticism, which indicates less reactivity to stress and higher emotional stability. Facet traits that fall within this domain include levels of an individual's tendency to experience anxiety, anger, depression, self-consciousness, impulsivity and vulnerability (McCrae & Costa, 2003). The Neuroticism domain was featured in n=34 of the articles included in the study.

##### ***4.5.1.1 Motivation for Facebook use.***

Motives for Facebook use play a role in determining self-presenting behaviour on Facebook. Undergraduate students (N=184) who were higher in Neuroticism used Facebook as a safe space for self-presentation, a way to meet belongingness needs to supplement offline relationships, and a passive way to learn about others (Seidman, 2013).

Neuroticism was found to be a significant predictor of self-presentational needs (Błachnio et al., 2013), especially in terms of displaying different facets of the self (Seidman, 2013). High Neuroticism was found to be one of the best predictors of the need for self-presentation among 97 students in Southwestern Ontario (Błachnio et al., 2013; Ross et al., 2009; Seidman, 2013). High levels of Neuroticism were positively associated with behaviours driven by the need for self-presentation, including general self-disclosure, emotional disclosure, and presentation of actual, ideal, and hidden aspects of self (Seidman, 2013).

Interestingly, a recent study (N=301) of Facebook users motives found no significant relationship between Neuroticism and motives for Facebook use such as companionship, virtual community, exhibitionism, relationship maintenance, or passing time (Hollenbaugh & Ferris, 2015). High Neuroticism was one of the best predictors for the need for belongingness. High levels of Neuroticism were positively associated with information-seeking behaviour on Facebook, but not with communication or acceptance-seeking – both behaviours driven rather by the need for belongingness (Błachnio et al., 2013).

#### ***4.5.1.2 Facebook use.***

Nadkarni and Hoffmann (2012) found in their review of evidence-based articles (N=42), that high Neuroticism is associated with high Facebook use. Emotional stability was negatively related to time spent on Facebook, suggesting that students from a Midwestern university (N=204) with higher levels of Neuroticism spent more time on Facebook (Moore & McElroy, 2012). More recently, time spent on Facebook was found to be unrelated to Neuroticism in a sample of 261 students in Southern California. The authors suggested that those high in Neuroticism may spend similar amounts of time on Facebook now due to the more commonplace mobile accessibility of Facebook (Michikyan, Subrahmanyam, et al., 2014). The negative relationship between Neuroticism and time spent on Facebook specifically to keep up with others, alludes to the impact that motives for Facebook use may have in mediating the effect of Neuroticism on time spent on Facebook. Despite being found to spend more time using Facebook, users higher in Neuroticism may not spend this time necessarily keeping up with others. No significant relationship was found between Neuroticism and the actual number of Facebook friends (Moore & McElroy, 2012). This study

pointed out Extraversion as a domain which impacts upon the number of friends more than Neuroticism.

#### ***4.5.1.3 Self-generated content.***

Individuals seem to make use of certain features of Facebook as opposed to others, in relation to emotional stability. From a survey administered to students in China (N=265), high Neuroticism was positively related to the use of status updates as a means of self-expression (J. L. Wang, Jackson, Zhang, & Su, 2012), and an explanation was offered that higher levels of Neuroticism may require for a user to feel more in control of self-presenting information. Therefore, status updates can be an appropriate way to self-express, because it allows for the user to limit information and take their time to consider what to include. For the same reasons, Neuroticism has been found to be significantly positively related to a preference for Facebook wall use, as opposed to uploading photos (Błachnio et al., 2013). When the content of status updates was considered in another study of a student sample, no significant relationships were found between Neuroticism and *posting* about the self or others (Moore & McElroy, 2012). Users' levels of Neuroticism correlated positively with two cues found in the *status update* content of students (N=28) and non-students (N=72). These cues were the use of laughter in status updates (e.g. haha), and the use of extended letters (e.g. chillllllll) (Hall et al., 2013). This may be explained by users' higher levels of impulsivity and vulnerability as shown by these extra in-text expressions.

Neuroticism has also been found to negatively predict the writing of *comments* among N=236 students from Hongik University in the Republic of Korea, perhaps due to a lack of control that triggers anxiety for those high in Neuroticism (Lee et al., 2014). The trait was found to be significantly correlated to having no information

posted on the information page of users (Fernandez et al., 2012). Those who have higher levels of Neuroticism may, due to their higher levels of anxiety, dwell on what may go wrong if they place personal information on the information page, and so prefer to keep such detail private (P T Costa & McCrae, 2010).

When photos are considered, the relationship with Neuroticism is not clear, but seems to be guided by specific types of photo activities rather than general photo activity. No significant relationships were found between Neuroticism and number of photos (Moore & McElroy, 2012). Low Neuroticism was subsequently related to a preference for using pictures on the Facebook profile, rather than the Facebook *wall* which users higher in Neuroticism prefer (Błachnio et al., 2013). Photos may *give off* more information than users wish to, and they may feel more in control when using text-based features. Another study found that high Neuroticism in a student sample (N=115) in Wolverhampton, UK, was predictive of a greater total number of photos uploaded, as well as a higher average number of photos per album (Eftekhar et al., 2014). The authors ascribe these results to the self-presentational goals of some users that are higher in Neuroticism. Differing motives and facet levels may help to explain these inconsistencies, while the use of different parts of Facebook (profile vs. albums) may explain further variance. Additional research is required to explore this. Wu et al. (2015) found insignificant differences between profile picture categories of those higher in Neuroticism and those of other personality trait holders in a snowball sample of 109 Facebook users. They found personality factors to be less influential on picture categories than other variables like narcissism and gender. High self-reported Neuroticism ratings were associated with *duckface* (see Glossary in Appendix I) cues in *selfies* of N=123 randomly selected internet users in China (Qiu et al., 2015). Posing with a *duckface* may be perceived by the user as a way to promote a more attractive or

socially desirable impression, therefore those with higher levels of neuroticism may use this cue in support of their need for belonging or self-presentation.

#### ***4.5.1.4 Other-generated content.***

Neurotic individuals may use Facebook more to keep up with others - without the social difficulties associated with FtF interactions (Seidman, 2013). They may be more likely to *lurk* (see Glossary in Appendix I). From the reviewed literature, this is the only connection found between Neuroticism and other-generated content. Hall, et. al. (2013) found no other-generated cues that were observable and diagnostic of Neuroticism on the profiles of 100 Facebook users. For Neuroticism, the focus seems to be on self-disclosure in self-generated content. More specific research in this regard is suggested.

#### ***4.5.1.5 Nature of self-disclosure.***

Neuroticism has a curvilinear relationship with the amount of sharing of basic information on Facebook. Those low or high in Neuroticism will share more basic information, while those who have average levels of Neuroticism will share less basic information (Amichai-Hamburger & Vinitzky, 2010). High Neuroticism is also positively associated with the willingness to share personally-identifying information (depth) among students (N=237) at an Israeli university, and negatively related to regret about posts among students (N=204) at a Midwestern university, USA (Amichai-Hamburger & Vinitzky, 2010; Moore & McElroy, 2012). These surprising results require more research into what kind of content leads to regret in emotionally stable persons, while the reviewer suggests that a possible explanation may have to do with stricter privacy settings among those who are more anxious, acting as a protective factor in terms of regret.

Neuroticism was positively related to presenting an authentic version of the self among 523 participants in an online survey, and this relationship was partially mediated by shyness, which significantly correlates with Neuroticism (Marriott & Buchanan, 2014). Michikyan et al. (2014) found no significant predictive value in Neuroticism of presentation of the real self on Facebook. However, Facebook activity level was found to have a significant positive relationship with real self-presentation. Neuroticism was found to be a positive predictor of ideal and false self-presentation on Facebook, with intent to impress or compare to others, but also for deceptive reasons (Michikyan, Subrahmanyam, et al., 2014), yet it did not significantly impact upon honesty, valence or intent in self-disclosures (Hollenbaugh & Ferris, 2015)

#### ***4.5.1.6 Accuracy of personality detection.***

Among all the other personality traits, observing Neuroticism from Facebook profiles of users from Texas, USA (N=133) seems to be the least accurate and most difficult for zero-acquaintance observers (Back et al., 2010). These results were reiterated by Nadkarni and Hoffman (2012), who found that for all five trait domains, except for Neuroticism, accurate impressions could be made from Facebook profiles. The cues used to judge Neuroticism in Facebook users (N=100) were misaligned with actual diagnostic cues associated with the trait (Hall et al., 2013). When online friends were asked to rate users' personality, the results reflected accurate ratings of other personality traits, but not of Neuroticism. Offline friends, however, were able to rate users' Neuroticism similarly to participants' self-report. Neuroticism is suggested to be a less desirable trait that may be hidden more, or simply presented less, in online disclosures than other traits (Marriott & Buchanan, 2014). The reviewer deduces that poor detectability of the trait from Facebook profiles therefore may imply intent on the part of users to manage impressions by censoring content that may make them

seem more emotionally unstable. This may contribute to the insignificant impact that the level of a user's Neuroticism has on their number of friends. If the trait is poorly detected, it may be less likely to impact upon the friend connection – at least from the friend's side.

#### ***4.5.1.7 Interrelatedness, complexity and specificity of variables.***

Impression management appears to require some emotional stability as can be seen in the negative relationship between Neuroticism and self-presentation, when social anxiety is corrected for. Fernandez et al. (2012) studied social anxiety as a more specific facet, alongside the more encompassing domain of Neuroticism, for its detectability in the profiles of 62 undergraduate students from a Midwestern university in the USA. The factor of shyness (akin to the facet trait, self-consciousness) is a mediating factor in the relationship between Neuroticism and presentation of an authentic self (Marriott & Buchanan, 2014). Further discussions on this finding were already mentioned in the section on the nature of self-disclosure.

A wider breadth of self-disclosure is found with those higher in Neuroticism and lower in self-esteem (Hollenbaugh & Ferris, 2014), meaning that a greater variety of topics is included in self-disclosures. The greater depth and breadth of self-disclosure may relate to the facet trait of impulsivity, as well as the motivation to self-present via posts.

#### ***4.5.1.8 Summary.***

The different motives that have been found to positively relate to Neuroticism can be a clue to explaining many of the inconsistent findings regarding Facebook self-presentation. Individuals who use Facebook to fulfil the need to self-present may contribute to the population who express an ideal or hidden self. Those who use

Facebook for belongingness needs, will likely be those who are more interested in the information-seeking qualities of Facebook and may not reflect many detectable variables on Facebook profiles to correlate with, but may point out the positive relationship with Facebook use, or time spent on Facebook (Seidman, 2013).

Due to the facet traits involved in determining the level of Neuroticism of the individual, it is a trait that may impact upon individual users uniquely. Those with higher levels of anxiety about their offline identity, may choose to use Facebook as a safe space to socialize and can present a version of themselves that is altered to appear ideal or even false. Others may be higher on levels of self-consciousness about the possibility of detection of inconsistencies in their impression management, and be hesitant to self-present using a SNS platform. To make the claim that it requires emotional stability to self-present, as suggested previously (Bodroža & Jovanović, 2015), may not be fully inclusive. It appears that, at times, lacking emotional stability may inspire self-presentational needs. This sort of inconsistency is evident in the positive relationship between Neuroticism and the real self, the ideal self, and the false self being presented by more neurotic individuals (Marriott & Buchanan, 2014; Michikyan, Subrahmanyam, et al., 2014).

What can be assumed from these results is that Facebook is certainly a space in which individuals with higher levels of Neuroticism interact or communicate more than more emotionally stable individuals. The results suggest that Neuroticism is more telling from self-generated content than by the way the individual experiences or manages other-generated content, but is not readily detectable by perusal of Facebook profiles only. Future research is required to shed light into the way Neuroticism impacts upon users getting likes, getting comments, and other forms of other-generated content. Furthermore, based on the findings of this review, it appears as if



their methods of self-presenting have less to do with their level of Neuroticism, and more to do with their motives for Facebook use.

#### **4.5.2 Extraversion.**

*How does the personality trait, Extraversion, impact upon self-presentation on Facebook?*

The personality domain of Extraversion refers to an individual's level of gregariousness or warmth. Lower levels of this trait imply an introverted personality who can be described as having lower levels of the facet traits, including gregariousness, warmth, assertiveness, activity, excitement-seeking, and positive emotionality (P T Costa & McCrae, 2010) . Of the included articles, 36 articles dealt with Extraversion.

##### ***4.5.2.1 Motivation for Facebook use.***

Those who are low in Extraversion and those who are high in Extraversion appear to have engaged in more self-exploratory behaviours online (Michikyan, Subrahmanyam, et al., 2014). This may reflect the higher level of the facet trait of excitement-seeking among these users. Higher Extraversion was also associated with communication as a motive for Facebook use (Seidman, 2013). It is suggested that more extraverted individuals use Facebook to actively supplement offline relationships. Accordingly, those higher in Extraversion reported less frequent use of Facebook for the purpose of keeping up with others, compared to introverts (Moore & McElroy, 2012). Bodroža and Jovanović (2015) found a zero correlation between Extraversion and socialization purposes for using Facebook in a sample of 804 Facebook users with varied demographics. They suggest that this result can be explained by the different reasons why individuals use Facebook. More introverted individuals may find the environment to be a safer place where they can function

socially without the intensity of social skills required from FtF interaction. Individuals high in Extraversion appear to be motivated to socialize and meet new people to satisfy their need for interaction (Bodroža & Jovanović, 2015). The motivation for using Facebook for socialization reflects the more extraverted individual's gregariousness - or preference to be sociable - and assertiveness (P T Costa & McCrae, 2010).

#### **4.5.2.2 Facebook use.**

Different degrees of Extraversion have been found to impact upon self-presentation in varied ways. Higher degrees of Extraversion are positively related to high Facebook use (Nadkarni & Hofmann, 2012). Michikyan et al. (2014) found that Extraversion is unrelated to time spent on Facebook, but found a significant positive relationship with activity level on Facebook. More extraverted individuals may be spending less time browsing and lurking on Facebook, but instead performing goal-directed tasks that would leave evidence of their activity on Facebook in the form of posts or comments, for instance. Having a high number of friends is positively related to Extraversion (Amichai-Hamburger & Vinitzky, 2010; Błachnio et al., 2013; Eftekhar et al., 2014; Hall et al., 2013; Nadkarni & Hofmann, 2012)

#### **4.5.2.3 Self-generated content.**

The review found that the number of status updates was positively related to Extraversion among a sample of university students (N=265) in China (J. L. Wang et al., 2012). More extraverted users would post more status updates, make use of more shorthand, extended letters, emoticons and positive affect in status updates. These cues indicated more engagement in self-monitoring and therefore, more self-presentation (Hall et al., 2013; Hall & Pennington, 2013). Individuals who are higher in introversion were also more likely to click *Like*, *Share* or write *comments* and

therefore actively engage in self-presentation on the *Wall* and the *News Feed* (Lee et al., 2014; J. L. Wang et al., 2012). Those users who are higher in Extraversion also reported less regret about Facebook content than those who are lower in Extraversion (Moore & McElroy, 2012). Average levels of Extraversion were related to a higher number of groups the user had subscribed to, that is, a curvilinear relationship was found (Krämer & Winter, 2008). A possible explanation may be that those lower in Extraversion may be reluctant to join groups, while those who are higher in Extraversion may enjoy a large group of friends and find it unnecessary to join groups to extend their social network. Moore and McElroy (2012) found no significant correlation between Extraversion and the number of wall postings uploaded. They also found an insignificant relationship between Extraversion and the number of photos posted among their USA university student sample.

College students from Hongik University, Korea, with higher levels of Extraversion have been found to upload photos more frequently (Lee et al., 2014), and the photos that a varied sample (N=109) chose as profile photos, did not differ significantly from those of individuals with other personality traits (Wu et al., 2014). These results contradict that of Kramer and Winter (2008), who found that choosing a 'different style' when selecting profile pictures for Facebook profiles positively related to higher levels of Extraversion. The dynamics of this method of self-presentation may have changed over time as there is a greater variety of ways in which to self-present, compared to when Facebook was first established (Eftekhari et al., 2014). Those who were found to engage in self-monitoring would have a profile picture at a younger age. Cues in users' profiles suggested that Extraversion is also associated with profile pictures which depict groups, rather than individuals (Hall & Pennington, 2013). When *selfies* were studied separately, it was found that

Extraversion did not relate to any specific cues (Qiu et al., 2015). The most effective diagnostic cues for Extraversion in Facebook users (N=100) were the number of pictures on a profile and the number of friends they had (Hall et al., 2013). Observers may have associated these cues with users' perceived activity and gregariousness facets, respectively. More extraverted adolescents have been found to engage in greater self-presentation than those who are less extraverted through profile pictures, social network sizes, status updates, and photo counts (Moore & McElroy, 2012; Ong et al., 2011).

#### ***4.5.2.4 Other-generated content.***

For the Extraversion domain, not only does self-generated content cue high levels of the trait in the user, but so does other-generated content. Extraverts got more likes and comments from friends on their status updates, and got comments on status updates from a greater number of unique friends (Hall & Pennington, 2013).

#### ***4.5.2.5 Nature of self-disclosure.***

North American university students with low levels of Extraversion were found to disclose the least amount of information online (B. Chen & Marcus, 2012). A lower amount of personal information used was associated with higher levels of Extraversion by Amichai-Hamburger and Vinitzky (2010). These authors suggest that introverts make use of the information posted on Facebook as a means to self-present, while extraverts can rely on their social skills and do not need to self-present. Depth was not considered as much as the amount of personal information in this study of 237 Israeli university students. A more recent study found that high levels on this domain among 301 Facebook users predicted disclosure of more intimate, personal information, that is, information of greater depth (Hollenbaugh & Ferris, 2014). Higher levels of Extraversion were marginally positively related with emotional

disclosure and this relationship was partially mediated by actual presentation of the self (Seidman, 2013). In other words, an individual with higher levels of extraversion is marginally more likely to disclose emotional content on Facebook, if they are presenting a real self on Facebook.

High Extraversion was significantly related with presentation of the actual self, and was unrelated to hidden self-presentation (Seidman, 2013). Interestingly, Hollenbaugh and Ferris (2015) found that the levels of Extraversion did not impact significantly upon honesty or valence of self-disclosure on Facebook. Contrasting results suggest that Extraversion does not significantly predict real self-presentation, but that it is a significant predictor of false self-presentation for self-exploration purposes. (Michikyan, Subrahmanyam, et al., 2014). High levels of Extraversion have also been found to negatively correlate with real online representations of the self (Marriott & Buchanan, 2014). These inconsistencies may be explained by the complex interactions between extraversion's own facet levels or motives for Facebook use, as well as the interrelated workings between extraversion and other traits or variables as mentioned below.

It appears as if Extraversion might not impact upon Facebook *check-in* intensity (S. S. Wang & Stefanone, 2013). These results are in line with that of Hollenbaugh and Ferris (2014) who reported that levels of Extraversion do not significantly impact upon the intensity of Facebook disclosure either.

#### ***4.5.2.6 Accuracy of personality detection.***

If higher levels of Extraversion are associated with greater levels of self-presentation, the reviewer expects that the trait would be easily observed in Facebook profiles or *selfies*. Extraversion levels, along with levels of Openness to Experience were found to be the most accurately detected by observers in several studies (Back et

al., 2010; Hall et al., 2013; Marriott & Buchanan, 2014; Nadkarni & Hofmann, 2012; Qiu et al., 2015). Observers depend on information about social interaction, attempts at humour, number of friends, and posting of pictures to rate Extraversion in users. In *selfies*, observers judged Extraversion by cues like emotional positivity (related to the positive emotions facet), and lower Extraversion ratings were related to the facial cue of pressed lips in photographs. This cue is said to display a sign of shyness and may be related to a lower score on the warmth facet (P T Costa & McCrae, 2010; Qiu et al., 2015). An elaboration on this finding can be found in the next section.

#### ***4.5.2.7 Interrelatedness, complexity and specificity of variables.***

Self-construal in terms of an individual's orientation toward their community, plays a role when valence and honesty of self-disclosure is considered. Students from a North American university (N=463) with a more collectivistic self-construal, who were also low on Extraversion disclosed the least positive information (Chen & Marcus, 2012). Individuals who are low on Extraversion and who are collectivistic disclosed the most information that is audience-relevant and the least honest information online (Chen & Marcus, 2012).

Sun and Wu (2012) explained a hierarchical route to Facebook self-presentation that stems from levels of Extraversion. An individual with higher levels of Extraversion is more inclined to a disposition to trust, which is positively related to trust in the Internet, which in turn is positively related to the perceived ability to modify self-presentation on Facebook and the intensity of Facebook use (Sun & Wu, 2012). It has also been found that the path from Extraversion to Facebook self-disclosure, and then check-in, is significant (S. S. Wang & Stefanone, 2013; S. S. Wang, 2013). Facebook self-disclosure seems to be significantly determined by

attitude about SNS. Extraversion has been found to partially affect users' attitude about SNS (R. Chen, 2013).

Even though users' Extraversion can be accurately detected from Facebook profiles, the diagnostic value of these cues is questionable as they may represent other variables as well. For example, the high self-monitor promotes a successful presentation of Extraversion, since observers tend to use the cue associated with self-monitoring to rate Extraversion. The same applies for those who promote a more conscientious self and also present a more extraverted self in doing so (Hall & Pennington, 2013).

#### ***4.5.2.8 Summary.***

According to the description of the Extraversion domain, higher levels will be motivated by the need to socialize and the need to assert oneself (P T Costa & McCrae, 2010). It appears as if more extraverted Facebook users meet these needs by high Facebook use, while not necessarily spending more time on Facebook. Those who are more extraverted use Facebook to supplement their social relationships, and therefore generate many different forms of content while also successfully inviting content to be generated by others. The social network size of those higher in Extraversion is larger, and this may be why information posted will be more in amount, but less of these posts will be personal. More extraverted users do, however, post information that is more emotionally disclosing, or deep, than less extraverted users. Due to these explicit cues that are associated with the trait domain, the level of an individual's Extraversion can be accurately detected by others by looking at their Facebook profile. Factors like users' motivation for Facebook use, self-construal, disposition to trust, and attitude about Facebook play a role in the interaction between this domain and individuals' methods of self-presentation.

### **4.5.3 Openness to Experience.**

*How does the personality trait, Openness to Experience, impact upon self-presentation on Facebook?*

The domain of Openness to Experience refers to an individual's curiosity about their inner and outer worlds. A higher level of Openness to Experience would mean that an individual lives an experientially richer life than those individuals that have lower levels. A lower score does not indicate hostility or aggression, but rather suggests that the individual will prefer the familiar to the novel, as opposed to the unconventional willingness to entertain new ideas, held by the more open individuals. The facets included in the Openness to Experience domain are indicative of an individual's Openness to Experience to rich experiences in fantasy, aesthetics, feelings, actions, ideas, and values (P T Costa & McCrae, 2010). In this review, 20 studies referred to Openness to Experience in relation to self-presentation.

#### ***4.5.3.1 Motivation for Facebook use.***

More open individuals from a sample of undergraduate students (N=233) tended to use Facebook more frequently to tell friends about themselves (McKinney et al., 2012). Once more, motivation for Facebook use is important in considering the behaviour that is associated with the personality trait.

Since its introduction in 2007, Facebook use has become a common experience among most populations, and the options available on Facebook may fail to be perceived by individuals high in Openness to Experience as new or challenging (Eftekhar et al., 2014). To satisfy the need for novel, interesting, and challenging experiences, individuals (N=265 undergraduate students) who had a more open attitude were more likely to play online games on Facebook (J. L. Wang et al., 2012). While Openness to Experience was not significantly related to the behaviours



associated with the need for belonging and the need for self-presentation in undergraduate students (N=184) in the USA (Seidman, 2013), more recently Openness to Experience has been found to be one of the most significant predictors of self-presentation in a larger sample (N=804) of Facebook users, including 359 students from a Serbian university and 176 students from a Facebook sample, 182 employed individuals, and 87 other participants. While higher Openness to Experience predicted the realistic representation of the self, it also enabled self-presenting individuals to experiment with identities online (Bodroža & Jovanović, 2015).

#### ***4.5.3.2 Facebook use.***

The domain has been positively associated with Facebook use (Ross et al., 2009). This finding is mentioned in the review by Blachnio, Przepiorka, and Rudnicka (2013). Moore and McElroy (2012) could not find any significant findings that suggest that Openness to Experience impacts upon Facebook usage or content. It is the opinion of the reviewer, that this may be another reflection of the way Facebook is now a mainstream part of the lives of individuals. Therefore, it no longer appeals significantly to those who are more curious.

#### ***4.5.3.3 Self-generated content.***

It appears as if an orientation to Openness to Experience does impact positively upon the frequency of posting status updates (McKinney et al., 2012). The review indicated that text in status updates tended to include less shorthand and less extended letter use, while content was more about politics and less about romantic relationships (Hall et al., 2013). Interestingly, high levels of Openness to Experience related negatively to the tendency to click Share (Lee et al., 2014). This phenomenon is unexplained by the authors and further research surrounding the content of shared posts is suggested. More open individuals commented less frequently on others' status

updates. Greater Openness to Experience was associated with cues that reflected an interest in media and art - such as music and books - in the information page (Hall et al., 2013). Individuals with an open attitude were found to make use of more features on the Facebook personal information section (Amichai-Hamburger & Vinitzky, 2010).

Openness to experience has been found to impact positively on the frequency of posting self-focussed photos as well (McKinney et al., 2012). Eftekhar et al. (2014) found no significant predictive value of this trait for photo-related activities on Facebook. Insignificant relationships were found between Openness to Experience and profile picture categories (Wu et al., 2014). Openness in profiles of users were found to be related to fewer friends in profile pictures (Hall et al., 2013). Further research is required to investigate the reasons for this relationship. In *selfies*, Openness to Experience is cued by emotional positivity. The trait was negatively related to normal full face *selfies* and pressed lips, while a positive relationship was found with emotional positivity in *selfies* (Qiu et al., 2015).

#### ***4.5.3.4 Other-generated content.***

The other-generated information that is related to Openness to Experience has to do with the tendency for more open individuals to receive comments from a greater number of unique friends on their own status updates (Hall et al., 2013).

#### ***4.5.3.5 Nature of self-disclosure.***

The more open users are to experience, the more expressive they are on Facebook according to Amichai-Hamburger and Vinitzky (2010). Contrasting results have found that higher levels of Openness to Experience are unrelated to level of self-disclosure, as well as intensity of Facebook check-ins (S. S. Wang & Stefanone, 2013). Higher Openness to Experience in individuals is related to more information

that is disclosed, and breadth is also impacted. A wider variety of topics is covered by posts by people who are more open to experience (Hollenbaugh & Ferris, 2014).

The level of one's Openness to Experience predicts honesty in self-disclosure, plays a direct predictive role with regards to intent, and indirectly impacts upon valence (Hollenbaugh & Ferris, 2015). More Openness to Experience meant that users were more honest, more intentional in self-disclosure, and more positive under the right circumstances. Elaboration on this can be found in the Interrelatedness, complexity and specificity of variables below.

#### ***4.5.3.6 Accuracy of personality detection.***

Vector correlations were significant and highest for the trait of Openness to Experience, suggesting that cues used by users and cues used by observers were in agreement, allowing for the accurate detection of the personality trait by observing the cues in Facebook behaviour (Hall et al., 2013). Openness was, along with Extraversion, most strongly detected by observers from profiles of users (Back et al., 2010).

#### ***4.5.3.7 Interrelatedness, complexity and specificity of variables.***

It appears as if Facebook provides a space for those with higher levels of Openness to Experience to find novelty in different forms, perhaps depending upon the facet traits that they are more inclined to. For example, a user high in Openness to Experience may have higher levels of openness to fantasy, and that may lead them to motives of experimenting with varied online presentations of the self (J. L. Wang et al., 2012). Another user may have higher levels of openness to actions, seeking new exciting things to do on Facebook, resulting in online gameplay, yet presenting a real version of the self.

The complex interaction of traits and motives is evident here, as with the other traits. The combination of different domains of an individual's personality and motives for Facebook use specifies outcomes for Openness to Experience. For example, Facebook users (N=301) who were high in Openness to Experience, low in Conscientiousness, low in Agreeableness, and low in perceived belongingness, were more likely to use Facebook for exhibitionism, and therefore were less honest in self-disclosures (Hollenbaugh & Ferris, 2015). Those who were high in Openness to Experience and who used Facebook for relationship maintenance were more intentional in self-disclosure. Those who were high in Openness to Experience, low in Conscientiousness, with less social cohesion, used Facebook for companionship motives, resulting in more negative disclosures. Those who were high in Openness to Experience, low in Conscientiousness, less agreeable, less connected to an offline network, and who used Facebook for exhibitionism, were more positive in their self-disclosures (Hollenbaugh & Ferris, 2015).

#### ***4.5.3.8 Summary.***

From the literature, it appears that those who are higher in Openness to Experience use Facebook with the motivation to tell friends about their real selves, which is reflected in their tendency to make use of the personal information section, or to display managed impressions they wish to present. They also use Facebook to find novel experiences such as identity experimentation or online gameplay. These motives that are akin to their domain of Openness to Experience, do not significantly impact their frequency of use or activity on Facebook, when compared to other traits. Higher levels of Openness to Experience does however reflect in users' self-generated content, which will be more likely to be about politics or reflect the users' interests. Those who have higher levels of this trait are less likely to be romantic in posts, and

are less likely to include shorthand or extended letters. While these users are less likely to *share* others' content, they tend to receive comments on their own self-generated content from a greater variety of friends, perhaps due to their tendency to post about a greater variety of different topics. From these cues, Openness to Experience is a trait that can be accurately detected by observers of users' Facebook profiles.

#### **4.5.4 Agreeableness.**

*How does the personality trait, Agreeableness, impact upon self-presentation on Facebook?*

The domain of Agreeableness describes an individual's interpersonal tendency to be altruistic or, on the lower end of the spectrum, antagonistic. Those who have higher levels of Agreeableness are likely to be sympathetic and helpful towards others, while those who have lower levels of Agreeableness may be sceptical and critical (McCrae & Costa, 2003). Neither of these two poles is better than the other. In terms of facets, this domain includes aspects like trust, straightforwardness, altruism, compliance, modesty and tender-mindedness (P T Costa & McCrae, 2010). The data on Agreeableness was provided for this review by n=35 of the included studies.

##### **4.5.4.1 Motivation for Facebook use.**

There is a positive relationship between Agreeableness and the need to belong, the disposition to trust, and the perceived ability to modify self-presentation on Facebook, in a study of 254 college students in New England and South California, USA (Sun & Wu, 2012). There was a significant hierarchical path from Agreeableness through disposition to trust and institution-based trust in the Internet that leads to Facebook self-presentation (Sun & Wu, 2012). Agreeableness seems to be unrelated to motives of information-seeking, but positively related to communication, acceptance seeking,

and connection maintenance. Higher levels of Agreeableness were negatively associated with attention-seeking. Along with these motives, a positive relationship was also found between high levels of Agreeableness and actual self-presentation among undergraduate students (N=184), possibly in order for those high in Agreeableness to supplement offline relationships. These motives support the more agreeable individual to meet his need for belonging (Seidman, 2013). When combined with low Conscientiousness, those low in Agreeableness prefer to maintain relationships online, and therefore intentionally present a true self online (Hollenbaugh & Ferris, 2015; Marriott & Buchanan, 2014).

#### ***4.5.4.2 Facebook use.***

Agreeableness was positively related to Facebook use (Błachnio et al., 2013; Moore & McElroy, 2012). Those higher on Agreeableness were found to make less use of page features, when compared to those who scored lower on Agreeableness. No correlation was found with number of friends (Amichai-Hamburger & Vinitzky, 2010; J. L. Wang et al., 2012). Authors have ascribed this result to the motives of Facebook use which may differ among those who are higher in Agreeableness.

#### ***4.5.4.3 Self-generated content.***

Agreeable individuals updated their status less frequently – especially containing media, music and news, but commented more frequently on other users' posts. They used fewer words - in terms of content and variety - in status updates (Hall et al., 2013). Users with higher degrees of Agreeableness generated a greater number of postings about themselves than those with lower degrees of Agreeableness (Moore & McElroy, 2012). The trait was also positively related to making comments on Facebook (Amichai-Hamburger & Vinitzky, 2010). A positive relationship was found between Agreeableness and regret about inappropriate content they may have posted

on Facebook (Moore & McElroy, 2012). Those who have high levels of straightforwardness, may regret posting frank and ingenuous content because of others' responses to it. In combination with high levels of compliance or low levels of altruism, these agreeable individuals may defer to others in such a conflict (P T Costa & McCrae, 2010).

A u-shaped correlation with the number of pictures uploaded found that those high and low on Agreeableness uploaded more pictures than those with a moderate level of Agreeableness (Amichai-Hamburger & Vinitzky, 2010). When cues of users' Facebook pages were compared to their self-ratings, Agreeable users had pictures in which they look friendlier or that were taken from below, and had attempted humorous pictures (Qiu et al., 2015).

#### ***4.5.4.4 Other-generated content.***

High Agreeableness is associated with a greater likelihood of using direct methods to deal with undesirable photos on Facebook in order to manage impressions (C. Lang & Barton, 2015). Agreeableness was predictive of the average number of *Likes* per profile picture and the average number of *Comments* per profile picture among a sample of 115 students in the United Kingdom. This may be indicative of the way users befriend agreeable individuals because of their warmth online and offline, as well as the motive for Facebook use of maintaining offline friendships online (Eftekhar et al., 2014).

#### ***4.5.4.5 Nature of self-disclosure.***

Although Agreeableness was found to be unrelated to levels of self-disclosure, there was a reiterated positive relationship with the tendency to share things about oneself on Facebook (S. S. Wang, 2013). Self-presentation to make a desired impression on others appears to be characteristic of individuals with low levels of

Agreeableness, low levels of Neuroticism and higher Openness to Experience (Bodroža & Jovanović, 2015).

The interactions of Agreeableness with honesty, valence, and intent require investigation into trait combinations, as discussed in a later section (4.5.4.7).

#### ***4.5.4.6 Accuracy of personality detection.***

When asked to estimate users' personality traits, Hall et al. (2013) found that observers' estimations were most accurate for Agreeableness. Marriot and Buchanan (2014) also reported similar observer ratings of the trait by online and offline friends. Observers estimated Agreeableness by relying on profile picture friendliness and attractiveness of the users (Hall et al., 2013). Their *selfies* are judged to be more emotionally positive, and with eyes looking at the camera (Qiu et al., 2015).

#### ***4.5.4.7 Interrelatedness, complexity and specificity of variables.***

There seems to be a complex interaction between the personality trait of Agreeableness, other personality traits, motives for Facebook use, as well as variables such as trust and network connectedness that impacts upon self-presentation in unique ways. Hollenbaugh and Ferris (2014) found a negative relationship between Agreeableness and the amount of information disclosed when this trait is paired with lower Conscientiousness, higher Openness to Experience and less social cohesion. Such individuals would also be more positive, but less honest in their disclosures due to exhibitionism being the motive for Facebook use. These users are suggested to use Facebook to seek positive attention by behaving in a bragging manner. Findings also showed a greater depth, yet less honesty and intent, in the self-disclosures of those with less Conscientiousness and higher Agreeableness (Hollenbaugh & Ferris, 2014, 2015).



From the review, however, it can be noted that Narcissism was predictive of a motive of exhibitionism (S. S. Wang & Stefanone, 2013) and self-presentation (Ong et al., 2011) on Facebook, in the form of more frequent photos (Mehdizadeh, 2010) and status updates that are self-focused (Lee et al., 2014). Additionally, photo-editing behaviour seems to be mediated by self-objectification in individuals, and related positively with higher levels of Narcissism in a sample of 800 men who completed an online survey (Fox & Rooney, 2015).

From the literature, it becomes clear that individuals higher in levels of Narcissism must be seen as a different subtype from those that are merely low in modesty – a facet of Agreeableness (P T Costa & McCrae, 2010). The research suggests that Narcissism plays a significant role in different aspects of Facebook self-presenting behaviour, and therefore has been considered as a free-standing factor in its own right (Buffardi & Campbell, 2008; Fox & Rooney, 2015; Lee et al., 2014; McKinney et al., 2012; Mehdizadeh, 2010; Mehl & Eid, 2014; Ong et al., 2011; S. S. Wang & Stefanone, 2013; Wu et al., 2014). The scope of this study did not allow for further investigation into the impacts of Narcissism on self-presentation on Facebook, and future review of this interaction is recommended.

#### ***4.5.4.8 Summary.***

More agreeable individuals seem to perceive that they have the ability to modify their self-presentation on Facebook, and accordingly they trust Facebook as a space to meet their needs for communication, acceptance-seeking, and maintaining social connections – ultimately addressing their need for belongingness. The more agreeable user tends to present his actual self on Facebook, and makes more use of Facebook than the less agreeable user. The number of friends a user has remains unaffected by his level of Agreeableness, but it appears to be negatively correlated with the amount

of features used on Facebook. This results in less frequent status updates, containing fewer words, being made by highly agreeable users, while they may make more comments on others' posts. Due to the make-up of the agreeableness domain, straightforwardness may result in regret about posts made, while altruism may affect the ways in which more agreeable persons handle other-generated content. More likes and comments received on their posts, may point out the way that friends reward Agreeable users for their warmth.

Agreeableness is accurately detectable by looking at an individual's Facebook profile. Cues like friendliness in pictures and positive emotion displayed in *selfies*, provide observers with clues about individuals' Agreeableness. Although the review recognizes the role that is played by the interaction between trait combinations and specific facet traits as part of Agreeableness, Narcissism proved to be an important factor when self-presentation is considered and future reviews are recommended to include this factor.

#### **4.5.5 Conscientiousness.**

*How does the personality trait, Conscientiousness, impact upon self-presentation on Facebook?*

The final domain of personality described in the Five-factor model is that of Conscientiousness. This domain refers to an individual's sense of self-control. On the upper end of the continuum, individuals with high levels of conscientiousness are described as purposeful and strong-willed. Those with low levels of Conscientiousness are considered to be unscrupulous, inexact in applying moral principles, more lackadaisical, and often more hedonistic. Facets that fall under Conscientiousness are competence, order, dutifulness, achievement striving, self-

discipline and deliberation (P T Costa & McCrae, 2010). The data provided for the domain of Conscientiousness was drawn from 19 studies.

#### ***4.5.5.1 Motivation for Facebook use.***

Seidman (2013) found that higher levels of Conscientiousness were negatively related with self-presenting behaviour (by posting photos) and most motivations for using Facebook. The study conducted a correlative study of undergraduate students' (N=184) motivations for Facebook use and their personality traits. More conscientious users may be more cautious in their self-presentation, since self-presentational motivation was negatively correlated with the trait domain. The findings indicate that those who are lower in Conscientiousness tended to use Facebook more for acceptance-seeking, attention-seeking, and are more likely to present aspects of themselves they usually hide, and an ideal self (Seidman, 2013). It seems that it is those who are low in Conscientiousness who are more likely to use Facebook to meet the need for self-presentation (Błachnio et al., 2013).

#### ***4.5.5.2 Facebook use.***

While Conscientiousness was not found to correlate significantly with time spent on Facebook or frequency of use, low Conscientiousness has been identified, due to its relationship with self-presentation, as an important and significant predictor of Facebook addiction (Bodroža & Jovanović, 2015). The reviewer makes sense of these findings by referring to the facets of Conscientiousness in the section on interrelatedness, complexity and specificity of variables below.

Higher Conscientiousness has been associated with more Facebook friends (Amichai-Hamburger & Vinitzky, 2010; Moore & McElroy, 2012; J. L. Wang et al., 2012). Hall et al. (2013) however, in a smaller sample of students in the USA (N=100), found that more conscientious individuals had fewer Facebook friends.

#### ***4.5.5.3 Self-generated content.***

Conscientiousness was associated with less listings of movies and books in the Info page (Hall et al., 2013), and with writing Comments less frequently (Lee et al., 2014). The cues for Conscientiousness are similar to Agreeableness. They updated their profile less frequently, and - in status updates - made use of fewer words in variety and in number (Hall et al., 2013). Fewer wall posts were made by more conscientious individuals, yet more regret was expressed about posts than among less conscientious users (Moore & McElroy, 2012). Perhaps, these results may indicate individuals' fastidiousness and scrupulous attention to detail (P T Costa & McCrae, 2010).

Inconsistent results were also found for the use of picture upload features. Amichai-Hamburger and Vinitzky (2010) found those higher in Conscientiousness were less likely to use picture upload features than those with lower Conscientiousness. This tendency indicated a lower willingness to upload private information via photos, which may reflect higher levels of deliberation - and therefore caution - as well as stricter dutifulness (Amichai-Hamburger & Vinitzky, 2010). Although Moore and McElroy (2012) could not significantly relate the number of photos uploaded with the trait, more conscientious individuals had friendlier profile pictures (Hall et al., 2013). A suggested explanation is offered in the section that elaborates on the interrelatedness, complexity and specificity of variables below, yet there is no contradictory evidence against the findings that Conscientiousness predicts the number of self-generated albums, as well as the number of videos uploaded (Eftekhar et al., 2014). The act of uploading and sorting photos onto a Facebook profile may seem too laborious to those with lower levels of the trait.

#### ***4.5.5.4 Other-generated content.***

Furthermore, individuals higher in Conscientiousness were found to be less likely to use direct methods to manage undesirable photos on Facebook, and may rely on more discreet, independent methods to manage the image, like *untagging* (C. Lang & Barton, 2015). The authors suggest, however, that further research is necessary to better understand the relationship between this trait and the management of undesirable photos.

Although a lower number of unique friends commented on conscientious users' status updates, more support or agreement was shown for their comments. The latter was the main diagnostic cue for Conscientiousness on Facebook, and the only diagnostic cue across all the traits that is related to other-generated content (Hall et al., 2013). This means that, instead of looking at their personal Facebook behaviour, one can accurately detect Conscientiousness in an individual by looking at how supportive a user's friends are toward their comments.

#### ***4.5.5.5 Nature of self-disclosure.***

Self-presenting behaviours such as amount of emotional- and general self-disclosure were unrelated to the level of Conscientiousness (Seidman, 2013). Conscientiousness was negatively correlated to authentic self-presentations on Facebook (Marriott & Buchanan, 2014), confirming with the association between honesty and Conscientiousness (Hall & Pennington, 2013).

When users are lower in Conscientiousness, Agreeableness and social cohesion, but higher in Openness to Experience, more self-disclosure takes place, but self-disclosures were less honest. Those who are less conscientious or more agreeable and motivated to meet new people disclosed information of greater depth, but mostly with less intent and less positivity (Hollenbaugh & Ferris, 2014, 2015). As expected, users'

honesty was positively associated with Conscientiousness, as were positive expressions (Hall & Pennington, 2013; Hollenbaugh & Ferris, 2015). Those with lower levels of Conscientiousness were found to self-present more, especially with regard to presenting an ideal or hidden self (Bodroža & Jovanović, 2015).

#### ***4.5.5.6 Accuracy of personality detection.***

Interestingly, observers judged positive expressions mentioned above to be related with more Extraversion, but not with more Conscientiousness (Hall & Pennington, 2013). Despite this misjudgement, it is suggested that observers can accurately estimate a user's Conscientiousness by looking at their Facebook profile alone (Hall et al., 2013; Marriott & Buchanan, 2014).

#### ***4.5.5.7 Interrelatedness, complexity and specificity of variables.***

The facet traits included in this domain describe those with lower levels of Conscientiousness as unmethodical, undependable and unreliable, as well as poorly driven for success (P T Costa & McCrae, 2010). The facet of self-discipline may be the most telling in relation to Bodroža and Jovanović's (2015) results above, pointing out low scorers' poor self-control. In combination with low levels of deliberation, those with poor self-discipline may become addicted to the presentation of an ideal self by self-presenting and substituting real life for their online experiences.

Conscientiousness was not directly related to the perceived ability to modify self-presentation on Facebook, but a hierarchical route was found via self-efficacy, Internet self-efficacy, and then Facebook self-presentation (Sun & Wu, 2012). Self-esteem is measured by the competence facet scale of the Conscientiousness domain. Kramer and Winter (2008) initially found self-esteem to be unrelated to self-presenting behaviour, however it has been found to affect Facebook use, where low self-esteem results in high Facebook use. This may be due to a feedback system

where self-presentation on Facebook means more exposure to self-information, resulting in enhanced self-esteem. Facebook enables visualization of social connections, while validating the user's self-esteem (Nadkarni & Hofmann, 2012a). Therefore, self-presentation is a manner of expression for those who are lower in self-esteem (Błachnio et al., 2013). Higher self-esteem may decrease the breadth of information disclosed on Facebook (Hollenbaugh & Ferris, 2014).

Individuals who are higher in Conscientiousness have been found to appear friendlier in their profile pictures (Hall et al., 2013). The reviewer recommends further research into the reasons for this finding and suggests that a more conscientious individual may be more deliberate in choosing pictures in which they appear friendly. An indication of one's character is implied by the trait combination of Conscientiousness and Agreeableness (P T Costa & McCrae, 2010). High Conscientiousness and high Agreeableness is referred to as effective altruism, which may reflect as friendliness in pictures of those with high levels of both traits (P T Costa & McCrae, 2010; Hall et al., 2013).

Self-efficacy, or the belief of an individual that they have the capacity to execute behaviours necessary to produce specific performance attainments, is negatively related to the facet trait of vulnerability in the Neuroticism domain (Bandura, 1977; P T Costa & McCrae, 2010). Self-efficacy significantly impacts self-presenting behaviour (Krämer & Winter, 2008), and is positively related to the perceived ability to modify self-presentation on Facebook. Since this is one of the main motives for Facebook use, it can translate into self-presentation behaviour (Błachnio et al., 2013).

#### **4.5.5.8 Summary.**

From this review's findings, the domain of Conscientiousness appears to impact negatively on the self-presentational behaviours of Facebook users. Those at the lower end of this trait's continuum seem motivated to use Facebook for purposes of presenting an ideal or hidden self, as well as attention-seeking and acceptance-seeking. The need for self-presentation and the need for belongingness are both addressed by these users. Those who over-indulge in this self-presentation and substitute their real life for their online self, may run the risk of addictive patterns forming.

The content of a more conscientious person is less likely to post wordy updates, or make comments on others' content. It is unclear whether more conscientious users upload more frequent photos, but they appear to be friendlier in profile pictures and have more albums and videos uploaded than those with lower levels of Conscientiousness. They are more likely to follow indirect methods to manage undesirable other-generated content, such as the *untag* feature. Other-generated content is a clue for observers to detect higher Conscientiousness levels. Users with higher levels of Conscientiousness receive more supportive comments from other users. Observers seem to interpret conscientiousness cues in individuals as Extraversion, but are still able to accurately judge conscientiousness from user profiles. Self-esteem and self-efficacy were found to be specific factors of importance in relation to the impact of Conscientiousness on self-presentation on Facebook.

## **4.6 Overview of the Findings**

Systematically exploring the literature available on self-presentation on Facebook and the role personality traits play, enabled the review to bring about an improved understanding of this topic. Personality traits do indeed play a significant role in



determining self-presentation on Facebook, albeit in a different manner for each individual trait. Appendix H provides for a summary of the findings for each trait. Personality traits were found to be surrounded by other factors that jointly impact users' self-presenting behaviour. In line with the review by Błachnio et. al (2013), one of the main contributing factors was motivation for using Facebook. It seems that personality and motives for Facebook use are variables that go hand in hand with regards to self-presentation on Facebook. Figure 5.1 represents the understanding brought about by the review of the interaction of these variables on self-presentation. An individual may be guided by certain motivations to make use of Facebook, but these motives for Facebook use may be impacted upon by the individual's personality traits as well as other variables. By taking both motivation and personality into account, patterns of self-disclosure can be noted in individuals' self- and other-generated content. By investigating this behaviour, individuals' self-presentation strategies can be understood better.

From the themes that arose in the literature, it seems that self-presentation is considered for both its quantitative and qualitative aspects. The use of Facebook can be considered in terms of the frequency of use, the time spent using the site, as well as the size of the social network in connection with the user. These are measurable variables that can be monitored when considering self-presentation, and appear to be impacted upon by each of the five domains. Importantly, there are specific actions or reactions on Facebook that are published and measured on the Facebook profile of a user. This self-generated and other-generated content can point out the frequency of the use of certain features that are available on Facebook. For example, the use of more photos by those with higher levels of Extraversion or less frequent status updates uploaded by those with lower levels of Agreeableness. The use of features on

Facebook provides valuable information in terms of the nature of a user's self-disclosure and self-presentation strategies. Users who upload the same amount of photos can, partially due to personality traits, differ in their photos in terms of valence, authenticity, or self-promotion. Therefore, it is important to note that information about self-presentation is more rich and valuable when both the frequency of posts, as well as the content of the posts is taken into account. When all these factors are considered, observers should be able to accurately detect most of the personality traits of Facebook users. This provides evidence for the notion that individuals use Facebook as an extension within which they are able to self-present online in similar ways to their offline approaches. It would appear that the claim of personality traits' impact on self-presentation on Facebook is more complex than was anticipated. The evidence suggests that more specific traits need to be tested against more specific uses of Facebook, without neglecting the mediating importance of the motives for Facebook use. It should be noted that, since individuals are not bound by their associations to a single trait level and should be considered as holistic human beings, the literature fails to reflect this complexity of trait combinations thoroughly. Nevertheless, for each trait of the Five-factor model, significant impacts of personality were explored individually.

For Neuroticism, inconsistent results for self-generated content and motives were found among different studies. It would appear that the role of motivation for Facebook use plays a role in determining the behaviours among individuals more so than the level of Neuroticism. Very limited research addressed the impact on the management or presence of other-generated content in relation to Neuroticism. Neuroticism was identified as a socially undesirable trait, and so may be associated

with impression management as a result. This possibly explained why the trait is not easily or accurately detected by observers of Facebook profiles.

Extraversion however, could be accurately observed and was found to impact users' self-presenting behaviour on both self- and other-generated content levels. Motives for Facebook use were related to Extraversion, but were varied. These include the supplementing of offline relationships, socialization, self-exploration, and self-presentation. Extraversion seems to have affected the directedness of Facebook use, making more active use of it, yet it had no impact on the amount of time spent on Facebook. It is implied that extraverts may be more likely to use Facebook actively, as opposed to introverts' tendency to reserve posts and uploads and lurk instead.

The attitude toward Openness to Experience is associated with the seeking of novel experiences, resulting in the more care-free use of Facebook's platform for self-generated content. Higher Openness to Experience led to specific self-presentations in users, including more positive content regarding politics, and more listings of music, art, books and photo uploads. Self-disclosure on Facebook was found to be more in amount, more intentional, covering more topics, and more positive for users that were more open to experience. It can be understood then, that Openness to Experience was accurately detected by observers.

Agreeableness was also detected accurately, and can be identified in the users' tendency to post more photos, comments, and self-focussed posts. Their photos were friendlier, more humorous, and invited more other-generated comments and likes from friends. Individuals with higher levels of Agreeableness seemed to be motivated to use Facebook by both the need for belongingness and the need for self-presentation, and were found to present their real self. This may be explained by their motives to supplement offline relationships, seek acceptance and communicate.

Conscientiousness did not significantly impact upon time spent on Facebook, or use of Facebook, yet low Conscientiousness was associated with Facebook addiction. This is possibly ascribed to the need for self-presentation by those low in Conscientiousness, and the tendency to hide the real self, leading to more wall posts, profile updates, words in status updates, and information on the Information page. Substituting this created Facebook impression for real-life interactions can entrench addictive patterns. Similarity was found among cues presented by Conscientiousness and Extraversion, and when honest users present a more conscientious self, they can be observed to be more extraverted as well (Hall & Pennington, 2013).

The ways in which personality impacts upon self-presentation were found in this review to be represented in the themes that emerged from the sample. Motivation plays a significant role in mediating the relationship between personality and self-presentation. Facebook use - in terms of time spent on Facebook, activity on Facebook, and the number of friends on Facebook – is considered as a basic factor that introduces researchers to the impact of personality traits on self-presentation on Facebook via their use, or lack thereof, of the platform. Users' self- and other-generated content provides more specific information about how self-presentation differs in relation to personality trait levels, especially when this content is considered in terms of its nature. This includes investigation into the valence, depth, breadth, intensity, intent, and honesty of the content. By utilising the cues for each trait, observers are able to detect users' level of Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, but not Neuroticism. For the latter, observers will need to learn to utilise cues that are, albeit scarce, evident in users' presentation of the trait in order to more accurately detect the level of Neuroticism more accurately. The review highlights the importance of understanding the complex

interworking of specific aspects of personality, features of Facebook use, as well as other variables involved in self-presentation on Facebook.

#### **4.7 Concluding Remarks**

This chapter presented the reader with a thorough explanation of the findings of the current review by first, mapping out the exploration of the impact of personality on self-presentation and what that entails, including the themes presented by the literature. Secondly, the findings for each of the five traits from the Five-factor model were presented, and each of the personality trait domains were explored for the impact it may have on self-presentation on Facebook. A summary of the findings of this review was included thereafter. The following section will offer conclusive remarks in terms of the applications and limitations of the review, as well as recommendations informed by the findings of the review.

## **Chapter 5: Conclusions, Limitations and Recommendations**

### **5.1 Overview of the Chapter**

This chapter provides conclusions on the findings brought about in the preceding chapter, in reference to the aims and objectives of the review. The value of these findings is explored here in order to establish the implications of the results of this review for psychology and other disciplines. Thereafter, limitations of the review are reported on, followed by recommendations for future research.

### **5.2 Conclusion of Findings**

The aim of this review was to explore and describe the impact of personality traits on the self-presentation of individuals on Facebook. The impact of each of the traits in the Five-factor model of personality was specifically brought into view in terms of their impact upon Facebook self-presentation. In order to gain understanding on this topic, a systematic review of the available research (N=37) was conducted.

Personality traits seem to be an important factor that impacts upon the ways Facebook users self-present. For each individual, the make-up of their personality has a unique effect on the interactions with their environment, and therefore, Facebook use. It appears that this relationship is more complex than anticipated, involving many other variables that play roles in mediation. Motivations for using Facebook can determine how the users self-present and behave within the Facebook environment. A more agreeable user who wishes to maintain their social relationships, for instance, may be more likely to make use of Facebook in a way that attempts to modify the presentation of self, partly due to the belief that such modification is possible. An investigation into the impact upon Facebook self-presentation can be commenced by observing the amount of time spent using Facebook, the frequency of active- or passive use, as well as the number of friends a user has in their social network.

Furthermore, signs of differences in Facebook self-presentation can be found in content that is created and published by users, self-generated content, as well as the content that is generated by others within the user's social network, or other-generated content.

The quality of the content that is published is measured by the amount, depth and breadth of the self-disclosures. Other aspects of self-presentation that can be observed include honesty, valence, regret about posts, intensity and intent. For each of these factors, self-presentation was impacted upon in different ways by each of the personality traits.

Due to the self-presentational cues on Facebook profiles that are associated with the personality traits of a particular user, it seems as if it is possible for observers to accurately detect four out of the five personality traits in the Five-factor model. All the traits, except Neuroticism, are detectable by looking only at a user's Facebook profile.

### **5.3 Value of the Review**

A collation of the available knowledge of how individuals manage impressions on Facebook within the normal and abnormal sense, will guide further studies in terms of analysing online self-presentation in relation to personality traits (Lee, Ahn, & Kim, 2014). It also has predictive value in the moderation of content on Facebook, and may aid the understanding of how personality traits relate to dishonest or deviant self-presentation in the online environment. This information can provide valuable insights to inform an updated theory of self-presentation (Rosenberg & Egbert, 2011). Furthermore, inter-disciplinary relationships with education, law, philosophy and information technology can benefit from the use of these findings.

#### **5.4 Limitations**

The present study is not without limitations, despite the methodical and rigorous efforts to ensure a sound implementation of the review process. Firstly, the review did not consider traits other than those included in the Five-factor model. From the research that was included in the study it became clear that other variables seem to play important roles in the self-presentation on Facebook. Other traits that were referred to, include Narcissism and Machiavellianism. Furthermore, motivational goals for Facebook use, cultural factors, self-construal, attitude about Facebook use, loneliness, gender, and other variables can play a role.

Secondly, the interaction of the different levels of personality traits was not fully explored and may require further investigation in order to explore the impact of trait combinations or personality profiles on self-presentation on Facebook.

Finally, on a practical level, one of the databases did not return accurate results in terms of the keywords used in search terms, which brings into question the inclusion of all possible studies and increases the probability of clerical error in working with masses of data.

#### **5.5 Recommendations**

As alluded to in the section above, the use of the Five-factor model may have restricted the scope of this review. Thus, the reviewer recommends further investigation into personality in terms of the factors most important to self-presentation. Future research may consider encompassing personality as well as motivation and other factors to identify the roles that these variables play with regards to self-presentation on Facebook. Due to the many factors involved in the constructs of self-presentation and personality, future research should consolidate the specific



facets of both constructs in order to derive a model that is more inclusive. Mayer's (2005) systemic perspective of personality may prove to be useful in this regard.

Furthermore, the understanding of the interaction between these variables may be improved by phenomenological studies that investigate the self-presenting behaviours on Facebook of individuals in relation to their personality profiles. Facebook is a dynamic and changing environment that offers new ways to self-present, and it is recommended that such changes be monitored and investigated in relation to personality traits of users.

## **5.6 Closing Remarks**

This chapter provided an overview of the present study's findings and its implications to psychology and other disciplines. In conclusion of the research conducted, the impact of personality traits upon self-presentation in the online setting of Facebook was explored and described. The value of this review lies in its possible application within the field of psychology, further research, and other disciplines such as information technology. Limitations of this review were mentioned and recommendations for future research were made for this exciting research area within the theme of Cyberpsychology.

## References

- Allport, G. . (1937). *Personality: A psychological interpretation*. New York, NY: Rhinehart & Winston.
- Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior*, *26*(6), 1289–1295.  
doi:10.1016/j.chb.2010.03.018
- Amiel, T. (2002). *Individual Differences in Internet Usage Motives (Master's Thesis)*. Virginia Polytechnic Institute and State University.
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological Science: A Journal of the American Psychological Society*, *21*(3), 372–374. doi:10.1177/0956797609360756
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. doi:10.1037/0033-295X.84.2.191
- Barker, A. (2013). Meta-synthesis. Retrieved September 24, 2015, from <https://abbarker.wordpress.com/2013/04/25/meta-synthesis/>
- Benham, A., Edwards, E., Fractenberg, B., Gordon-Murnane, L., Hetherington, C., Liptak, D. A., ... Mintz, A. P. (2012). *Web of deceit: Misinformation and manipulation in the age of social media*. Medford, NJ: Information Today.
- Bienvenu, O. J., Samuels, J. F., Costa, P. T., Reti, I. M., Eaton, W. W., & Nestadt, G. (2004). Anxiety and depressive disorders and the five-factor model of

personality: A higher- and lower-order personality trait investigation in a community sample. *Depression and Anxiety*, 20(2), 92–97.

doi:10.1002/da.20026

Błachnio, A., Przepiórka, A., & Rudnicka, P. (2013). Psychological determinants of using Facebook: A research review. *International Journal of Human-Computer Interaction*, 29(11), 775–787. doi:10.1080/10447318.2013.780868

Bodroža, B., & Jovanović, T. (2015). Validation of the new scale for measuring behaviors of Facebook users: Psycho-Social Aspects of Facebook Use (PSAFU). *Computers in Human Behavior*, 54, 425–435. doi:10.1016/j.chb.2015.07.032

Brignall, T. W., & Van Valey, T. (2005). The impact of internet communications on social interaction. *Sociological Spectrum*, 25, 335–348.

doi:10.1080/02732170590925882

Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking Web sites. *Personality and Social Psychology Bulletin*, 34(10), 1303–1314.

doi:10.1177/0146167208320061

Burls, A. (2009). What is Critical Appraisal? Retrieved September 25, 2014, from [http://www.medicinesox.ac.uk/bandolier/painres/download/whatis/what\\_is\\_critical\\_appraisal.pdf](http://www.medicinesox.ac.uk/bandolier/painres/download/whatis/what_is_critical_appraisal.pdf)

Center for Reviews and Dissemination. (2009). Systematic Reviews: CRD's guidance for undertaking reviews in healthcare. Retrieved March 26, 2014, from <http://www.york.ac.uk/inst/crd/SysRev/!SSL!/WebHelp/SysRev3.htm>

- Chamorro-Premuzic, T. (2007). *Personality and Individual Differences*. London, England: Blackwell Psychology.
- Chen, B., & Marcus, J. (2012). Students' self-presentation on Facebook: An examination of personality and self-construal factors. *Computers in Human Behavior, 28*(6), 2091–2099. doi:10.1016/j.chb.2012.06.013
- Chen, R. (2013). Living a private life in public social networks: An exploration of member self-disclosure. *Decision Support Systems, 55*(3), 661–668. doi:10.1016/j.dss.2012.12.003
- Christofides, E., Muise, A., & Desmarais, S. (2009). Information disclosure and control on Facebook: are they two sides of the same coin or two different processes? *Cyberpsychology & Behavior, 12*(3), 341–345. doi:10.1089/cpb.2008.0226
- Cooley, C. H. (1922). *Human Nature and the Social Order*. New York, NY: Scribners.
- Costa, P. T., & McCrae, R. R. (2010). *NEO Inventories for the NEO Personality Inventory-3 (NEO PI-3), NEO Five-Factor Inventory-3 (NEO-FFI-3) and NEO Personality Inventory-revised (NEO PI-R): Professional Manual*. Psychological Assessment Resources.
- Derks, D., Bos, A. E. R., & Von Grumbkow, J. (2007). Emoticons and online message interpretation. *Social Science Computer Review, 26*(3), 379–388. doi:10.1177/0894439307311611

- Digman, J. M. (1990). Personality structure: Emergence of the Five-Factor Model. *Annual Review of Psychology, 41*(1), 417–440.  
doi:10.1146/annurev.ps.41.020190.002221
- Eftekhari, A., Fullwood, C., & Morris, N. (2014). Capturing personality from Facebook photos and photo-related activities: How much exposure do you need? *Computers in Human Behavior, 37*, 162–170. doi:10.1016/j.chb.2014.04.048
- Elamin, M. B., Flynn, D. N., Bassler, D., Briel, M., Alonso-Coello, P., Karanicolas, P. J., ... Montori, V. M. (2009). Choice of data extraction tools for systematic reviews depends on resources and review complexity. *Journal of Clinical Epidemiology, 62*(5), 506–510. doi:10.1016/j.jclinepi.2008.10.016
- Ellison, N. B., Hancock, J. T., & Toma, C. L. (2012). Profile as promise: A framework for conceptualizing veracity in online dating self-presentations. *New Media & Society, 14*(1), 45–62. doi:10.1177/1461444811410395
- Evans, S. (2012). Virtual selves, real relationships: An exploration of the context and role for social interactions in the emergence of self in virtual environments. *Integrative Psychological & Behavioral Science, 46*(4), 512–28.  
doi:10.1007/s12124-012-9215-x
- Facebook. (2015). Products. Retrieved August 11, 2015, from <http://newsroom.fb.com/products/>
- Fernandes, T. (1995). *Global interface design: a guide to designing international user interfaces*. San Diego, CA: Academic Press Professional.

- Fernandez, K. C., Levinson, C. A., & Rodebaugh, T. L. (2012). Profiling: Predicting social anxiety from Facebook profiles. *Social Psychological and Personality Science*, 3(6), 706–713. doi:10.1177/1948550611434967
- Flett, G. L. (2007). *Personality Theory & Research*. Ontario, Canada: John Wiley & Sons.
- Fox, J., & Rooney, M. C. (2015). The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences*, 76, 161–165. doi:10.1016/j.paid.2014.12.017
- Gershon, I. (2010). *The Breakup 2.0: Disconnecting over New Media*. Ithaca, New York: Cornell University.
- Goffman, E. (1959). The presentation of self in everyday life. *The Academy of Management Review*, 14(1), 103. doi:10.2307/258197
- Goffman, E. (1990). *Presentation of self in everyday Life*. London, England: Peguin.
- Gonzales, A. L., Hancock, J. T., Gonzales, A. L., Hancock, J. T., & Ph, D. (2011). Mirror, mirror on my Facebook wall : Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior and Social Networking*, 14(1-2), 79–83. doi:10.1089/cyber.2009.0411
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology*, 29(2), 75–91.

- Hall, J. A., & Pennington, N. (2013). Self-monitoring, honesty, and cue use on Facebook: The relationship with user extraversion and conscientiousness. *Computers in Human Behavior, 29*(4), 1556–1564.  
doi:10.1016/j.chb.2013.01.001
- Hall, J. A., Pennington, N., & Lueders, A. (2013). Impression management and formation on Facebook: A lens model approach. *New Media & Society, 16*(6), 958–982. doi:10.1177/1461444813495166
- Harter, S. (1993). Causes and Consequences of Low Self-Esteem in Children and Adolescents. In R. F. Baumeister (Ed.), *The Puzzle of Low Self-Regard* (pp. 87–116). New York, NY: Springer US.
- Hemingway, P., & Brereton, N. (2009). What is a systematic review? *European Journal of Oral Implantology, 1*(April), 174–175. Retrieved from <http://www.medicine.ox.ac.uk/bandolier/painres/download/whatis/Syst-review.pdf>
- Hollenbaugh, E. E., & Ferris, A. L. (2014). Facebook self-disclosure: Examining the role of traits, social cohesion, and motives. *Computers in Human Behavior, 30*, 50–58. doi:10.1016/j.chb.2013.07.055
- Hollenbaugh, E. E., & Ferris, A. L. (2015). Predictors of honesty, intent, and valence of Facebook self-disclosure. *Computers in Human Behavior, 50*, 456–464.  
doi:10.1016/j.chb.2015.04.030
- Hong, F. Y., Huang, D. H., Lin, H. Y., & Chiu, S. L. (2014). Analysis of the psychological traits, Facebook usage, and Facebook addiction model of

- Taiwanese university students. *Telematics and Informatics*, 31(4), 597–606.  
doi:10.1016/j.tele.2014.01.001
- Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior*, 28(2), 561–569. doi:10.1016/j.chb.2011.11.001
- Ivcevic, Z., & Ambady, N. (2013). Face to (face)book: The two faces of social behavior? *Journal of Personality*, 81(June), 290–301. doi:10.1111/j.1467-6494.2012.00804.x
- Kapidzic, S. (2013). Narcissism as a predictor of motivations behind Facebook profile picture selection. *Cyberpsychology, Behavior and Social Networking*, 16(1), 14–9. doi:10.1089/cyber.2012.0143
- Kim, J., & Lee, J.-E. R. (2011). The Facebook paths to happiness: effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14(6), 359–364.  
doi:10.1089/cyber.2010.0374
- Kim, W., Jeong, O.-R., & Lee, S.-W. (2010). On social Web sites. *Information Systems*, 35(2), 215–236. doi:10.1016/j.is.2009.08.003
- Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106–116.  
doi:10.1027/1864-1105.20.3.106



- Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2013). Envy on Facebook: A hidden threat to users' life satisfaction? In *Proceedings of the 11th International Conference on Wirtschaftsinformatik*. Leipzig, Germany.
- Lambiotte, R., Quercia, D., Stillwell, D., Kosinski, M., & Crowcroft, J. (2012). The personality of popular Facebook users. *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work*, 955–964.  
doi:10.1145/2145204.2145346
- Lang, C., & Barton, H. (2015). Just untag it: Exploring the management of undesirable Facebook photos. *Computers in Human Behavior*, 43, 147–155.  
doi:10.1016/j.chb.2014.10.051
- Lang, G. (2012). *Think twice before you post: The impact of online self-presentation on the self-concept (Doctoral Dissertation)*. The City University of New York.
- Lee, E., Ahn, J., & Kim, Y. J. (2014). Personality traits and self-presentation at Facebook. *Personality and Individual Differences*, 69, 162–167.  
doi:10.1016/j.paid.2014.05.020
- Lewis, M. (2011). The origins and uses of self-awareness or the mental representation of me. *Consciousness and Cognition*, 20(1), 120–129.  
doi:10.1016/j.concog.2010.11.002
- Lynam, D. R., & Widiger, T. A. (2001). Using the five-factor model to represent the DSM-IV personality disorders: an expert consensus approach. *Journal of Abnormal Psychology*, 110(3), 401–412. doi:10.1037/0021-843X.110.3.401

- Marriott, T. C., & Buchanan, T. (2014). The true self online: Personality correlates of preference for self-expression online, and observer ratings of personality online and offline. *Computers in Human Behavior, 32*, 171–177.  
doi:10.1016/j.chb.2013.11.014
- Mayer, J. D. (2005). A tale of two visions: can a new view of personality help integrate psychology? *The American Psychologist, 60*(4), 294–307.  
doi:10.1037/0003-066X.60.4.294
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *The American Psychologist, 52*(5), 509–516. doi:10.1037/0003-066X.52.5.509
- McCrae, R. R., & Costa, P. T. (2003). *Personality in Adulthood*. New York, NY: The Guildford Press.
- McKinney, B. C., Kelly, L., & Duran, R. L. (2012). Narcissism or openness?: College students' use of Facebook and Twitter. *Communication Research Reports, 29*(2), 108–118. doi:10.1080/08824096.2012.666919
- McLaughlin, C., & Vitak, J. (2012). Norm evolution and violation on Facebook. *New Media & Society, 14*(2), 299–315. doi:10.1177/1461444811412712
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior and Social Networking, 13*(4), 357–364.
- Mehl, M. R., & Eid, M. (2014). Narcissistic power poster? On the relationship between narcissism and status updating activity on Facebook. *Journal of Research in Personality, 53*, 165–174. doi:10.1016/j.jrp.2014.10.004

- Michikyan, M., Dennis, J., & Subrahmanyam, K. (2014). Can you guess who I am? Real, ideal, and false self-presentation on Facebook among emerging adults. *Emerging Adulthood, 3*(1), 55–64. doi:10.1177/2167696814532442
- Michikyan, M., Subrahmanyam, K., & Dennis, J. (2014). Can you tell who i am? Neuroticism, extraversion, and online self-presentation among young adults. *Computers in Human Behavior, 33*, 179–183. doi:10.1016/j.chb.2014.01.010
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and MetaAnalyses: The PRISMA statement. *PLoS Med, 6*(6). doi:10.1371/journal.pmed1000097
- Moore, K., & McElroy, J. C. (2012). The influence of personality on Facebook usage, wall postings, and regret. *Computers in Human Behavior, 28*(1), 267–274. doi:10.1016/j.chb.2011.09.009
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences, 52*(3), 243–249. doi:10.1016/j.paid.2011.11.007
- Nguyen, M., Bin, Y. S., & Campbell, A. (2012). Comparing online and offline self-disclosure: A systematic review. *Cyberpsychology, Behavior, and Social Networking, 15*(2), 103–111. doi:10.1089/cyber.2011.0277
- Noblit, G. W., & Hare, R. D. (1988). *Meta-Ethnography: Synthesizing Qualitative Studies*. Newbury Park, CA: SAGE Publications.
- Ong, E. Y. L., Ang, R. P., Ho, J. C. M., Lim, J. C. Y., Goh, D. H., Lee, C. S., & Chua, A. Y. K. (2011). Narcissism, extraversion and adolescents' self-presentation on

- Facebook. *Personality and Individual Differences*, 50(2), 180–185.  
doi:10.1016/j.paid.2010.09.022
- Petticrew, M., & Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*. Malden, MA: Blackwell. doi:10.1027/1016-9040.11.3.244
- Public Health Resource Unit. (2006). 10 questions to help you make sense of reviews. *Critical Appraisal Skills Programme (CASP)*.
- Qiu, L., Lin, H., Leung, A. K., & Tov, W. (2012). Putting their best foot forward: Emotional disclosure on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 15(10), 569–572. doi:10.1089/cyber.2012.0200
- Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T. (2015). What does your selfie say about you? *Computers in Human Behavior*, 52(November), 443–449.  
doi:10.1016/j.chb.2015.06.032
- Robinson, L. (2007). The cyberself: the self-ing project goes online, symbolic interaction in the digital age. *New Media & Society*, 9(1), 93–110.  
doi:10.1177/1461444807072216
- Roeper, A., & Higgens-D'Allesandro, A. (2007). *The "I" of the Beholder: A Guided Journey to the Essence of a Child*. Great Potential Press.
- Rosenberg, J., & Egbert, N. (2011). Online impression management: Personality traits and concerns for secondary goals as predictors of self-presentation tactics on facebook. *Journal of Computer-Mediated Communication*, 17(1), 1–18.  
doi:10.1111/j.1083-6101.2011.01560.x

- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578–586. doi:10.1016/j.chb.2008.12.024
- Rui, J. R., & Stefanone, M. a. (2013). Strategic image management online. *Information, Communication & Society*, 16(8), 1286–1305. doi:10.1080/1369118X.2013.763834
- Ryan, G. (2010). Guidance notes on planning a systematic review. Retrieved September 24, 2015, from [www.library.nuigalway.ie/media/jameshardimanlibrary/content/documents/support/Guidance on planning a systematic review.pdf](http://www.library.nuigalway.ie/media/jameshardimanlibrary/content/documents/support/Guidance%20on%20planning%20a%20systematic%20review.pdf)
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27(5), 1658–1664. doi:10.1016/j.chb.2011.02.004
- Schlosser, R. W. (2007). Appraising the Quality of Systematic Reviews. Retrieved March 3, 2014, from [http://www.ktdrr.org/ktlibrary/articles\\_pubs/ncddrwork/focus/focus17/Focus17.pdf](http://www.ktdrr.org/ktlibrary/articles_pubs/ncddrwork/focus/focus17/Focus17.pdf)
- Schouten, A. P., Valkenburg, P. M., & Peter, J. (2007). Precursors and underlying processes of adolescents' online self-disclosure: Developing and testing an "Internet-attribute-perception" model. *Media Psychology*, 10(2), 292–315. doi:10.1080/15213260701375686

- Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences, 54*(3), 402–407. doi:10.1016/j.paid.2012.10.009
- Shaw, L. H., & Gant, L. M. (2002). In defense of the internet: the relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychology & Behavior, 5*(2), 157–171. doi:10.1089/109493102753770552
- Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology, 73*(6), 1380–1393. doi:10.1037/0022-3514.73.6.1380
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*, 63–75. doi:10.1111/j.1744-618X.2000.tb00391.x
- Smock, A. (2010). Self-presentation on Facebook: Managing content created by user and others. In *The Proceedings of the Annual Meeting of International Communication Association*. Singapore.
- Smock, A. D., Ellison, N. B., Lampe, C., & Yvette, D. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior, 27*(6), 2322–2329. doi:10.1016/j.chb.2011.07.011

- Stefanone, M. a, Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and social-networking-site behavior. *Cyberpsychology, Behavior and Social Networking, 14*(1), 41–49. doi:10.1089/cyber.2010.0049
- Stieger, S., Burger, C., Bohn, M., & Voracek, M. (2013). Who commits virtual identity suicide? Differences in privacy concerns, Internet addiction, and personality between Facebook users and quitters. *Cyberpsychology, Behavior and Social Networking, 16*(00), 629–34. doi:10.1089/cyber.2012.0323
- Stoughton, J. W., Thompson, L. F., & Meade, A. W. (2013). Big Five personality traits reflected in job applicants' social media postings. *Cyberpsychology, Behavior and Social Networking, 16*(11), 800–806. doi:10.1089/cyber.2012.0163
- Suh, A. (2013). The influence of self-discrepancy between the virtual and real selves in virtual communities. *Computers in Human Behavior, 29*, 246–256.
- Suler, J. R., & Phillips, W. A. (1998). The bad boys of cyberspace: Deviant behaviour in a multimedia chat community. *Cyberpsychology & Behavior, 1*(3), 275–294.
- Sun, T., & Wu, G. (2012). Traits, Predictors, and Consequences of Facebook Self-Presentation. *Social Science Computer Review, 30*(4), 419–433.  
doi:10.1177/0894439311425978
- Thurlow, C., Lengel, L., & Tomic, A. (2004). *Computer Mediated Communication*. London, England: SAGE.
- Toma, C. L., Hancock, J. T., & Ellison, N. B. (2008). Separating fact from fiction: an examination of deceptive self-presentation in online dating profiles. *Personality*

*and Social Psychology Bulletin*, 34(8), 1023–1036.

doi:10.1177/0146167208318067

Tosun, L. P., & Lajunen, T. (2010). Does Internet use reflect your personality?

Relationship between Eysenk's personality dimensions and Internet use.

*Computers and Human Behaviour*, 162–167.

Walther, J. B. (1992). Interpersonal Effects in Computer-Mediated Interaction A

Relational Perspective. *Communication Research*, 19(1), 52–90.

Wang, J. L., Jackson, L. a., Zhang, D. J., & Su, Z. Q. (2012). The relationships among the Big Five Personality factors, self-esteem, narcissism, and sensation-seeking to Chinese University students' uses of social networking sites (SNSs).

*Computers in Human Behavior*, 28(6), 2313–2319.

doi:10.1016/j.chb.2012.07.001

Wang, S. S. (2013). "I share, therefore I am": personality traits, life satisfaction, and

Facebook check-ins. *Cyberpsychology, Behavior and Social Networking*, 16(12),

870–7. doi:10.1089/cyber.2012.0395

Wang, S. S., & Stefanone, M. A. (2013). Showing off? Human mobility and the

interplay of traits, self-disclosure, and Facebook check-ins. *Social Science*

*Computer Review*, 31(4), 0894439313481424–. doi:10.1177/0894439313481424

Wardlaw, J. (2010). Advice on how to write a systematic review.

doi:10.1371/journal.pmed1000097



- Weibel, D., Wissmath, B., & Mast, F. W. (2010). Immersion in mediated environments: The role of personality traits. *Cyberpsychology, Behavior and Social Networking*, *13*(3), 251–6.
- Weiner, I. B., & Greene, R. L. (2008). *Handbook of Personality Assessment*. Hoboken, NJ: John Wiley & Sons.
- Wheless, L. R. (1978). A follow-up study of the relationships among trust, disclosure, and interpersonal solidarity. *Human Communication Research*, *4*, 143–157.
- Widiger, T. A., Trull, T. J., Clarkin, J. F., Sanderson, C., & Costa, P. T. (1994). A Description of the DSM-III-R and DSM-IV Personality Disorders with the Five-Factor Model of Personality. In P. T. Costa (Ed.), *Personality disorders and the five-factor model of personality*. (p. 364). Washington DC: American Psychological Association.
- Wiffen, P. J. (2011). Sense about systematic reviews. *Journal of Pain & Palliative Care Pharmacotherapy*, *25*(4), 374. doi:10.3109/15360288.2011.620696
- Wolfendale, J. (2007). My Avatar, my self: Virtual harm and attachment. *Ethics and Information Technology*, *9*(2), 111–119.
- Wu, Y. J., Chang, W., & Yuan, C. (2014). Do Facebook profile pictures reflect user's personality? *Computers in Human Behavior*, *51*, 880–889.  
doi:10.1016/j.chb.2014.11.014

- Yesil, M. M. (2014). The relationship between facebook use and personality traits of university students. *International Journal of Academic Research*, 6(2), 75–80. doi:10.7813/2075-4124.2014/6-2/B.12
- Yeung, K.-T., & Martin, J. L. (2003). The Looking Glass Self: An Empirical Test and Elaboration. *Social Forces*, 81(3), 843–879.
- Zhang, Y., Tang, L. S.-T., & Leung, L. (2011). Gratifications, Collective Self-Esteem, Online Emotional Openness, and Traitlike Communication Apprehension as Predictors of Facebook Uses. *Cyberpsychology, Behavior, and Social Networking*, 14(12), 733–739. doi:10.1089/cyber.2010.0042

### Appendix A: Search Keywords

The following keyword search combinations were utilised in the searches performed on the databases as follows.

1	Self-Presentation	Facebook	Personality Trait	All search combinations were performed on the following databases: SAGE Taylor & Francis Online Science Direct EBSCOHost (Selected sections were Academic Search Complete, Communication & Mass Media Complete, E-Journals, ERIC, Humanities International Complete, Library, Information Science & Technology Abstracts, MasterFILE Premier, PsychINFO)
2	Self-Presentation	Facebook	Five-factor Model	
3	Self-Presentation	Facebook	Openness to Experience	
4	Self-Presentation	Facebook	Conscientiousness	
5	Self-Presentation	Facebook	Extraversion	
6	Self-Presentation	Facebook	Agreeableness	
7	Self-Presentation	Facebook	Neuroticism	
8	Image Management	Facebook	Personality Trait	
9	Image Management	Facebook	Five-factor Model	
10	Image Management	Facebook	Openness to Experience	
11	Image Management	Facebook	Conscientiousness	
12	Image Management	Facebook	Extraversion	
13	Image Management	Facebook	Agreeableness	
14	Image Management	Facebook	Neuroticism	
15	Impression Management	Facebook	Personality Trait	
16	Impression Management	Facebook	Five-factor Model	
17	Impression Management	Facebook	Openness to Experience	
18	Impression Management	Facebook	Conscientiousness	
19	Impression Management	Facebook	Extraversion	
20	Impression Management	Facebook	Agreeableness	
21	Impression Management	Facebook	Neuroticism	

### Appendix B: Sample Returned from Initial Search

Search Return Summary	
Total Searches:	4 Databases (Including: ScienceDirect, SAGE Publications, Taylor & Francis Online, and EBSCOHost)
Total Items Returned:	469
Search Terms included:	<p>“Facebook”</p> <p>AND</p> <p>(“Self-presentation” OR</p> <p>“Image Management” OR</p> <p>“Impression Management”)</p> <p>AND</p> <p>(“Personality Trait” OR</p> <p>“Five-factor model” OR</p> <p>“Agreeableness” OR</p> <p>“Neuroticism” OR</p> <p>“Openness to experience” OR</p> <p>“Extraversion” OR</p> <p>“Conscientiousness”)</p>

**Items Returned:**

Ref #	Author(s)	Pub date	Title	Facebook	Self-Presentation	Personality Trait	Include?
1	Abdullah, Z.	2014	Activity Theory as Analytical Tool: A Case Study of Developing Student Teachers' Creativity in Design.				<b>N</b>
2	Abell, L., & Brewer, G.	2014	Machiavellianism, self-monitoring, self-promotion and relational aggression on Facebook.	Y	Y	Y	<b>Y</b>
3	Abraham, J., & Rufaedah, A.	2014	"Theologization" of Psychology and "Psychologization" of Religion: How Do Psychology and Religion Supposedly Contribute to Prevent and Overcome Social Conflicts?				<b>N</b>
4	Adebanjo, D., & Michaelides, R.	2010	Analysis of Web 2.0 enabled e-clusters: A case study.				<b>N</b>
5	Adrian, A.	2013	How much privacy do clouds provide? An Australian perspective.				<b>N</b>
6	Aharony, N.	2009	Librarians and information scientists in the blogosphere: An exploratory analysis.				<b>N</b>
7	Aharony, N., & Prebor, G.	2015	Librarians' and Information Professionals' Perspectives Towards Discovery Tools — An Exploratory Study.				<b>N</b>
8	Aksoy, L., Buoye, A., Aksoy, P., Larivière, B., & Keiningham, T. L.	2013	A Cross-national Investigation of the Satisfaction and Loyalty Linkage for Mobile Telecommunications Services across Eight Countries.				<b>N</b>
9	Alemu, G., & Stevens, B.	2015	An Emergent Theory of Digital Library Metadata. An Emergent Theory of Digital Library Metadata.				<b>M</b>
10	Ali-Hassan, H., Nevo, D., & Wade, M.	2015	Linking dimensions of social media use to job performance: The role of social capital.				<b>N</b>

11	Allen, M., & Omori, K.	2014	Cultural Differences between American and Japanese Self-Presentation on SNSs.	Y	Y	M	Y
12	Al-Saggaf, Y., & Simmons, P.	2015	Social media in Saudi Arabia: Exploring its use during two natural disasters.	Y			M
13	Amichai-Hamburger, Y., & Vinitzky, G.	2010	Social network use and personality.	Y		Y	M
14	Anastakis, D. J.	2014	The anatomy of reputation: an Association for Surgical Education priority.		Y		N
15	Anderson, K.	2012	Academic and Professional Publishing.				N
16	Andon, P., & Free, C.	2012	Auditing and crisis management: The 2010 Melbourne Storm salary cap scandal.				N
17	Androutsopoulos, J., & Juffermans, K.	2014	Digital language practices in superdiversity: Introduction. Discourse,	Y			N
18	Anzoise, V., & Sardo, S.	2015	Dynamic Systems and the role of Evaluation: The case of the Green Communities project.				N
19	Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B.	2014	E-leadership: Re-examining transformations in leadership source and transmission.				N
20	Axsen, J., Orlebar, C., & Skippon, S.	2013	Social influence and consumer preference formation for pro-environmental technology: The case of a U.K. workplace electric-vehicle study.				N
21	Aydin, G. S., Muyan, M., & Demir, A.	2013	The Investigation of Facebook usage Purposes and Shyness, Loneliness.	Y	M	Y	Y
22	Azzolini, J.	2013	Law Firm Librarianship.				N

23	Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D.	2010	Facebook profiles reflect actual personality, not self-idealization.	Y		Y	Y
24	Bae, S., Jang, J., & Kim, J.	2013	Good Samaritans on social network services: Effects of shared context information on social supports for strangers.	Y	Y	M	Y
25	Baelden, D., & Van Audenhove, L.	2015	Participative ICT4D and living lab research: The case study of a mobile social media application in a rural Tanzanian University setting.				N
26	Barnes, S. J., & Pressey, A. D.	2014	Caught in the Web? Addictive behavior in cyberspace and the role of goal-orientation.	Y		Y	Y
27	Bartikowski, B., Taieb, B., & Chandon, J.-L.	2015	Targeting without alienating on the Internet: Ethnic minority and majority consumers.	Y			N
28	Bayerl, P. S., Brewster, B., Domdouzis, K., & Gibson, H.	2014	Cyber Crime and Cyber Terrorism Investigator's Handbook.				M
29	Becton, J. B., Carr, J. C., & Judge, T. A.	2011	Is the past prologue for some more than others? The hobo syndrome and job complexity.				N
30	Bekkers, V., Edwards, A., & de Kool, D.	2013	Social media monitoring: Responsive governance in the shadow of surveillance?	Y	Y		Y
31	Bellavista, P., Montanari, R., & Das, S. K.	2013	Mobile social networking middleware: A survey.	Y			N
32	Benckendorff, P.	2009	Evaluating Wikis as an Assessment Tool for Developing Collaboration and Knowledge Management Skills.				N
33	Bente, S., Bombosch, U., & Langade, S.	2012	Collaborative Enterprise Architecture. Collaborative Enterprise Architecture.				N

34	Berdychevsky, L., & Gibson, H. J.	2015	Phenomenology of young women's sexual risk-taking in tourism.					<b>N</b>
35	Bergvik, S., & Wynn, R.	2012	The use of short message service (SMS) among hospitalized coronary patients.					<b>N</b>
36	Bertot, J. C., Jaeger, P. T., & Hansen, D.	2012	The impact of polices on government social media usage: Issues, challenges, and recommendations.	Y				<b>N</b>
37	Berube, L.	2011	Do You Web 2.0?					<b>M</b>
38	Biswas, K.	2014	Pharma's Prescription. Pharma's Prescription.					<b>N</b>
39	Błachnio, A., Przepiórka, A., & Rudnicka, P.	2013	Psychological Determinants of Using Facebook: A Research Review.	Y		Y	Y	
40	Blanchard, A. L., & Henle, C. A.	2008	Correlates of different forms of cyberloafing: The role of norms and external locus of control.					<b>N</b>
41	Blanke, T.	2014	Digital Asset Ecosystems.					<b>N</b>
42	Blanke, T.	2014	Digital Asset Ecosystems.					<b>N</b>
43	Blazevic, V., Wiertz, C., Cotte, J., de Ruyter, K., & Keeling, D. I.	2014	GOSIP in Cyberspace: Conceptualization and Scale Development for General Online Social Interaction Propensity.					<b>N</b>
44	Bligh, M. C., Kohles, J. C., & Pillai, R.	2011	Romancing leadership: Past, present, and future.					<b>N</b>
45	Block, J. H., Fisch, C. O., Hahn, A., & Sandner, P. G.	2015	Why do SMEs file trademarks? Insights from firms in innovative industries.					<b>N</b>



46	Bodroža, B., & Jovanović, T.	2016	Validation of the new scale for measuring behaviors of Facebook users: Psycho-Social Aspects of Facebook Use (PSAFU).	Y			<b>M</b>
47	Bolander, B., & Locher, M. A.	2014	Doing sociolinguistic research on computer-mediated data: A review of four methodological issues.				<b>N</b>
48	Bonk, C. J., Lee, M. M., Kim, N., & Lin, M.-F. G.	2009	The tensions of transformation in three cross-institutional wikibook projects.				<b>N</b>
49	Borek, A., Parlikad, A. K., Webb, J., & Woodall, P.	2014	Total Information Risk Management. Total Information Risk Management.				<b>N</b>
50	Borges, W.	2015	International Encyclopedia of the Social & Behavioral Sciences.				<b>N</b>
51	Bowie, D., & Buttle, F.	2011	Hospitality Marketing.				<b>N</b>
52	Boyle, K., & Johnson, T. J.	2010	MySpace is your space? Examining self-presentation of MySpace users.		Y		<b>N</b>
53	Brawley, A. M., & Pury, C. L. S.	2016	Work experiences on MTurk: Job satisfaction, turnover, and information sharing.				<b>N</b>
54	Brito, P. Q.	2012	Tweens' characterization of digital technologies.				<b>N</b>
55	Brown, D. D.	2013	Agile User Experience Design. Agile User Experience Design.				<b>N</b>
56	Buffardi, L. E., & Campbell, W. K.	2008	Narcissism and social networking Web sites.	Y		Y	<b>Y</b>

57	Buffardi, L. E., & Campbell, W. K.	2008	Narcissism and social networking Web sites.					<b>D</b>
58	Bullingham, L., & Vasconcelos, A.	2013	"The presentation of self in the online world": Goffman and the study of online identities.	Y	Y			<b>Y</b>
59	Bullock, J. A., Haddow, G. D., & Coppola, D. P.	2013	Introduction to Homeland Security.					<b>N</b>
60	Butler, T.	2011	Compliance with institutional imperatives on environmental sustainability: Building theory on the role of Green IS.					<b>N</b>
61	Buyya, R., Vecchiola, C., & Selvi, S. T.	2013	Mastering Cloud Computing. Mastering Cloud Computing.					<b>N</b>
62	Buyya, R., Vecchiola, C., & Selvi, S. T.	2013	Mastering Cloud Computing. Mastering Cloud Computing.					<b>N</b>
63	Cabiddu, F., Carlo, M. De, & Piccoli, G.	2014	Social media affordances: Enabling customer engagement.					<b>N</b>
64	Capriotti, P., & Pardo Kuklinski, H.	2012	Assessing dialogic communication through the Internet in Spanish museums.					<b>N</b>
65	Casale, S., & Fioravanti, G.	2015	Satisfying needs through Social Networking Sites: A pathway towards problematic Internet use for socially anxious people?	Y		Y		<b>Y</b>
66	Caverlee, J., Liu, L., & Webb, S.	2010	The SocialTrust framework for trusted social information management: Architecture and algorithms.					<b>N</b>
67	Chan, E. A., & Nyback, M.-H.	2015	A virtual caravan--A metaphor for home-internationalization through social media: A qualitative content analysis.					<b>N</b>

68	Chan, K. W., Li, S. Y., & Zhu, J. J.	2015	Fostering Customer Ideation in Crowdsourcing Community: The Role of Peer-to-peer and Peer-to-firm Interactions.					N
69	Chan, N. N., Walker, C., & Gleaves, A.	2015	An exploration of students' lived experiences of using smartphones in diverse learning contexts using a hermeneutic phenomenological approach.					N
70	Chang, L., & Chen, J. V.	2014	Aligning principal and agent's incentives: A principal-agent perspective of social networking sites.					N
71	Chang, V., Walters, R. J., & Wills, G.	2013	The development that leads to the Cloud Computing Business Framework.					N
72	Charlebois, S., & Summan, A.	2015	A Risk Communication Model for Food Regulatory Agencies in Modern Society.					N
73	Chatfield, A. T., Reddick, C. G., & Brajawidagda, U.	2015	Government surveillance disclosures, bilateral trust and Indonesia-Australia cross-border security cooperation: Social network analysis of Twitter data.					N
74	Chatterjee, P.	2011	Drivers of new product recommending and referral behaviour on social network sites.					N
75	Chauhan, R. S., Buckley, M. R., & Harvey, M. G.	2013	Facebook and personnel selection:					N
76	Cheasman, C., Simpson, S., & Everard, R.	2015	Acceptance and Speech Work: The Challenge.					N
77	Cheliotis, G.	2009	From open source to open content: Organization, licensing and decision processes in open cultural production.					N
78	Chen, B., & Marcus, J.	2012	Students' self-presentation on Facebook: An examination of	Y	Y	Y	Y	Y

			personality and self-construal factors.				
79	Chen, B., & Marcus, J.	2012	Students' self-presentation on Facebook: An examination of personality and self-construal factors.				<b>D</b>
80	Chen, J. C.	2013	Western Thoracic Surgical Association 2013 presidential address: winning the HITECH challenge.				<b>N</b>
81	Chen, R.	2013	Living a private life in public social networks: An exploration of member self-disclosure.	Y	Y		<b>M</b>
82	Chen, S.-C., & Lin, C.-P.	2015	The impact of customer experience and perceived value on sustainable social relationship in blogs: An empirical study.				<b>N</b>
83	Cheng, J. W., Mitomo, H., Otsuka, T., & Jeon, S. Y.	2015	The effects of ICT and mass media in post-disaster recovery – A two model case study of the Great East Japan Earthquake.				<b>N</b>
84	Cheung, O., Thomas, D., & Patrick, S.	2010	New Approaches to E-Reserve. New Approaches to E-Reserve.				<b>N</b>
85	Chik, W. B.	2013	The Singapore Personal Data Protection Act and an assessment of future trends in data privacy reform.				<b>N</b>
86	Child, J. T., & Agyeman-Budu, E. A.	2010	Blogging privacy management rule development: The impact of self-monitoring skills, concern for appropriateness, and blogging frequency.				<b>N</b>
87	Choi choi181@ssu.ac.kr, J., & Kim yb@ssu.ac.kr, Y.	2014	The moderating effects of gender and number of friends on the relationship between self-presentation and brand-related word-of-mouth on Facebook.	Y	Y		<b>M</b>
88	Christofides, E., Muise, A., & Desmarais, S.	2009	Information disclosure and control on Facebook: are they two sides of the same coin or two different processes?	Y	Y	Y	<b>Y</b>

89	Chung, N., Han, H., & Koo, C.	2015	Adoption of travel information in user-generated content on social media: the moderating effect of social presence.	Y			<b>N</b>
90	Chung, N., Nam, K., & Koo, C.	2016	Examining information sharing in social networking communities: Applying theories of social capital and attachment.	Y			<b>N</b>
91	Cleveland, M., Laroche, M., & Papadopoulos, N.	2015	You are what you speak? Globalization, multilingualism, consumer dispositions and consumption.		Y		<b>N</b>
92	Conole, G., & Culver, J.	2010	The design of Cloudworks: Applying social networking practice to foster the exchange of learning and teaching ideas and designs.				<b>N</b>
93	Constantinides, E.	2014	Foundations of Social Media Marketing.	Y			<b>N</b>
94	Cooperman, L.	2015	Managing the One-Person Library.				<b>N</b>
95	Corney, R.	2008	Female frequent internet gamblers: a qualitative study of their gambling, its impact and their views on treatment and policy,				<b>N</b>
96	Correia, A., Santos, J., Azevedo, D., Paredes, H., & Fonseca, B.	2013	Putting "Human Crowds" in the Loop of Bibliography Evaluation: A Collaborative Working Environment for CSCW Publications.				<b>N</b>
97	Costa, F. F.	2013	Social networks, web-based tools and diseases: implications for biomedical research.	Y			<b>N</b>
98	Costa, L., & Poulet, Y.	2012	Privacy and the regulation of 2012.				<b>N</b>
99	Courage, M. L., Bakhtiar, A., Fitzpatrick, C., Kenny, S., & Brandeau, K.	2015	Growing up multitasking: The costs and benefits for cognitive development.				<b>N</b>

100	Cova, B.	2014	Re-branding brand genericide.					<b>N</b>
101	Craig, A.	2012	Social Media for Academics. Social Media for Academics.					<b>N</b>
102	Crawford, A.	2012	New Directions for Academic Liaison Librarians. New Directions for Academic Liaison Librarians.					<b>N</b>
103	Criado, J. I., Sandoval-Almazan, R., & Gil-Garcia, J. R.	2013	Government innovation through social media.	Y				<b>N</b>
104	Crowson, M., & Goulding, A.	2013	Virtually homosexual: Technoromanticism, demarginalisation and identity formation among homosexual males.					<b>N</b>
105	Cuddapah, J. L., & Stanford, B. H.	2015	Career-changers' ideal teacher images and grounded classroom perspectives.					<b>N</b>
106	Davis, J.	2010	Architecture of the personal interactive homepage: constructing the self through MySpace.			Y		<b>N</b>
107	Davis, J.	2010	Architecture of the personal interactive homepage: constructing the self through MySpace.			Y		<b>N</b>
108	De Kraker, J., Cörvers, R., Valkering, P., Hermans, M., & Rikers, J.	2013	Learning for sustainable regional development: towards learning networks 2.0?					<b>N</b>
109	De Longueville, B.	2010	Community-based geoportals: The next generation? Concepts and methods for the geospatial Web 2.0.					<b>N</b>
110	De Roure, D., Goble, C., & Stevens, R.	2009	The design and realisation of the Virtual Research Environment for social sharing of workflows.					<b>N</b>

111	DePamphilis, D. M.	2014	Mergers, Acquisitions, and Other Restructuring Activities. Mergers, Acquisitions, and Other Restructuring Activities.				<b>N</b>
112	DePamphilis, D. M.	2015	Mergers, Acquisitions, and Other Restructuring Activities. Mergers, Acquisitions, and Other Restructuring Activities.				<b>N</b>
113	Dillon, P., Wang, R., Vesisenaho, M., Valtonen, T., & Havu-Nuutinen, S.	2013	Using technology to open up learning and teaching through improvisation: Case studies with micro-blogs and short message service communications.				<b>N</b>
114	DiStaso, M. W., Vafeiadis, M., & Amaral, C.	2015	Managing a health crisis on Facebook: How the response strategies of apology, sympathy, and information influence public relations.	Y			<b>N</b>
115	Ditoiu, M.-C., & Platon, O.-E.	2012	Aspects Regarding the Romanian Social Network User's Profile and its Implications in Marketing Destination Pages.				<b>N</b>
116	Djelassi, S., & Decoopman, I.	2013	Customers' participation in product development through crowdsourcing: Issues and implications.				<b>N</b>
117	Dobos, Á., & Jenei, Á.	2013	Citizen Engagement as a Learning Experience.				<b>N</b>
118	Docherty, S. L., Robb, S. L., Phillips-Salimi, C., Cherven, B., Stegenga, K., Hendricks-Ferguson, V., ... Haase, J.	2013	Parental perspectives on a behavioral health music intervention for adolescent/young adult resilience during cancer treatment: report from the children's oncology group.				<b>N</b>
119	Donnelly, D. F., & Boniface, S.	2013	Consuming and creating: Early-adopting science teachers' perceptions and use of a wiki to support professional development.				<b>N</b>
120	Donnelly, G., Iyer, R., & Howell, R. T.	2012	The Big Five personality traits, material values, and financial well-			Y	<b>N</b>

			being of self-described money managers.				
121	Donnelly, G., Ksendzova, M., & Howell, R. T.	2013	Sadness, identity, and plastic in over-shopping: The interplay of materialism, poor credit management, and emotional buying motives in predicting compulsive buying.				<b>N</b>
122	Döring, N. M.	2009	The Internet's impact on sexuality: A critical review of 15years of research.				<b>N</b>
123	Doz, Y. L., & Kosonen, M.	2010	Embedding Strategic Agility.				<b>N</b>
124	Durrant, A., Frohlich, D., Sellen, A., & Lyons, E.	2009	Home curation versus teenage photography: Photo displays in the family home.				<b>N</b>
125	Durugbo, C., & Pawar, K.	2014	A unified model of the co-creation process.				<b>N</b>
126	Edgley, C., Sharma, N., & Anderson-Gough, F.	2015	Diversity and professionalism in the Big Four firms: Expectation, celebration and weapon in the battle for talent.				<b>N</b>
127	Eftekhar, A., Fullwood, C., & Morris, N.	2014	Capturing personality from Facebook photos and photo-related activities: How much exposure do you need?	Y	Y	Y	<b>Y</b>
128	Eftekhar, A., Fullwood, C., & Morris, N.	2014	Capturing personality from Facebook photos and photo-related activities: How much exposure do you need?				<b>D</b>
129	El Ouiridi, M., Segers, J., El Ouiridi, A., & Pais, I.	2015	Predictors of job seekers' self-disclosure on social media.	Y	Y		<b>M</b>
130	Elsner, W., Heinrich, T., & Schwardt, H.	2015	The Microeconomics of Complex Economies. The Microeconomics of Complex Economies.				<b>N</b>



131	Emanuel, L., Neil, G. J., Bevan, C., Fraser, D. S., Stevenage, S. V., Whitty, M. T., & Jamison-Powell, S.	2014	Who am I? Representing the self offline and in different online contexts.	Y	Y	Y	Y
132	Enginkaya, E., & Yilmaz, H.	2014	What Drives Consumers to Interact with Brands through Social Media? A Motivation Scale Development Study.	Y			N
133	Falloon, G.	2013	Young students using iPads: App design and content influences on their learning pathways.				N
134	Federici, T., Braccini, A. M., & Sæbø, Ø.	2015	"Gentlemen, all aboard!" ICT and party politics: Reflections from a Mass-eParticipation experience.				N
135	Feiler, D. C., & Kleinbaum, a. M.	2015	Popularity, Similarity, and the Network Extraversion Bias.				N
136	Fernandes, D. A. B., Soares, L. F. B., Gomes, J. V., Freire, M. M., & Inácio, P. R. M.	2014	Emerging Trends in ICT Security. Emerging Trends in ICT Security.				N
137	Fernandez, K. C., Levinson, C. a., & Rodebaugh, T. L.	2012	Profiling: Predicting Social Anxiety From Facebook Profiles.	Y		Y	M
138	Fischer, E., & Reuber, A. R.	2011	Social interaction via new social media: (How) can interactions on Twitter affect effectual thinking and behavior?				N
139	Fiske, S. T., & North, M. S.	2015	Measures of Personality and Social Psychological Constructs. Measures of Personality and Social Psychological Constructs.			Y	N

140	Fong, K., & Mar, R. a.	2015	What Does My Avatar Say About Me? Inferring Personality From Avatars.		Y	Y	N
141	Fournier, S., & Avery, J.	2011	The uninvited brand.				N
142	Fox, J., & Rooney, M. C.	2015	The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites.	Y	Y	Y	Y
143	Frame, A., & Brachotte, G.	2015	Le tweet stratégique: Use of Twitter as a PR tool by French politicians.				N
144	Frampton, B. D., & Child, J. T.	2013	Friend or not to friend: Coworker Facebook friend requests as an application of communication privacy management theory.				N
145	Fraser, S.	2014	Opus : University of Bath Online Publication Store.				N
146	Fuentes-Bautista, M.	2014	Rethinking localism in the broadband era: A participatory community development approach.				N
147	Fullwood, C., Nicholls, W., & Makichi, R.	2014	We've got something for everyone: How individual differences predict different blogging motivations.				N
148	Gallouj, F., Weber, K. M., Stare, M., & Rubalcaba, L.	2014	The futures of the service economy in Europe: A foresight analysis.				N
149	Galluzzi, A.	2014	Libraries and Public Perception. Libraries and Public Perception.				N
150	Gardner, B., & Revell, S.	2012	Open Source Software in Life Science Research. Open Source Software in Life Science Research.				N
151	Gardner, B., & Thomas, V.	2014	Building an Information Security Awareness Program. Building an Information Security Awareness Program.				N

152	Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P.	2011	Authentic leadership: A review of the literature and research agenda.				<b>N</b>
153	Gawer, A.	2014	Bridging differing perspectives on technological platforms: Toward an integrative framework.				<b>N</b>
154	Gillen, J.	2011	A battle worth winning: The service of culture to the Communist Party of Vietnam in the contemporary era.				<b>N</b>
155	Girard, Y., Hett, F., & Schunk, D.	2015	How individual characteristics shape the structure of social networks.	Y		Y	<b>M</b>
156	Giuffrida, R., & Dittrich, Y.	2013	Empirical studies on the use of social software in global software development – A systematic mapping study.				<b>N</b>
157	Gloor, P. A., Fischbach, K., Fuehres, H., Lassenius, C., Niinimäki, T., Olguin, D. O., ... Putzke, J.	2011	Towards “Honest Signals” of Creativity – Identifying Personality Characteristics Through Microscopic Social Network Analysis.	Y		Y	<b>M</b>
158	Godé, C., & Lebraty, J.-F.	2015	Experience feedback as an enabler of coordination: An aerobic military team case.				<b>N</b>
159	Goldsmith, M. U. D., & Fonseca, A. J.	2014	Proactive Marketing for the New and Experienced Library Director. Proactive Marketing for the New and Experienced Library Director.				<b>N</b>
160	Goodman, E., Kuniavsky, M., & Moed, A.	2012	Observing the User Experience. Observing the User Experience.	M			<b>M</b>
161	Graham, M. W., Avery, E. J., & Park, S.	2015	The role of social media in local government crisis communications.				<b>N</b>

162	Gray, C., Hogg, R., & Kennedy, C.	2012	A qualitative study exploring health literacy for child and adolescent vaccination in Scotland.					<b>N</b>
163	Grieve, R., & de Groot, H. T.	2011	Does online psychological test administration facilitate faking?					<b>N</b>
164	Gross, J.	2012	Building your Library Career with Web 2.0. Building your Library Career with Web 2.0.					<b>N</b>
165	Gross, J.	2012	Building your Library Career with Web 2.0. Building your Library Career with Web 2.0.					<b>N</b>
166	Gunasekaran, A., & Spalanzani, A.	2012	Sustainability of manufacturing and services: Investigations for research and applications.					<b>N</b>
167	Haddow, G. D., & Haddow, K. S.	2014	Disaster Communications in a Changing Media World. Disaster Communications in a Changing Media World.					<b>N</b>
168	Hall, J. A., & Pennington, N.	2013	Self-monitoring, honesty, and cue use on Facebook: The relationship with user extraversion and conscientiousness.	Y	Y	Y	Y	
169	Hall, J. a., & Pennington, N.	2013	Self-monitoring, honesty, and cue use on Facebook: The relationship with user extraversion and conscientiousness.					<b>D</b>
170	Hall, J. a., Pennington, N., & Lueders, a.	2013	Impression management and formation on Facebook: A lens model approach.	Y	Y	M	M	
171	Hall, J. a., Pennington, N., & Lueders, a.	2013	Impression management and formation on Facebook: A lens model approach.					<b>D</b>
172	Hames, I.	2012	Academic and Professional Publishing. Academic and Professional Publishing.					<b>N</b>
173	Hart, J., Nailling, E., Bizer, G. Y., & Collins, C. K.	2015	Attachment theory as a framework for explaining engagement with Facebook.	Y		M	M	

174	Hayley, A., Zinkiewicz, L., & Hardiman, K.	2015	Values, attitudes, and frequency of meat consumption. Predicting meat-reduced diet in Australians.					<b>N</b>
175	Herring, S. C., & Kapidzic, S.	2015	International Encyclopedia of the Social & Behavioral Sciences. International Encyclopedia of the Social & Behavioral Sciences.					<b>N</b>
176	Heverin, T., & Zach, L.	2012	Crisis Information Management. Crisis Information Management.					<b>N</b>
177	Hew, K. F.	2011	Students' and teachers' use of Facebook.	Y				<b>N</b>
178	Hirschorn, D. S., Choudhri, A. F., Shih, G., & Kim, W.	2014	Use of mobile devices for medical imaging.					<b>N</b>
179	Hodge, M.	2015	Skills to Make a Librarian. Skills to Make a Librarian.					<b>N</b>
180	Hoffman, B.	2015	Motivation for Learning and Performance. Motivation for Learning and Performance.					<b>N</b>
181	Hofmann, R.	2014	Visionary competence for long-term development of brands, products, and services: The trend receiver concept and its first applications at Audi.					<b>N</b>
182	Holbeche, L.	2010	HR Leadership. HR Leadership.					<b>N</b>
183	Hollenbaugh, E. E., & Ferris, A. L.	2015	Predictors of honesty, intent, and valence of Facebook self-disclosure.	Y	Y	Y	Y	
184	Holtznider, B., Wheeler, T., Stragand, G., & Gee, J.	2010	Agile Development and Business Goals. Agile Development & Business Goals.					<b>N</b>
185	Hopkins, P., & Todd, L.	2015	Creating an intentionally dialogic space: Student activism and the Newcastle Occupation 2010.					<b>N</b>
186	Hoyng, R.	2015	A socio-technical contract: Network governance and ICT4D in Turkey.					<b>N</b>

187	Huang, Z., & Benyoucef, M.	2013	From e-commerce to social commerce: A close look at design features.				<b>N</b>
188	Human, L. J., Biesanz, J. C., Parisotto, K. L., & Dunn, E. W.	2012	Your Best Self Helps Reveal Your True Self: Positive Self-Presentation Leads to More Accurate Personality Impressions.		Y	Y	<b>M</b>
189	Hung, C.-L., Chou, J. C.-L., & Dong, T.-P.	2011	Innovations and communication through innovative users: An exploratory mechanism of social networking website.	Y			<b>N</b>
190	Hunt, D. S., Lin, C. A., & Atkin, D. J.	2014	Photo-messaging: Adopter attributes, technology factors and use motives.				<b>N</b>
191	Inayatullah, S., & Song, M.-M.	2014	Visions and scenarios of democratic governance in Asia 2030.				<b>N</b>
192	Jackson, P.	2010	Web 2.0 Knowledge Technologies and the Enterprise. Web 2.0 Knowledge Technologies and the Enterprise.				<b>M</b>
193	Jackson, P.	2010	Web 2.0 Knowledge Technologies and the Enterprise. Web 2.0 Knowledge Technologies and the Enterprise.				<b>D</b>
194	Jackson, P.	2010	Web 2.0 Knowledge Technologies and the Enterprise. Web 2.0 Knowledge Technologies and the Enterprise.				<b>D</b>
195	Jackson, P.	2010	Web 2.0 Knowledge Technologies and the Enterprise. Web 2.0 Knowledge Technologies and the Enterprise.				<b>D</b>
196	Jackson, P.	2010	Web 2.0 Knowledge Technologies and the Enterprise. Web 2.0 Knowledge Technologies and the Enterprise.				<b>D</b>
197	Jacobsson, A., Boldt, M., & Carlsson, B.	2015	A risk analysis of a smart home automation system.				<b>N</b>

198	Jang, H.-J., Sim, J., Lee, Y., & Kwon, O.	2013	Deep sentiment analysis: Mining the causality between personality-value-attitude for analyzing business ads in social media.	Y		Y	<b>N</b>
199	Janowski, T.	2015	Digital government evolution: From transformation to contextualization.				<b>N</b>
200	Janta, H., Brown, L., Lugosi, P., & Ladkin, A.	2011	Migrant relationships and tourism employment.				<b>N</b>
201	Jarke, M., Loucopoulos, P., Lyytinen, K., Mylopoulos, J., & Robinson, W.	2011	The brave new world of design requirements.				<b>N</b>
202	Jin, J., Li, Y., Zhong, X., & Zhai, L.	2015	Why users contribute knowledge to online communities? An empirical study of an online social Q&A community.	Y			<b>N</b>
203	Johansen, W., Aggerholm, H. K., & Frandsen, F.	2012	Entering new territory: A study of internal crisis management and crisis communication in organizations.				<b>N</b>
204	Jost, J. T., & Krochik, M.	2014	Chapter Five – Ideological Differences in Epistemic Motivation: Implications for Attitude Structure, Depth of Information Processing, Susceptibility to Persuasion, and Stereotyping.				<b>N</b>
205	Kaewkitipong, L., Chen, C. C., & Ractham, P.	2015	A community-based approach to sharing knowledge before, during, and after crisis events: A case study from Thailand.				<b>N</b>
206	Kamprath, M., & Mietzner, D.	2015	The impact of sectoral changes on individual competences: A reflective scenario-based approach in the creative industries.				<b>N</b>
207	Kang, I., Bonk, C. J., & Kim, M.-C.	2011	A case study of blog-based learning in Korea: Technology becomes pedagogy.				<b>N</b>

208	Kang, J.-Y. M., & Johnson, K. K. P.	2015	F-Commerce platform for apparel online social shopping: Testing a Mowen's 3M model.	Y			<b>N</b>
209	Kang, S.	2007	Disembodiment in online social interaction: impact of online chat on social support and psychosocial well-being.	Y			<b>N</b>
210	Karakiza, M.	2015	The Impact of Social Media in the Public Sector.	Y			<b>N</b>
211	Karnik, N. S., & Dogra, N.	2010	The cultural sensibility model: a process-oriented approach for children and adolescents.				<b>N</b>
212	Kear, K., Woodthorpe, J., Robertson, S., & Hutchison, M.	2010	From forums to wikis: Perspectives on tools for collaboration.				<b>N</b>
213	Kiesenbauer, J., & Zeffass, A.	2015	Today's and tomorrow's challenges in public relations: Comparing the views of chief communication officers and next generation leaders.				<b>N</b>
214	Kim, J.-Y.	2012	A study on learners' perceptual typology and relationships among the learner's types, characteristics, and academic achievement in a blended e-Education environment.				<b>N</b>
215	Klenk, N. L., & Wyatt, S.	2015	The design and management of multi-stakeholder research networks to maximize knowledge mobilization and innovation opportunities in the forest sector.				<b>N</b>
216	Koponen, J. M.	2010	FutureSelf: Emerging digitized life patterns and a personal future simulation system.				<b>N</b>
217	Krämer, J., Wiewiorra, L., & Weinhardt, C.	2013	Net neutrality: A progress report.				<b>N</b>



218	Krämer, N. C., & Winter, S.	2008	Impression Management 2.0: The Relationship of Self-Esteem, Extraversion, Self-Efficacy, and Self-Presentation Within Social Networking Sites.	Y	Y	Y	Y
219	Krämer, N. C., & Winter, S.	2008	Impression Management 2.0: The Relationship of Self-Esteem, Extraversion, Self-Efficacy, and Self-Presentation Within Social Networking Sites.				D
220	Krawczyk, M. J., Muchnik, L., Mańka-Krasoń, A., & Kułakowski, K.	2011	Line graphs as social networks.				N
221	Krishnan, A., & Atkin, D.	2014	Individual differences in social networking site users: The interplay between antecedents and consequential effect on level of activity.	Y			N
222	Kuksa, I., & Childs, M.	2014	Making Sense of Space. Making Sense of Space.				N
223	Kunz, W., & Seshadri, S.	2015	From virtual travelers to real friends: Relationship-building insights from an online travel community.				N
224	Kuo, E. W., & Thompson, L. F.	2014	The influence of disposition and social ties on trust in new virtual teammates.				N
225	Kwak, K. T., Choi, S. K., & Lee, B. G.	2014	SNS flow, SNS self-disclosure and post hoc interpersonal relations change: Focused on Korean Facebook user.	Y	Y		N
226	Kwanya, T., Stilwell, C., & Underwood, P. G.	2015	Library 3.0. Library 3.0.				N
227	Kwanya, T., Stilwell, C., & Underwood, P. G.	2015	Library 3.0. Library 3.0.				N
228	Labrecque, L. I., Markos, E., & Milne, G. R.	2011	Online Personal Branding: Processes, Challenges, and Implications.	Y	Y		M

229	Lackermaid, G.	2011	Hybrid cloud architectures for the online commerce.					<b>N</b>
230	Lang, C., & Barton, H.	2015	Just untag it: Exploring the management of undesirable Facebook photos.	Y	Y			<b>M</b>
231	Latysheva, E. V., Karlova, L. V., & Koryakina, A. S.	2015	Internet Communication and Transformation of University Information Space.					<b>N</b>
232	Law, D.	2011	Libraries and Society. Libraries and Society.					<b>N</b>
233	Leary, M. R., Jongman-Sereno, K. P., & Diebels, K. J.	2015	Measures of Personality and Social Psychological Constructs. Measures of Personality and Social Psychological Constructs.					<b>N</b>
234	Lee, E., Ahn, J., & Kim, Y. J.	2014	Personality traits and self-presentation at Facebook.	Y	Y	Y	Y	
235	Lee, E. B.	2014	Too Much Information: Heavy Smartphone and Facebook Utilization by African American Young Adults.	Y	Y			<b>N</b>
236	Lee, J.-Y.	2015	Personal computer wallpaper user segmentation based on Sasang typology.					<b>N</b>
237	Lee, S., Park, D.-H., & Han, I.	2014	New members' online socialization in online communities: The effects of content quality and feedback on new members' content-sharing intentions.					<b>N</b>
238	Lee, S. Y.	2014	How do people compare themselves with others on social network sites?: The case of Facebook.	Y				<b>N</b>
239	Lee, S.-M., Ungson, G. R., & Russo, M. V.	2011	What determines an engaging website?: An empirical study of website characteristics and operational performance.					<b>N</b>

240	Lee-Won, R. J., Shim, M., Joo, Y. K., & Park, S. G.	2014	Who puts the best “face” forward on Facebook?: Positive self-presentation in online social networking and the role of self-consciousness, actual-to-total Friends ratio, and culture.	Y	Y		<b>M</b>
241	Leikas, S., Verkasalo, M., & Lönnqvist, J.-E.	2013	Posing personality: Is it possible to enact the Big Five traits in photographs?		Y	Y	<b>M</b>
242	Leong, J., & Nguyen, L. H.	2011	Continuing professional development for RMIT International University Vietnam library staff: Adding value through an international partnership: A case study.				<b>N</b>
243	Lewis, M. A., & Dicker, A. P.	2015	Social Media and Oncology: The Past, Present, and Future of Electronic Communication between Physician and Patient.				<b>N</b>
244	Liberali, G., Urban, G. L., & Hauser, J. R.	2013	Competitive information, trust, brand consideration and sales: Two field experiments.				<b>N</b>
245	Lim, J. S., Nicholson, J., Yang, S.-U., & Kim, H.-K.	2015	Online authenticity, popularity, and the “Real Me” in a microblogging environment.				<b>N</b>
246	Lindfors, P., Solantaus, T., & Rimpelä, A.	2012	Fears for the future among Finnish adolescents in 1983-2007: from global concerns to ill health and loneliness.				<b>N</b>
247	Lo, S. K., Hsieh, A. Y., & Chiu, Y. P.	2013	Contradictory deceptive behavior in online dating.		Y		<b>N</b>
248	Lomas, T., Cartwright, T., Edginton, T. L., & Ridge, D. T.	2011	Men behaving well? Journeys towards constructive engagement with well-being through meditation,				<b>N</b>
249	Lynch, A. J. J., Thackway, R., Specht, A., Beggs, P. J., Brisbane, S., Burns, E. L., ... Waycott, M.	2015	Transdisciplinary synthesis for ecosystem science, policy and management: The Australian experience.				<b>N</b>

250	Lyons, S.	2012	Indie Film Producing. Indie Film Producing.					<b>N</b>
251	MacKinnon, L., Bacon, L., Gan, D., Loukas, G., Chadwick, D., & Frangiskatos, D.	2013	Strategic Intelligence Management. Strategic Intelligence Management.					<b>N</b>
252	Madichie, N. O., & Hinson, R.	2014	A critical analysis of the “dialogic communications” potential of sub-Saharan African Police Service websites.					<b>N</b>
253	Magnuson, M. J., & Dundes, L.	2008	Gender differences in “social portraits” reflected in MySpace profiles.		Y			<b>N</b>
254	Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G.	2008	Self-presentation and gender on MySpace.		Y			<b>N</b>
255	Marasi, S., & Bennett, R. J.	2015	Pay communication: Where do we go from here?					<b>N</b>
256	Maresh-Fuehrer, M. M., & Smith, R.	2015	Social media mapping innovations for crisis prevention, response, and evaluation.					<b>N</b>
257	Marriott, T. C., & Buchanan, T.	2014	The true self online: Personality correlates of preference for self-expression online, and observer ratings of personality online and offline.	M	Y	Y		<b>M</b>
258	Marwick, A., & Ellison, N. B.	2012	“There Isn’t Wifi in Heaven!” Negotiating Visibility on Facebook Memorial Pages.	Y				<b>N</b>
259	Mashal, I., Alsaryrah, O., Chung, T.-Y., Yang, C.-Z., Kuo, W.-H., & Agrawal, D. P.	2015	Choices for interaction with things on Internet and underlying issues.					<b>N</b>

260	McKelvey, K.	2015	Textiles and Fashion. Textiles and Fashion.				<b>N</b>
261	McKinney, B. C., Kelly, L., & Duran, R. L.	2012	Narcissism or Openness?: College Students' Use of Facebook and Twitter.	Y	M	Y	<b>M</b>
262	Medeiros, F. A., & Bygrave, L. A.	2015	Brazil's Marco Civil da Internet: Does it live up to the hype?				<b>N</b>
263	Mehdizadeh, S.	2010	Self-presentation 2.0: Narcissism and self-esteem on Facebook.	Y	Y	Y	<b>Y</b>
264	Mehl, M. R., & Eid, M.	2014	Narcissistic power poster ?			Y	<b>M</b>
265	Meijer, A., Grimmelikhuijsen, S., & Brandsma, G. J.	2012	Communities of Public Service Support.				<b>N</b>
266	Meijer, A., & Thaens, M.	2013	Social media strategies: Understanding the differences between North American police departments.				<b>N</b>
267	Meinrath, S. D., Losey, J. W., & Pickard, V. W.	2011	Chapter 5 – Digital Feudalism: Enclosures and Erasures from Digital Rights Management to the Digital Divide.				<b>N</b>
268	Mele, C., & Russo-Spena, T.	2015	Innomediary agency and practices in shaping market innovation.				<b>N</b>
269	Men, L. R.	2015	The internal communication role of the chief executive officer: Communication channels, style, and effectiveness.				<b>N</b>
270	Men, L. R., & Tsai, W.-H. S.	2015	Infusing social media with humanity: Corporate character, public engagement, and relational outcomes.				<b>N</b>
271	Menon, T., & Smith, E. B.	2014	Identities in flux: cognitive network activation in times of change.				<b>N</b>

272	Merolli, M., Gray, K., & Martin-Sanchez, F.	2013	Health outcomes and related effects of using social media in chronic disease management: a literature review and analysis of affordances.					<b>N</b>
273	Mestre, L. S.	2011	Visibility of Diversity within Association of Research Libraries Websites.					<b>N</b>
274	Michalopoulos, D., Mavridis, I., & Jankovic, M.	2014	GARS: Real-time system for identification, assessment and control of cyber grooming attacks.					<b>N</b>
275	Michikyan, M., Dennis, J., & Subrahmanyam, K.	2014	Can You Guess Who I Am? Real, Ideal, and False Self-Presentation on Facebook Among Emerging Adults.	Y	Y			<b>M</b>
276	Michikyan, M., Subrahmanyam, K., & Dennis, J.	2014	Can you tell who i am? Neuroticism, extraversion, and online self-presentation among young adults.	M	Y	Y		<b>M</b>
277	Mock, N., Morrow, N., & Papendieck, A.	2013	From complexity to food security decision-support: Novel methods of assessment and their role in enhancing the timeliness and relevance of food and nutrition security information.					<b>N</b>
278	Moon, Y. J., Kim, W. G., & Armstrong, D. J.	2014	Exploring neuroticism and extraversion in flow and user generated content consumption.			Y		<b>N</b>
279	Moore, K., & McElroy, J. C.	2012	The influence of personality on Facebook usage, wall postings, and regret.	Y	M	Y		<b>M</b>
280	Morgan, N., Pritchard, A., Pride, R., Munro, J., & Richards, B.	2011	Destination Brands. Destination Brands.					<b>N</b>
281	Mummery, J., & Rodan, D.	2013	The role of blogging in public deliberation and democracy.					<b>N</b>
282	Myrick, J. G.	2015	Emotion regulation, procrastination, and watching cat videos online: Who watches Internet cats, why, and to what effect?					<b>N</b>

283	Nadkarni, A., & Hofmann, S. G.	2012	Why Do People Use Facebook?	Y		Y	<b>M</b>
284	Nadkarni, A., & Hofmann, S. G.	2012	Why Do People Use Facebook?				<b>D</b>
285	Nam, T.	2012	Suggesting frameworks of citizen-sourcing via Government 2.0.				<b>N</b>
286	Nambisan, P., & Watt, J. H.	2011	Managing customer experiences in online product communities.				<b>N</b>
287	Nardon, L., Aten, K., & Gulanowski, D.	2015	Expatriate adjustment in the digital age: The co-creation of online social support resources through blogging.				<b>N</b>
288	Neuhofer, B., Buhalis, D., & Ladkin, A.	2012	Conceptualising technology enhanced destination experiences.				<b>N</b>
289	Neuman, Y.	2014	Personality from a cognitive-biological perspective.				<b>N</b>
290	Nguyen, L. C.	2015	Establishing a Participatory Library Model: A Grounded Theory Study.				<b>N</b>
291	Nguyen, M., Bin, Y. S., & Campbell, A.	2012	Comparing Online and Offline Self-Disclosure: A Systematic Review.	M	Y		<b>N</b>
292	Nollet, J., Rebolledo, C., & Popel, V.	2012	Becoming a preferred customer one step at a time.				<b>N</b>
293	O'Neill, A.	2012	Encyclopedia of Applied Ethics.				<b>N</b>

294	Oliver, G.	2011	Organisational Culture for Information Managers.					<b>N</b>
295	Omilion-Hodges, L. M., & Baker, C. R.	2014	Everyday talk and convincing conversations: Utilizing strategic internal communication.					<b>N</b>
296	Omilion-Hodges, L. M., & McClain, K. L.	2015	University use of social media and the crisis lifecycle: Organizational messages, first information responders' reactions, reframed messages and dissemination patterns.					<b>N</b>
297	Ong, E. Y. L., Ang, R. P., Ho, J. C. M., Lim, J. C. Y., Goh, D. H., Lee, C. S., & Chua, A. Y. K.	2011	Narcissism, extraversion and adolescents' self-presentation on Facebook.	Y	Y	Y	Y	
298	Oostrom, J. K., van der Linden, D., Born, M. P., & van der Molen, H. T.	2013	New technology in personnel selection: How recruiter characteristics affect the adoption of new selection technology.					<b>N</b>
299	Oriyano, S.-P., & Shimonski, R.	2012	Client-Side Attacks and Defense. Client-Side Attacks and Defense.					<b>N</b>
300	Ott, L., & Theunissen, P.	2015	Reputations at risk: Engagement during social media crises.					<b>N</b>
301	Palmer, N., Kemp, R., Kielmann, T., & Bal, H.	2012	The Case for Smartphones as an Urgent Computing Client Platform.					<b>N</b>
302	Papagiannidis, S., Gebka, B., Gertner, D., & Stahl, F.	2015	Diffusion of web technologies and practices: A longitudinal study.					<b>N</b>
303	Paraskevas, A., Altinay, L., McLean, J., & Cooper, C.	2013	CRISIS KNOWLEDGE IN TOURISM: TYPES, FLOWS AND GOVERNANCE.					<b>N</b>



304	Park, M. J., Choi, H., Kim, S. K., & Rho, J. J.	2015	Trust in government's social media service and citizen's patronage behavior.				<b>N</b>
305	Park, N., Jin, B., & Annie Jin, S.-A.	2011	Effects of self-disclosure on relational intimacy in Facebook.	Y	M		<b>N</b>
306	Parsell, M., & Townley, C.	2012	Encyclopedia of Applied Ethics. Encyclopedia of Applied Ethics.				<b>N</b>
307	Pawlikowski, M., Altstötter-Gleich, C., & Brand, M.	2013	Validation and psychometric properties of a short version of Young's Internet Addiction Test.				<b>N</b>
308	Pektas, S. T.	2012	The Blended Design Studio: An Appraisal of New Delivery Modes in Design Education.				<b>N</b>
309	Pennington, N., & Hall, J. a.	2014	An analysis of humor orientation on Facebook: A lens model approach.	Y			<b>N</b>
310	Pentina, I., & Tarafdar, M.	2014	From "information" to "knowing": Exploring the role of social media in contemporary news consumption.				<b>N</b>
311	Peters, A. N., Winschiers-Theophilus, H., & Mennecke, B. E.	2015	Cultural influences on Facebook practices: A comparative study of college students in Namibia and the United States.				<b>N</b>
312	Petrelli, D., Bowen, S., & Whittaker, S.	2014	Photo mementos: Designing digital media to represent ourselves at home.	M	Y		<b>N</b>
313	Petrocchi, N., Asnaani, A., Martinez, A. P., Nadkarni, A., & Hofmann, S. G.	2014	Differences Between People Who Use Only Facebook and Those Who Use Facebook Plus Twitter.	Y		M	<b>N</b>
314	Petrocchi, N., Asnaani, A., Martinez, A. P., Nadkarni, A., & Hofmann, S. G.	2014	Differences Between People Who Use Only Facebook and Those Who Use Facebook Plus Twitter.				<b>N</b>

315	Phillips, N. K.	2011	Academic Library Use of Facebook: Building Relationships with Students.	Y			<b>N</b>
316	Picazo-Vela, S., Gutiérrez-Martínez, I., & Luna-Reyes, L. F.	2012	Understanding risks, benefits, and strategic alternatives of social media applications in the public sector.	M			<b>N</b>
317	Pimmer, C., Brysiewicz, P., Linxen, S., Walters, F., Chipps, J., & Gröhbiel, U.	2014	Informal mobile learning in nurse education and practice in remote areas--a case study from rural South Africa.				<b>N</b>
318	Pollock, J. M.	2012	Chapter 3 – Why Do People Commit Crime?				<b>N</b>
319	Poulet, Y.	2009	Data protection legislation: What is at stake for our society and democracy?				<b>N</b>
320	Powell, T.	2011	Abstracts from the 64th Reciprocal Meat Conference of the American Meat Science Association, 19–22 June 2011, Kansas State University, Manhattan Kansas.				<b>N</b>
321	Qiu, L., Lin, H., Leung, A. K., & Tov, W.	2012	Putting Their Best Foot Forward: Emotional Disclosure on Facebook.	Y	Y	M	<b>M</b>
322	Qiu, L., Lin, H., Leung, A. K., & Tov, W.	2012	Putting Their Best Foot Forward: Emotional Disclosure on Facebook.				<b>D</b>
323	Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T.	2015	What does your selfie say about you?	M	M	Y	<b>M</b>
324	Quick, E. K.	2013	Solution Focused Anxiety Management. Solution Focused Anxiety Management.				<b>N</b>
325	Raford, N.	2015	Online foresight platforms: Evidence for their impact on scenario planning & strategic foresight.				<b>N</b>

326	Rahimi, E., van den Berg, J., & Veen, W.	2015	Facilitating student-driven constructing of learning environments using Web 2.0 personal learning environments.					<b>N</b>
327	Rahmat, R. A. A. O. K., & Osman, K.	2012	From Traditional to Self-Regulated Learners: UKM Journey Towards Education 3.0.					<b>N</b>
328	Ramaswamy, V., & Ozcan, K.	2015	Brand Value Co-Creation in a Digitalized World: An Integrative Framework and Research Implications.					<b>N</b>
329	Ramli, R.	2013	Culturally appropriate communication in Malaysia: budi bahasa as warranty component in Malaysian discourse.					<b>N</b>
330	Randhawa, P., Calantone, R. J., & Voorhees, C. M.	2015	The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer–brand connections.					<b>N</b>
331	Rauschnabel, P. A., Brem, A., & Ivens, B. S.	2015	Who will buy smart glasses? Empirical results of two pre-market-entry studies on the role of personality in individual awareness and intended adoption of Google Glass wearables.					<b>N</b>
332	Reilly, A. H., & Hynan, K. A.	2014	Corporate communication, sustainability, and social media: It's not easy (really) being green.					<b>N</b>
333	Reiner, L., & Stebbins, L.	2009	The JAL Guide to the Professional Literature.					<b>N</b>
334	Reiner, L., & Stebbins, L.	2009	The JAL Guide to the Professional Literature.					<b>N</b>
335	Reips, U.-D., & Buffardi, L. E.	2012	Studying Migrants with the Help of the Internet: Methods from Psychology.					<b>N</b>
336	Rosenberg, J., & Egbert, N.	2011	Online impression management: Personality traits and concerns for secondary goals as predictors of	Y	Y	Y	Y	<b>Y</b>

			self-presentation tactics on facebook.				
337	Rosenthal-Stott, H. E. S., Dicks, R. E., & Fielding, L. S.	2015	The Valence of Self-Generated (Status Updates) and Other-Generated				<b>N</b>
338	Rothenberger, L.	2014	The VAP – An organization of and for foreign correspondents in Germany.				<b>N</b>
339	Ruck, K., & Welch, M.	2012	Valuing internal communication; management and employee perspectives.				<b>N</b>
340	Rui, J. R., & Stefanone, M. a.	2013	Strategic Image Management Online.	Y	Y		<b>M</b>
341	Rui, J. R., & Stefanone, M. a.	2013	Strategic Image Management Online.				<b>D</b>
342	Rui, J., & Stefanone, M. a.	2013	Strategic self-presentation online: A cross-cultural study.	Y	Y	M	<b>M</b>
343	Sadovykh, V., Sundaram, D., & Piramuthu, S.	2015	Do Decision-Making Structure and Sequence Exist in Health Online Social Networks?				<b>N</b>
344	Saha, J. M., & Rowley, C.	2015	The Changing Role of the Human Resource Profession in the Asia Pacific Region. The Changing Role of the Human Resource Profession in the Asia Pacific Region.				<b>N</b>
345	Saleem, H., Beaudry, A., & Croteau, A.-M.	2011	Antecedents of computer self-efficacy: A study of the role of personality traits and gender.				<b>N</b>
346	Salleh, S. M., Tasir, Z., & Shukor, N. A.	2012	Web-Based Simulation Learning Framework to Enhance Students' Critical Thinking Skills.				<b>N</b>

347	Sarrab, M., Elbasir, M., & Alnaeli, S.	2016	Towards a quality model of technical aspects for mobile learning services: An empirical investigation.					<b>N</b>
348	Saxby, S.	2008	News and comment on recent developments from around the world.					<b>N</b>
349	Saxby, S.	2008	News and comment on recent developments from around the world.					<b>N</b>
350	Saxby, S.	2008	News and comment on recent developments from around the world.					<b>N</b>
351	Schack, C. M.	2010	Identitetskonstruktion på Facebook – en kvalitativ undersøgelse af unges brug af det sociale online-netværk Facebook					<b>M</b>
352	Schauppenlehner-Kloyber, E., & Penker, M.	2015	Managing group processes in transdisciplinary future studies: How to facilitate social learning and capacity building for self-organised action towards sustainable urban development?					<b>N</b>
353	Schmid, G., Schreier, A., Meyer, R., & Wolke, D.	2008	Are infant regulatory disorders predictive of intelligence in preschool children: Results of a prospective longitudinal study,					<b>N</b>
354	Schmid, G., Schreier, A., Meyer, R., & Wolke, D.	2008	Are infant regulatory disorders predictive of intelligence in preschool children: Results of a prospective longitudinal study,					<b>N</b>
355	Schneider, J. A., Zhou, A. N., & Laumann, E. O.	2015	A new HIV prevention network approach: sociometric peer change agent selection.					<b>N</b>
356	Schwartz, H. a., & Ungar, L. H.	2015	Data-Driven Content Analysis of Social Media: A Systematic Overview of Automated Methods.					<b>N</b>
357	Schwarz, J. O., Kroehl, R., & von der Gracht, H. A.	2014	Novels and novelty in trend research — Using novels to perceive weak signals and transfer frames of reference. Technological Forecasting and Social Change, 84, 66–73. doi:10.1016/j.techfore.2013.09.007(					<b>N</b>

358	Sedikides, C., Wildschut, T., Routledge, C., Arndt, J., Hepper, E. G., & Zhou, X.	2015	Chapter Five – To Nostalgize: Mixing Memory with Affect and Desire.					<b>N</b>
359	Sedivy, J., & Chromy, J.	2015	Research of Communication Activities Using Electronic Devices in Education.					<b>N</b>
360	Seidman, G.	2013	Self-presentation and belonging on Facebook: How personality influences social media use and motivations.	Y	Y	Y	Y	
361	Seigneur, J.-M.	2009	Computer and Information Security Handbook. Computer and Information Security Handbook.					<b>N</b>
362	Seigneur, J.-M.	2013	Computer and Information Security Handbook. Computer and Information Security Handbook.					<b>N</b>
363	Semertzaki, E.	2011	Special Libraries As Knowledge Management Centres. Special Libraries As Knowledge Management Centres.					<b>N</b>
364	Seo, D., & Lee, J.	2016	Web_2.0 and five years since: How the combination of technological and organizational initiatives influences an organization's long-term Web_2.0 performance.					<b>N</b>
365	Setchell, J., Watson, B., Jones, L., & Gard, M.	2015	Weight stigma in physiotherapy practice: Patient perceptions of interactions with physiotherapists.					<b>N</b>
366	Shehab, M., Squicciarini, A., Ahn, G.-J., & Kokkinou, I.	2012	Access control for online social networks third party applications.					<b>N</b>
367	Sidebotham, M., Fenwick, J., Carter, A., & Gamble, J.	2015	Using the Five Senses of Success framework to understand the experiences of midwifery students enrolled in an undergraduate degree program.					<b>N</b>

368	Sievers, K., Wodzicki, K., Aberle, I., Keckeisen, M., & Cress, U.	2015	Self-presentation in professional networks: More than just window dressing.		Y		<b>N</b>
369	Simons, G.	2014	Russian public diplomacy in the 21st century: Structure, means and message.				<b>N</b>
370	Sivarajah, U., Irani, Z., & Weerakkody, V.	2015	Evaluating the use and impact of Web 2.0 technologies in local government.				<b>N</b>
371	Sobré-Denton, M., Carlsen, R., & Gruel, V.	2014	Opening doors, opening minds: A cosmopolitan pedagogical framework to assess learning for global competency in Chicago's underserved communities.				<b>N</b>
372	Soliman, A. M.	2012	International Encyclopedia of Housing and Home. International Encyclopedia of Housing and Home.				<b>N</b>
373	Sööt, A., & Viskus, E.	2014	Contemporary Approaches to Dance Pedagogy – The Challenges of the 21st Century.				<b>N</b>
374	Spagnoletti, P., Resca, A., & Sæbø, Ø.	2015	Design for social media engagement: Insights from elderly care assistance.				<b>N</b>
375	Spartz, J. T., Su, L. Y.-F., Griffin, R., Brossard, D., & Dunwoody, S.	2015	YouTube, Social Norms and Perceived Salience of Climate Change in the American Mind.				<b>N</b>
376	Spencer, A. J., Buhalis, D., & Moital, M.	2012	A hierarchical model of technology adoption for small owner-managed travel firms: An organizational decision-making and leadership perspective.				<b>N</b>
377	Srinivasan, V.	2012	Multi generations in the workforce: Building collaboration.				<b>N</b>

378	Stamati, T., Papadopoulos, T., & Anagnostopoulos, D.	2014	Social media for openness and accountability in the public sector: Cases in the Greek context.					<b>N</b>
379	Stopfer, J. M., Egloff, B., Nestler, S., & Back, M. D.	2014	Personality expression and impression formation in online social networks: An integrative approach to understanding the processes of accuracy, impression management and meta-accuracy.	M	Y	Y	Y	<b>Y</b>
380	Sun, P.-L., Ku, C.-Y., & Shih, D.-H.	2015	An implementation framework for E-Government 2.0.					<b>N</b>
381	Sun, T., & Wu, G.	2012	Traits, Predictors, and Consequences of Facebook Self-Presentation.	Y	Y	Y	Y	<b>Y</b>
382	Sun, Y., Wang, N., Shen, X.-L., & Zhang, J. X.	2015	Location information disclosure in location-based social network services: Privacy calculus, benefit structure, and gender differences.					<b>N</b>
383	Svenningsen, S. R., Brandt, J., Christensen, A. A., Dahl, M. C., & Dupont, H.	2015	Historical oblique aerial photographs as a powerful tool for communicating landscape changes.					<b>N</b>
384	Swanson, T. A.	2012	Managing Social Media in Libraries.					<b>N</b>
385	Swanson, T. A.	2012	Managing Social Media in Libraries.					<b>N</b>
386	Tainter, C. R., Wong, N. L., & Bittner, E. A.	2015	Innovative Strategies in Critical Care Education.					<b>N</b>
387	Teng, C.-C.	2011	Commercial hospitality in restaurants and tourist accommodation: Perspectives from international consumer experience in Scotland.					<b>N</b>
388	Terms, F.	2012	Social Psychology.					<b>N</b>



389	Terzis, V., Moridis, C. N., & Economides, A. A.	2012	How student's personality traits affect Computer Based Assessment Acceptance: Integrating BFI with CBAAM.				<b>N</b>
390	Tessitore, T., Pandelaere, M., & Van Kerckhove, A.	2014	The Amazing Race to India: Prominence in reality television affects destination image and travel intentions.				<b>N</b>
391	Thoms, B., & Eryilmaz, E.	2014	How media choice affects learner interactions in distance learning classes.				<b>N</b>
392	Tian, W., & Zhao, Y.	2015	Optimized Cloud Resource Management and Scheduling.				<b>N</b>
393	Tifferet, S., & Vilnai-Yavetz, I.	2014	Gender differences in Facebook self-presentation: An international randomized study.	Y	Y	M	<b>M</b>
394	Timmis, S.	2012	Constant companions: Instant messaging conversations as sustainable supportive study structures amongst undergraduate peers.				<b>N</b>
395	Titangos, H.-L. H.	2013	Local Community in the Era of Social Media Technologies. Local Community in the Era of Social Media Technologies.				<b>N</b>
396	Toma, C. L., Hancock, J. T., & Ellison, N. B.	2008	Separating fact from fiction: an examination of deceptive self-presentation in online dating profiles.		Y		<b>N</b>
397	Tong, S. T., & Walther, J. B.	2012	The Confirmation and Disconfirmation of Expectancies in Computer-Mediated Communication.				<b>N</b>
398	Tsovaltzi, D., Judele, R., Puhl, T., & Weinberger, A.	2015	Scripts, individual preparation and group awareness support in the service of learning in Facebook: How does CSCL compare to social networking sites?				<b>N</b>
399	Tulchinsky, T. H., & Varavikova, E. A.	2014	The New Public Health. The New Public Health.				<b>N</b>

400	Tulley, C.	2013	Migration Patterns: A Status Report on the Transition from Paper to Eportfolios and the Effect on Multimodal Composition Initiatives.				<b>N</b>
401	Turvey, B. E., & Crowder, S.	2013	Ethical Justice. Ethical Justice.				<b>N</b>
402	Uimonen, P.	2015	International Encyclopedia of the Social & Behavioral Sciences. International Encyclopedia of the Social & Behavioral Sciences.				<b>N</b>
403	Underwood, J. D. M., Kerlin, L., & Farrington-Flint, L.	2011	The lies we tell and what they say about us: Using behavioural characteristics to explain Facebook activity.	Y	Y	M	<b>M</b>
404	Vaghjee, H.	2014	Assessing the Technological Adeptness of University Students in Mauritius.				<b>N</b>
405	Valtonen, T., Hacklin, S., Dillon, P., Vesisenaho, M., Kukkonen, J., & Hietanen, A.	2012	Perspectives on personal learning environments held by vocational students.				<b>N</b>
406	Van Compernelle, R. a.	2015	Are multilingualism, tolerance of ambiguity, and attitudes toward linguistic variation related?				<b>N</b>
407	Van Der Heide, B., D&apos;Angelo, J. D., & Schumaker, E. M.	2012	The Effects of Verbal Versus Photographic Self-Presentation on Impression Formation in Facebook.	Y	Y		<b>N</b>
408	Van Dijck, J.	2013	“You have one identity”: performing the self on Facebook and LinkedIn.	Y	Y	M	<b>M</b>
409	Van Ommering, E.	2015	Formal history education in Lebanon: Crossroads of past conflicts and prospects for peace.				<b>N</b>

410	Varey, R. J.	2008	Marketing as an Interaction System.					<b>N</b>
411	Veletsianos, G., & Kimmons, R.	2013	Scholars and faculty members' lived experiences in online social networks.					<b>N</b>
412	Versichele, M., Neutens, T., Delafontaine, M., & Van de Weghe, N.	2012	The use of Bluetooth for analysing spatiotemporal dynamics of human movement at mass events: A case study of the Ghent Festivities.					<b>N</b>
413	Vitolo, C., Elkhatib, Y., Reusser, D., Macleod, C. J. A., & Buytaert, W.	2015	Web technologies for environmental Big Data.					<b>N</b>
414	Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C.	2009	Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication: A Test of Warranting Theory Using Facebook.	Y	Y			<b>M</b>
415	Walumbwa, F. O., Christensen, A. L., & Hailey, F.	2011	Authentic leadership and the knowledge economy.					<b>N</b>
416	Wandel, T., & Beavers, A.	2010	Playing Around with Identity.					<b>N</b>
417	Wang, J.	2012	The developmental state in the global hegemony of neoliberalism: A new strategy for public housing in Singapore.					<b>N</b>
418	Wang, J. L., Jackson, L. a., Zhang, D. J., & Su, Z. Q.	2012	The relationships among the Big Five Personality factors, self-esteem, narcissism, and sensation-seeking to Chinese University students' uses of social networking sites (SNSs).	Y	M	Y		<b>M</b>
419	Wang, N., & Sun, Y.	2015	Social influence or personal preference? Examining the determinants of usage intention across social media with different sociability.					<b>N</b>

420	Wang, Q., & Hannes, K.	2014	Academic and socio-cultural adjustment among Asian international students in the Flemish community of Belgium: A photovoice project.					<b>N</b>
421	Wang, S. S.	2013	"I share, therefore I am": personality traits, life satisfaction, and Facebook check-ins. <i>Cyberpsychology, Behavior and Social Networking</i> , 16(12), 870–7. doi:10.1089/cyber.2012.0395	Y	M	Y		<b>M</b>
422	Wang, S. S., & Stefanone, M. a.	2013	Showing Off? Human Mobility and the Interplay of Traits, Self-Disclosure, and Facebook Check-Ins.	Y	Y	Y		<b>Y</b>
423	Wang, S. S., & Stefanone, M. a.	2013	Showing Off? Human Mobility and the Interplay of Traits, Self-Disclosure, and Facebook Check-Ins.					<b>D</b>
424	Wang, X.	2012	Foreign direct investment and innovation in China's e-commerce sector.					<b>N</b>
425	Ware, M.	2015	International Encyclopedia of the Social & Behavioral Sciences.					<b>N</b>
426	Waters, R. D., Amarkhil, A., Bruun, L., & Mathisen, K. S.	2012	Messaging, music, and mailbags: How technical design and entertainment boost the performance of environmental organizations' podcasts.					<b>N</b>
427	Waters, R. D., Burnett, E., Lamm, A., & Lucas, J.	2009	Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. <i>Public Relations Review</i> , 35(2), 102–106. doi:10.1016/j.pubrev.2009.01.006	Y				<b>N</b>
428	Wearing, S., & McGehee, N. G.	2013	Volunteer tourism: A review.					<b>N</b>

429	Web 2.0 and Libraries.	2010	Web 2.0 and Libraries.					<b>N</b>
430	Weber, D. M., & Kauffman, R. J.	2011	What drives global ICT adoption? Analysis and research directions.					<b>N</b>
431	Weber, M., Ziegele, M., & Schnauber, A.	2013	Blaming the victim: the effects of extraversion and information disclosure on guilt attributions in cyberbullying.					<b>N</b>
432	Weinberg, B. D., de Ruyter, K., Dellarocas, C., Buck, M., & Keeling, D. I.	2013	Destination Social Business: Exploring an Organization's Journey with Social Media, Collaborative Community and Expressive Individuality. <i>Journal of Interactive Marketing</i> , 27(4), 299–310. doi:10.1016/j.intmar.2013.09.006					<b>N</b>
433	Wheeler, A., & Winburn, M.	2015	Cloud Storage Security. <i>Cloud Storage Security</i> .					<b>N</b>
434	Wheeler, A., & Winburn, M.	2015	Cloud Storage Security. <i>Cloud Storage Security</i> .					<b>N</b>
435	Whitworth, A.	2014	Radical Information Literacy.					<b>N</b>
436	Wilson, R. E., Gosling, S. D., & Graham, L. T.	2012	A Review of Facebook Research in the Social Sciences.					<b>N</b>
437	Windsor, A., & Park, S.-S.	2014	Designing L2 reading to write tasks in online higher education contexts.					<b>N</b>
438	Winston, E. R., Dawn Medlin, B., & Adriana Romaniello, B.	2012	An e-patient's End-user community (EUCY): The value added of social network applications.					<b>N</b>

439	Winter, S., Neubaum, G., Eimler, S. C., Gordon, V., Theil, J., Herrmann, J., ... Krämer, N. C.	2014	Another brick in the Facebook wall - How personality traits relate to the content of status updates.	Y	Y	Y	Y
440	Winzenried, A., Law, D., Hughes, P., Johnson, D., Healey, S., Warner, D., ... Giovenco, G.	2010	Visionary Leaders for Information. Visionary Leaders for Information.				N
441	Winzenried, A., Law, D., Hughes, P., Johnson, D., Healey, S., Warner, D., ... Giovenco, G.	2010	Visionary Leaders for Information. Visionary Leaders for Information.				N
442	Wirtz, B. W., Schilke, O., & Ullrich, S.	2010	Strategic Development of Business Models.				N
443	Withers, M., Williamson, M., & Reddington, M.	2010	Transforming HR. Transforming HR.				N
444	Wright, D., Gutwirth, S., Friedewald, M., De Hert, P., Langheinrich, M., & Moscibroda, A.	2009	Privacy, trust and policy-making: Challenges and responses.				N
445	Wu, Y.-C. J., Chang, W.-H., & Yuan, C.-H.	2014	Do Facebook profile pictures reflect user's personality?	Y	M	Y	Y
446	Yaakobi, E., & Goldenberg, J.	2014	Social relationships and information dissemination in virtual social network systems: An attachment theory perspective.				N
447	Yang, Q., & Li, C.	2013	Mozart or metallica, who makes you more attractive? A mediated moderation test of music, gender, personality, and attractiveness in cyberspace.				N

448	Yengin, İ., Karahoca, D., Karahoca, A., & Ozcinar, Z.	2010	Being ready for the paradigm shifts in e-learning: Where is the change happening and how to catch the change? <i>Procedia - Social and Behavioral Sciences</i> , 2(2), 5762–5768. doi:10.1016/j.sbspro.2010.03.940				<b>N</b>
449	Yi, M., Oh, S. G., & Kim, S.	2013	Comparison of social media use for the U.S. and the Korean governments.				<b>N</b>
450	Yoo, K.-H., & Gretzel, U.	2011	Influence of personality on travel-related consumer-generated media creation.	M	M	Y	<b>M</b>
451	Yoshida, M., James, J. D., & Cronin, J. J.	2013	Sport event innovativeness: Conceptualization, measurement, and its impact on consumer behavior.				<b>N</b>
452	Young, T., & Milton, N.	2011	Knowledge Management for Sales and Marketing. <i>Knowledge Management for Sales and Marketing</i> .				<b>N</b>
453	Youssef, C. M.	2011	Recent events in Egypt and the Middle East.				<b>N</b>
454	Zavattaro, S. M., French, P. E., & Mohanty, S. D.	2015	A sentiment analysis of U.S. local government tweets: The connection between tone and citizen involvement.				<b>N</b>
455	Zavattaro, S. M., & Sementelli, A. J.	2014	A critical examination of social media adoption in government: Introducing omnipresence.				<b>N</b>
456	Zheng, L.	2013	Social media in Chinese government: Drivers, challenges and capabilities.				<b>N</b>
457	Zhong, B., Hardin, M., & Sun, T.	2011	Less effortful thinking leads to more social networking? The associations between the use of social network sites and personality traits.	Y	M	Y	<b>M</b>
458	Zhou, L., & Wang, T.	2014	Social media: A new vehicle for city marketing in China.				<b>N</b>

459	Zoeteman, B. C. J.	2013	What is behind the leadership shift in sustainable development from politicians to CEOs?					N
460	Zuiderwijk, A., & Janssen, M.	2014	Open data policies, their implementation and impact: A framework for comparison.					N
461	Zulaeha, I.	2013	Innovation Models of Indonesian Learning in Multicultural Society.					N
462		2009	2009 Bibliography Issue.					N
463		2010	2010 Public Relations Review Bibliography Issue.					N
464		2011	Contents.					N
465		2013	Meeting Reports.					N
466		2009	Photographic Possibilities.					N
467		n.d.	Presenting me.	Y	Y	M		M
468		2011	Review Briefs: October/December 2011.					N
469		2011	Special Interest Report Abstracts.					N





## Appendix D: Checklist for Quality Appraisal

Three broad issues need to be considered when appraising the report of a study, as adapted from the Critical Appraisal Skills Programme (2006):

- Is the study valid?
- What are the results?
- Will the results contribute to a systematic review?

Specific screening questions:

1. Clearly-focused research question?
2. Appropriate methodology used for research question?
3. Appropriate sampling method used?
4. Data collected in a way that addresses research question?
5. Have ethical issues been addressed?
6. Were statistics appropriately applied?
7. Was data analysis sufficiently rigorous?
8. Clear statement of findings?
9. Can findings be generalized?
10. How do findings contribute to existing knowledge?

## Appendix E: Narrowed Sample

Ref #	Author(s)	Pub date	Title	Methodology	Population (N size, gender, age, location)	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
2	Abell, L., & Brewer, G.	2014	Machiavellianism, self-monitoring, self-promotion and relational aggression on Facebook.	Quantitative	N = 243 (N = 54 men N = 189 Women) Age 18-69, British				X	
13	Amichai-Hamburger, Y., & Vinitzky, G.	2010	Social network use and personality.	Quantitative	N = 237 (N=101 Male, N= 136 Female) students, average age = 22. Israel.	X	X	X	X	X
23	Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D.	2010	Facebook profiles reflect actual personality, not self-idealization.	Quantitative	N = 236 OSN users (ages 17–22 years) United States (Facebook; N = 133, 52 male, 81 female) and Germany (StudiVZ, SchuelerVZ; N = 103, 17 male, 86 female).	X	X	X	X	X
39	Błachnio, A., Przepiórka, A., & Rudnicka, P.	2013	Psychological Determinants of Using Facebook: A Research Review.	Review	N = 59 articles	X	X	X	X	X

46	Bodroža, B., & Jovanović, T.	2016	Validation of the new scale for measuring behaviors of Facebook users: Psycho-Social Aspects of Facebook Use (PSAFU).	Quantitative	N = 804 (SERBIA) Subsample 1: N= 445; avg age 26.95 years (15-62); 79.1% females; 39.6% students, 41.1% employed persons, 15.7% unemployed, 2.7% secondary school, 0.9% retired. Subsample 2: N= 359; avg age 21.29 years (18-44); 79.4% females; 100% students.	X	X	X	X	X
56	Buffardi, L. E., & Campbell, W. K.	2008	Narcissism and social networking Web sites.	Quantitative	Owner participants: N = 156 undergraduate students (n= 100 female, 56 male; age range = 18-23 avg 18.97) Rater participants: N = 128 undergraduate students (n= 86 female, 46 male; age range = 18-26 avg 19.41)				X	
78	Chen, B., & Marcus, J.	2012	Students' self-presentation on Facebook: An examination of personality and self-construal factors.	Qualitative	N = 463 university students			X		

81	Chen, R.	2013	Living a private life in public social networks: An exploration of member self-disclosure.	Quantitative	N = 222 university students			X		
127	Eftekhar, A., Fullwood, C., & Morris, N.	2014	Capturing personality from Facebook photos and photo-related activities: How much exposure do you need?	Quantitative	N = 115 (84 female, 31 male; 17 - 55 years)	X	X	x	X	X
137	Fernandez, K. C., Levinson, C. a., & Rodebaugh, T. L.	2012	Profiling: Predicting Social Anxiety From Facebook Profiles.	Quantitative	N = 62 undergraduate university students (39.63% female; mean age 19)					X
142	Fox, J., & Rooney, M. C.	2015	The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites.	Quantitative	N = 800 men ( age 18-40) USA?				X	
168	Hall, J. A., & Pennington, N.	2013	Self-monitoring, honesty, and cue use on Facebook: The relationship with user extraversion and conscientiousness.	Quantitative	N = 100 profiles N= 35 raters		X	X	X	

170	Hall, J. a., Pennington, N., & Lueders, a.	2013	Impression management and formation on Facebook: A lens model approach.	Quantitative	N = 100 profiles N = 35	X	X	X	X	X
183	Hollenbaugh, E. E., & Ferris, A. L.	2015	Predictors of honesty, intent, and valence of Facebook self-disclosure.	Quantitative	N = 301 FB users (avg age = 31.85; n = 232 female, n= 68 male)	X	X	X	X	X
440	Hollenbaugh, Ferris	2014	Facebook self-disclosure: Examining the role of Traits, social cohesion	Quantitative	N=305 (18-68; avg age31.85; n=232 females n=68 males; )	X	X	X	X	X
218	Krämer, N. C., & Winter, S.	2008	Impression Management 2.0: The Relationship of Self-Esteem, Extraversion, Self-Efficacy, and Self-Presentation Within Social Networking Sites.	Quantitative	N = 58			X		
230	Lang, C., & Barton, H.	2015	Just untag it: Exploring the management of undesirable Facebook photos.	Mixed method	N = 19 for focus groups (n = 6 male, n=13 female; age 18-64) N = 112 for online questionnaire (age 18-61, avg age = 29.54; n=37 male, n = 75 female)		X		X	

234	Lee, E., Ahn, J., & Kim, Y. J.	2014	Personality traits and self-presentation at Facebook.	Quantitative	N = 236 (n= 108 male, n= 128 female; avg age = 20.6)	X	X	X	X	X
257	Marriott, T. C., & Buchanan, T.	2014	The true self online: Personality correlates of preference for self-expression online, and observer ratings of personality online and offline.	Quantitative	N = 523 primary participants (62% female, 37% male, 1% unknown gender, age 16 - 75, ) N = 41 observers (n= 22 female, n= 19 male)	X	X	X	X	X
261	McKinney, B. C., Kelly, L., & Duran, R. L.	2012	Narcissism or Openness?: College Students' Use of Facebook and Twitter.	Quantitative	N = 233 ( n= 144 female, n = 89 male; avg age 19.77)	X			X	
263	Mehdizadeh, S.	2010	Self-presentation 2.0: Narcissism and self-esteem on Facebook.	Quantitative	N = 100 (n=50 male, n= 50 female; age 18-25, avg age = 22.21)				X	
264	Mehl, M. R., & Eid, M.	2014	Narcissistic power poster ? On the relationship between narcissism and status updating activity on Facebook	Quantitative	1) N= 296 (n=161 female, n=133 male n=2 unknown gender; age 19-31) 2) N = 209 (n=164 female, n=45 male; age 18-25, avg age = 23.49)				X	

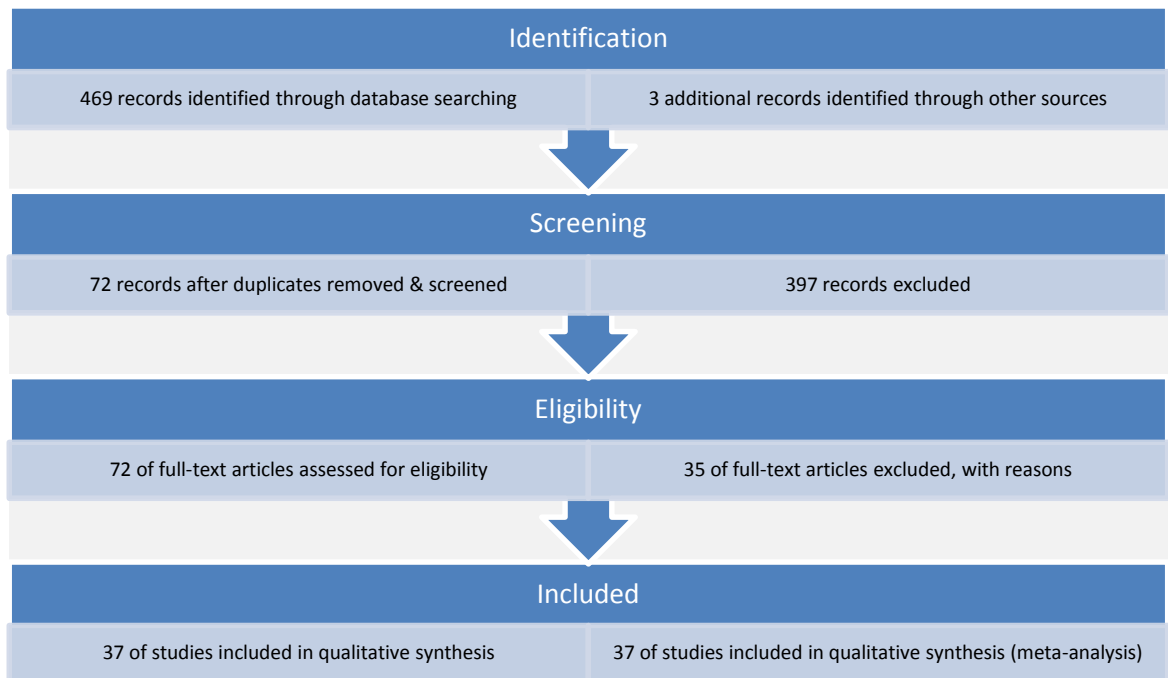
276	Michikyan, M., Subrahmanyam, K., & Dennis, J.	2014	Can you tell who I am? Neuroticism, extraversion, and online self-presentation among young adults.	Quantitative	N = 261 (n=66 males, n=195 female; avg age = 21.92)			X		X
279	Moore, K., & McElroy, J. C.	2012	The influence of personality on Facebook usage, wall postings, and regret.	Quantitative	N=209 (n=127 male, n=77 female)	X	X	X	X	X
283	Nadkarni, A., & Hofmann, S. G.	2012	Why Do People Use Facebook?	Review	N=42 studies			X		X
297	Ong, E. Y. L., Ang, R. P., Ho, J. C. M., Lim, J. C. Y., Goh, D. H., Lee, C. S., & Chua, A. Y. K.	2011	Narcissism, extraversion and adolescents' self-presentation on Facebook.	Quantitative	N=275 (n=165 female, 109 male, 1 unknown gender; age 12-18, avg age = 14.18)			X	X	
323	Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T.	2015	What does your selfie say about you?	Quantitative	N= 505 + 107 (612)	X	X	X	X	X
336	Rosenberg, J., & Egbert, N.	2011	Online impression management: Personality traits and concerns for secondary goals as predictors of self-presentation tactics on facebook.	Quantitative	N=477 (75.6% female, 23% male; mean age = 33.14)					



360	Seidman, G.	2013	Self-presentation and belonging on Facebook: How personality influences social media use and motivations.	Quantitative	N=184 (n=51 male, n=133 female, mean age = 19.51)	X	X	X	X	X
379	Stopfer, J. M., Egloff, B., Nestler, S., & Back, M. D.	2014	Personality expression and impression formation in online social networks: An integrative approach to understanding the processes of accuracy, impression management and meta-accuracy.	Quantitative	Targets: N=103 (n=86 female; n=17 male; avg age 18.17) Perceivers: N=10 (n=5 female; n=5 male; avg age = 24.20) Thin-slice perceivers: N=46 (variable for different slices.)	X	X	X	X	X
381	Sun, T., & Wu, G.	2012	Traits, Predictors, and Consequences of Facebook Self-Presentation.	Quantitative	N = 254 (avg age = 22, range = 18-44; 73% female, 27% male.) college students		X	X	X	
414	Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C.	2009	Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication: A Test of Warranting Theory Using Facebook.	Quantitative	1) N= 115 (n=52 male, n=63 female; avg age 19.68) 2) N= 125 (n=68 male, n=57 female; avg age 20.13)			X		

418	Wang, J. L., Jackson, L. a., Zhang, D. J., & Su, Z. Q.	2012	The relationships among the Big Five Personality factors, self-esteem, narcissism, and sensation-seeking to Chinese University students' uses of social networking sites (SNSs).	Quantitative	N=265 (avg age = 20.15; 18-24; )	X	X	X	X	X
421	Wang, S. S.	2013	"I share, therefore I am": personality traits, life satisfaction, and Facebook check-ins	Quantitative	N=523 (n=228 male, n=295 female)	X		X	X	
422	Wang, S. S., & Stefanone, M. a.	2013	Showing Off? Human Mobility and the Interplay of Traits, Self-Disclosure, and Facebook Check-Ins.	Quantitative	N=523 (n=228 male, n=295 female)	X		X	X	
439	Winter, S., Neubaum, G., Eimler, S. C., Gordon, V., Theil, J., Herrmann, J., ... Krämer, N. C.	2014	Another brick in the Facebook wall - How personality traits relate to the content of status updates.	Mixed method	N= 173 excluded 1. N=172 (n=102 female, n=70 male; mean age = 25.95)					

445	Wu, Y.-C. J., Chang, W.-H., & Yuan, C.-H.	2014	Do Facebook profile pictures reflect user's personality?	Quantitative	N=109 (n=43 males, n=66 females) N=1744 profile pictures evaluated (15 each)	X	X	X	X	X
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**Appendix F: PRISMA Flowchart of included records**

### Appendix G: Data Extraction Sheet for Content Analysis

DATA EXTRACTION SHEET		Ref No:
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Sampling type, qual/quant/sysreview	Sampling (size, gender, age), location	
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>	<b>Conclusions</b>	
<b>Recommendations</b>	<b>Independent Reviewer Notes:</b>	
	Ms Parnaz Salmani, Intern Clinical Psychologist – knowledgeable on systematic review methodology and thematic analysis reviewed a sample of the data extraction forms and the data synthesis process.	
<b>Direct Quotes</b>		

Sample of completed Data Extraction Forms:

<b>DATA EXTRACTION SHEET</b>		<b>Ref No:</b> <b>23</b>
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D.	Facebook profiles reflect actual personality, not self-idealization.	2010
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Quantitative. Correlation	N = 236 OSN users (ages 17–22 years) United States (Facebook; N = 133, 52 male, 81 female) and Germany (StudiVZ, SchuelerVZ; N = 103, 17 male, 86 female).	To determine if SNS profiles are used to create and communicate idealized selves, or if they reflect actual personality.
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>		<b>Conclusions</b>
Extended real-life hypothesis. Contrary to the virtual-identity hypothesis. No evidence of self-idealization found. Extraversion and openness were most strongly accurately detected by observers. Lowest accuracy for observing neuroticism (difficult to detect in all zero-acquaintance contexts).		Individuals are not using their Facebook profiles to promote an idealized virtual identity, instead they use it as a medium to express and communicate their real personality.
<b>Recommendations</b>		<b>Independent Reviewer Notes:</b>
Specific profile components to be investigated, as well as other personality traits and other forms of impression management.		Detection of personality in profile Not specifically Facebook
<b>Direct Quotes</b>		
"OSNs might be an efficient medium for expressing and communicating real personality, which may help explain their popularity." page 3		

<b>DATA EXTRACTION SHEET</b>		<b>Ref No: 39</b>
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
Błachnio, A., Przepiórka, A., & Rudnicka, P.	Psychological Determinants of Using Facebook: A Research Review.	2013
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Review	N = 59 articles	To determine which personality traits determine the use of facebook, through the use of technology acceptance model. Secondly, the motives for facebook use are discussed
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>	<b>Conclusions</b>	
<p>Extraversion positively related to FB use. extraversion related to less conservative self-presentation and downloading unusual profile photo.</p> <p>Openness positively related to social media use.</p> <p>Agreeableness positively related to Facebook use.</p> <p>Neuroticism related to the frequency of Facebook use and to specific features (high neuroticism - use FB wall, Low neuroticism - posting pictures on profile)</p> <p>Neuroticism good predictor of self-presentational needs.</p> <p>Conscientiousness: Low level connected with need for self-presentation in Facebook.</p> <p>Narcissism: positively related to Facebook use and self-promotion in Facebook.</p> <p>Those who were more extroverted benefitted more from SNS use. Less popular users use Facebook to benefit by making new friends or acquaintances.</p> <p>Users use Facebook with four motives (information, entertainment, social interaction and personal identity) and with 2 needs (need to belong, need for self-presentation) in mind</p>	<p>self-efficacy has an impact on self-presentation activity on Facebook, which is one of many motives that individuals consider when they use Facebook.</p>	

<p>Motivation and Personality are both factors that can determine the ways users use Facebook.</p> <p>Self-presentation is a good way of expression, especially for those high in narcissism and lower on self-esteem.</p> <p>For users who derive pleasure from Facebook use, self-presentation is more important than keeping in touch. These users also have less restrictive privacy settings, and more friends on facebook, and they are more open and get to know more people.</p> <p>self-efficacy is positively related to perceived ability to modify one's presentation on Facebook.</p>	
<p><b>Recommendations</b></p>	<p><b>Independent Reviewer Notes:</b></p>
<p>building and verifying advanced theoretical models is suggested for Motives of Facebook use; as well as the inclusion of personality, self-efficacy and motivational and social factors into Technology Acceptance Model (TAM)</p>	<p>Also looks at other traits such as self-esteem, collective self-esteem, loneliness, shyness, narcissism, social factors, altruism and social interdependent self-construal.</p>
<p><b>Direct Quotes</b></p>	
<p>"using Facebook is a complicated and multisimensioinal process."</p>	



<b>DATA EXTRACTION SHEET</b>		<b>Ref No: 46</b>
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
Bodroža, B., & Jovanović, T.	Validation of the new scale for measuring behaviors of Facebook users: Psycho-Social Aspects of Facebook Use (PSAFU).	2015
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Quantitative. Factor analysis and Correlation	<p>N = 804 (SERBIA)  Subsample 1: N= 445;  avg age 26.95 years (15-62); 79.1% females; 39.6% students, 41.1% employed persons, 15.7% unemployed, 2.7% secondary school, 0.9% retired.</p> <p>Subsample 2: N= 359;  avg age 21.29 years (18-44); 79.4% females; 100% students.</p>	To develop a questionnaire for measuring socio-psychological aspects of Facebook use and secondarily to examine the relationship between dimensions of FB use and personality traits.
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>	<b>Conclusions</b>	
<p>Psycho-Social Dimensions identified through the development of a questionnaire: Compensation, Self-presentation, Socialization, FB Addiction, and Virtual Self.</p> <p>Social anxiety predicts self-presentation on FB for students. For FB users, Self-presentation is also predicted by higher Openness, lower Agreeableness and Neuroticism.</p> <p>Higher Openness predicts the use of FB profile as a realistic representation of one's personality.</p> <p>Self-presentation characteristic of individuals with low agreeableness and neuroticism, and higher openness.</p> <p>Negative relationship with Neuroticism in regression analysis, but positive for pearson correlation (indicates that when social anxiety is corrected for, impression</p>	<p>correlations between dimensions of psycho-social aspects of FB use and personality traits are low to moderate. Perhaps because user's behaviour and experiences on FB are narrower in scope than in offline settings.</p>	

<p>management activities on FB requires some emotional stability.</p> <p>Openness enables self-presenting individuals to experiment with identities online.</p> <p>Self-presentation and socialization on FB are tightly related to addiction-like processes and behaviours, suggesting that substituting FB for real-life interactions can entrench addictive patterns.</p>	
<p><b>Recommendations</b></p>	<p><b>Independent Reviewer Notes:</b></p>
<p>More representative sample suggested to incorporate cultural universality. Suggested to explore other personality traits, personal values, motivation or self-concept.</p>	
<p><b>Direct Quotes</b></p>	
<p>"It seems that possibility of strengthening and enhancing the self in online communication is very appealing for individuals who experience problems in communication in offline setting."</p> <p>"Facebook may be a safe surrounding for experimenting with identities. People may feel free to explore behaviours and identities they usually restrain to show among people from "real" life."</p>	

<b>DATA EXTRACTION SHEET</b>		<b>Ref No: 78</b>
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
Chen, B., & Marcus, J.	Students' self-presentation on Facebook: An examination of personality and self-construal factors.	2012
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Qualitative	N = 463 university students	
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>		<b>Conclusions</b>
<p>Aspects of Self-disclosure tested in correlation (intent, amount, positivity, honesty, control and relevance)</p> <p>High correlations between in-person and mirror online constructs. Weak to moderate correlations between different constructs.</p> <p>Specifically, it was found that individuals low on extraversion disclosed the least amount of information online, and individuals both low on extraversion and idiocentrism disclosed the most audience-relevant information and the least honest information online, as compared to other groups.</p> <p>and that extraverts are more likely to disclose information in such online environments relative to individuals low on extraversion</p> <p>individuals with interdependent self-construals (allocentrists) who were also low on extraversion disclosed the least positive and the most audience-relevant information online but not in-person. Thus, these findings tentatively suggested that the SNS (Facebook) environment may be viewed as an environment that stifles individual expression and thereby promotes interdependent behavior,</p>		<p>Thus, the least honest information disclosed was as hypothesized, by allocentric individuals low on extraversion, and interacting in an online environment. As expected also, allocentrists low on extraversion disclosed more audience relevant information online than allocentrists high on extraversion.</p>

<p>especially among those not inclined to disclose information in the first place</p>	
<p><b>Recommendations</b></p>	<p><b>Independent Reviewer Notes</b></p>
<p>Future research could focus on such varied contexts or samples.  Cultural variation in sample could be investigated as well as implication in multivariate interactions.  Application to teachers/instructors on SNS should be investigated</p>	<p>Mini IPIP used to measure Extraversion (valid measure?)  Self-construal in Five-factor model?  Hypothesis 3 and 4 relevant.</p>
<p><b>Direct Quotes</b></p>	

<b>DATA EXTRACTION SHEET</b>		<b>Ref No: 230</b>
<b>Identifying Features of the Journal Article</b>		
<b>Author/s</b>	<b>Title</b>	<b>Source, year</b>
Lang, C., & Barton, H.	Just untag it: Exploring the management of undesirable Facebook photos.	2015
<b>Specific Characteristics of the Journal Article</b>		
<b>Methodology</b>	<b>Population</b>	<b>Purpose/Main focus</b>
Mixed method correlation	N = 19 for focus groups (n = 6 male, n=13 female; age 18-64) N = 112 for online questionnaire (age 18-61, avg age = 29.54; n=37 male, n = 75 female)	To progress existing knowledge by identifying what online and offline methods do FB users employ to remove undesirable photos uploaded and tagged by other users; and to explore the differences in how personality types manage undesirable FB photos.
<b>Description of Findings / Notes</b>		
<b>Finding/ Results</b>	<b>Conclusions</b>	
<p>Focus Groups: categories of online and offline methods to manage undesirable photos: Facebook, Email, Text, Offline. Also direct/indirect/preemptive.</p> <p>Untagging was the most frequent response in focus groups, followed by texting the uploader to ask to take it down.</p> <p>Online Questionnaire: untagging is the most frequently chosen method (75% chose it) females are not more likely than males to untag younger indivs more likely to untag than older indivs no significance for younger indivs being more likely to use FB methods High on Agreeableness = more likely to use direct methods, (This result was predicted as those with agreeable personality traits are eager to help others, and expect their help in return) High on conscientiousness = less likely to use direct methods, (This finding suggests that conscientious individuals may avoid direct involvement with the</p>	<p>What others say about us is just as important as what we say about ourselves when it comes to self-presentation and impression management. Within SNS the dichotomous relationship of privacy violations and control over online reputation inevitably results in a trade off between privacy concerns and impression management tactics.</p>	

<p>uploader, relying instead on discreet, independently actioned methods to manage the image.)</p>	
<p><b>Recommendations</b></p>	<p><b>Independent Reviewer Notes</b></p>
<p>Further research is required in order to explore the relationship between age and the methods used to manage undesirable photos before the implications of these results can be understood. Further research is required to fully understand the influence of this personality trait on the management of undesirable Facebook photos.</p>	<p>How are users self-presenting by untagging or using other strategies to remove association with other-generated content. (theme?) Gender, Age = other variable considered</p>
<p><b>Direct Quotes</b></p>	
<p>"Facebook users are learning to live with by dissociating themselves with artefacts that depict undesirable self-representations. This dissociation results in an ‘out of sight, out of mind’ effect ..."</p>	

### Appendix H: Summary of Findings

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	Narcissism
FB Use	Positive relationship	Positive relationship	0/+	Positive relationship	No relationship	Positive relationship
Time spent on FB	0/+	No relationship			No relationship	Positive relationship
No of FB Friends	No relationship	Positive relationship		No relationship	-/+	Positive relationship

Self-Generated Content						
Static information on Profile	less info on Info Page no impact on profile pic category	profile picture category = different have a profile picture at a younger age more people in profile picture	More info on Info Page List more music, books, art on Info Page Impact on Profile picture category Less people in profile picture.	Less use of more page features Less music, media posted	Friendly profile pic Less movies, books listed on Info Page Less frequent profile updates	No/positive rel with About Me info

Broadcast content	more photos, status, duckface, Laugh, extended letters	more status, photo SP, status SP, social network size SP, shorthand in status, emoticons in status, extended letter in status, selfie cues, photos uploaded. Inverted U-correlation with groups.	More status about self More photos of self More online games played More photos uploaded More politics, less romantic content Less shorthand, extended letters in status Less normal full face, and pressed lips in selfies	Less frequent status update, less words in status, smaller variety of words in status. U-correlation with photos uploaded, more posts about self, friendly in photos, photos taken from below, humour in picture	More Albums, Videos Less words in status, smaller variety of words in status No/Negative impact on No. of Photos uploaded	More selfies, photo editing, fun pictures, attractive pictures, status updates Less clever, entertaining status. No impact on no. of photos, or how provocative photos are.
Directed content (wall)	more wall use	More wall post SP			Less wall posts	
Response Actions	Less comments	More likes, shares,	Less comments, less shares		Less comments made	
<b>Other-Generated Content</b>						
Get likes/comments		more comments, more likes,		More likes on profile pic, more comments on profile picture	Get more supportive comments	
No. of Unique friends who comment		Positive Relationship	Positive Relationship		Negative Relationship	
Untagging or direct mgmt				more likely to use direct approach	More likely to untag	



Passive use (lurking)					Less direct approach to managing undesirable photos.	
<b>Self-Disclosure</b> (Honesty, Valence, Intent, Intensity, Depth, Breadth, Amount)	No impact on honesty, valence, intent. More depth, regret, breadth, ideal self, false self U-correlation with Amount More real self	No impact on intensity, check-in intensity, hidden self. More self- monitoring, positive valence positive relationship with Amount, Attitude, Self- disclosure, Trust, false self Inconsistent for Honesty, Valence, Depth, and Real Self	Positive Valence, More expression, More self-disclosure, more breadth of self- disclosure, more intent, more positivity in selfies no impact intensity of check-ins Dependent on motives: Less positive valence, and Less honesty Real self	More depth, regret Less amount, honesty, Negative valence Less presentation of true self	More honesty, Regret, Valence, and Intent No impact on emotional disclosure No/ Negative impact on self-disclosure Less real self, less depth	More self-disclosure, self-promotion, intensity
Accurately Detected	No	Yes	Yes	Yes	Yes	Yes, but overestimated
Motives for FB use	Need to Belong, Info-seeking Keep up with others Self-presentation	Not to keep up with others More to socialize (interact or use as a safe environment) Self-presentation Communication Emotional self- disclosure Need for interaction Self-exploration	Positive for Novelty seeking, Self- presentation, self- exploration/experim enting with self No rel with Need for belonging or need for self-presentation	Need to belong, Disposition to trust Perceived ability to Modify SP Self-presentation Communication Acceptance-seeking Supplement offline relationships Not related to info- seeking motive	Self-presentation only via self-efficacy and Internet self- efficacy Negatively related to need for self- presentation, facebook addiction. No impact on perceived ability to modify Self- presentation.	Social interaction, Agency, Exhibitionism, Self- presentation, Insecurity, Self- objectification. Negative with Communion.

### Appendix I: Glossary

About Me	A section of a user Facebook profile, dedicated to storing information about the user, including relationship status, work information, residential details, contact details, interests, groups, common friends, etc.
Check-in	Allows the user to share location information into a status update, revealing where the user is geographically.
Comment	Allows the user to contribute a direct text response to another user's posted content
Duckface	A facial pose used by individuals in photographs, especially <i>selfies</i> , resembling a duck or pouting face.
Emoticon	The use of text and punctuation symbols to create in-text faces or pictures. More recently, pictures are made available for use, without the need for symbols. Both qualify as emoticons
Group	A shared Facebook domain used by communities with a common interest.
Information page	See About Me
Like	When clicked in response to another user's content, a notification is given to the other user that the content has been <i>liked</i> . Content can accumulate <i>likes</i> and <i>comments</i> from multiple users.
News Feed	A list of posts available for a user to browse through. These posts are uploaded either by users that are friends of the user, or groups and pages followed by the user. Posts uploaded by users related to friends may also appear in the feed if friends are <i>tagged</i> or if friends have <i>liked</i> or <i>commented</i> on the post.
Notes	A section on Facebook that allows for the user to post text-based content that is longer and separate from the status updates on the user's wall.
Photo album	A section on a user's Facebook page that is dedicated to holding photographs, grouped according to user preferences. Several photo albums can be created to contain multiple photographs.
Post	Any uploaded content is registered at a specific timestamp, and is considered a posted item if it is stored onto either the user's wall, or another user's wall.
Profile picture	A photograph, chosen by the user, to act as an avatar (or representing picture) on their profile. Whenever content is uploaded by a user, it will be accompanied by the user's profile picture as well as their Facebook handle.
Selfie	A photograph taken by the user, of the user.
Share	Clicking share allows the user to rebroadcast content onto their own feed that has been uploaded by other users.
Thread	A new thread is created each time content is uploaded, and is continued as users make use of comments to open a discussion related (mostly) to the content.
Untag	The act of a user removing the association between content posted by another user and their own Facebook handle or profile.