Original Article

Analysis of Teenagers' Facebook Profile Creation with a Special Focus on Photography: Insights from Croatia

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Abstract: Today, phones with integrated cameras and affordable photo equipment make it possible for teenagers to take photos at any time and place. To portray themselves in a certain way, teenagers post photos on social networks such as Facebook and Instagram. The social and technical affordances of Facebook enable identity construction by providing the tools to shape the information and photos posted on an individual's profile in an attempt to regulate how others perceive them. This paper analyzes Facebook profile creation among teenagers with a special focus on photography. The research is based on data obtained through questionnaires taken by 200 12-14-year olds attending primary education schools in Croatia. Research results indicate that teenagers create their profiles on Facebook with great consideration of other people's opinions, but even more for expression of their true selves. For the participants in this study, posting photos that reflect their identity, their feelings, or their lifestyle is more important than posting photos with the intention of being liked by others.

Keywords: Facebook, identity, impression management, photography, self-image, social networks

Introduction

New technologies such as smartphones, tablets, photo cameras, and other similar devices allow people to access the internet, thus enabling them to communicate with each other and share their photos wherever they are and whenever they want to. These new multifunctional communication tools have become an important part of people's daily lives. In recent years, many teenagers, as well as adults, started joining social networking service (SNS) websites. On SNS, individuals have the ability to project and express who they are and construct their online identities to guarantee their appeal to their desired audiences. By creating online identities, individuals can thrive socially because they can present themselves in any way they want. This representation is usually positive, as wanting to be perceived in a positive light is fundamental to human nature.

The popularity of SNS, especially among teenagers, has made social networks a new and important factor that directly affects identity creation in young people in general. Teenagers communicate more on SNS than in person, they organize gatherings and events through SNS, and today the problem of bullying on SNS is becoming more and more prominent. It can be concluded that SNS, as a representative of the new media, are an important social variable for today's youth as their physical and virtual worlds become increasingly psychologically connected. SNS are very important for identity creation of an individual as well as society as a whole. In that regard, the virtual world serves as a playground for developmental issues from the physical world, such as identity construction and expression. Therefore, SNS represent a significant research opportunity that can provide significant insights into the identity formation of teenagers today.

One of the primary tools for identity creation on SNS is photography. Most teenagers have smartphones and take photos of themselves on a daily basis. These photos are shared everywhere: they share them mutually via direct messaging or post them on SNS, where they share their life moments and take "selfies." The importance of photography in recent times is indicated by the fact that the word "selfie" (i.e., a photograph of a person taken by the person herself/himself) was declared the word of the year by the Oxford Dictionary in 2013, its usage having increased by 17,000% since 2012 (BBC News 2013). Users can select or emphasize certain characteristics in their photos they believe to be socially desirable, while eliminating or de-emphasizing undesirable ones, thus creating a specific online identity. Through photos, online friends may gain more distinct information than from the user's written profile. To summarize, photos have become an integral part of everyday life and their posting on SNS or elsewhere can create an image of individuals who regularly strive to present themselves in a positive light.

Currently, one of the most famous and widely used SNS is Facebook, which currently has more than 2 billion active users on a monthly basis (Statista, 2018); thus, it is the most relevant SNS for research for online identity creation. The photos that people choose to represent themselves on Facebook (e.g., their profile image, as well as the photos they share with their audiences) are very important because they can be seen as a representation of the user's identity. Facebook profile photos give a first impression about the user, while other photos the users share communicate more thorough information and therefore contribute to elements of users' online identities.

This leads us to the main focus of this paper, which is understanding how new media affect the identity construction and expression of teenagers in the age group 12 to 14. More precisely, the paper examines teenagers' self-presentation through new media (Facebook), placing a special focus on photography. The paper also examines whether there are differences in the way Facebook users in the age group of 12 to 14 create their online identity by posting photos with regard to age and gender. The paper investigates if teenagers post photos which present their "ideal selves" in order to be liked by others rather than photos which represent their true selves, as well as whether female Facebook users in the age group of 12 to 14 give more importance to presenting their "ideal selves" than male participants. The research is performed using a questionnaire comprised of a series of statements about the motivation behind sharing photos on Facebook, which was distributed to 200 participants at different schools in Croatia. The gathered data was analyzed using principal factor analysis which confirmed two groups of questions: one which suggests that teenagers create their online identity to be liked by others, and the other which suggests that teenagers create an online identity that represents their true selves. These groups of questions were statistically analyzed, and the results indicate that identity creation based upon true identities is more important to the users in our sample. We also find that there are differences in age as well as gender.

This paper is structured as follows: the literature review is presented in section two, followed by a section explaining the impact of social media on teenagers. Next, we present a section about identity, self-presentation, and impression management, followed by a section about photography on Facebook as a tool for creating impressions. After that, we define methodology according to which the research was conducted, and in the final section we discuss the results.

Literature review

SNSs are virtual communities which allow people to connect and interact with each other, share their common interests or just "hang out" online (Murray & Waller, 2007). One of the most famous and widely used ones is Facebook. Facebook is a social networking service platform that enables people to share their thoughts, actions, photos and videos with friends and family, and, in some instances, the public at large. Lerner (2010) stated that the invention of Facebook had enabled identity construction by providing the tools to alter the information and photos posted on an individual's profile in an attempt to control how others see them. Facebook provides users the ability to design and virtually express who they are and construct their impressions to guarantee they appeal to their desired audiences. Constructing online identities on Facebook allows users to thrive socially because they can present themselves in any way they want. People want others to perceive them in a positive light. That is fundamental human nature, but it has also become very important in various personal and job-related circles. People engage in social interactions to present a desired impression. This impression is maintained by consistently presenting intelligible and complementary behaviours. Goffman (1959) called this process impression management. Goffman in his research wanted to understand why people may change their appearance to make a positive impression on others and thus, it is vital for this study.

Photographs are a significant element of how Facebook functions since people choose this social networking site as one of the preferred sites (along with Instagram) to distribute and look at images. Mary Meeker, a renowned market analyst with Kleiner Perkins Caufield Byers stated that in 2013, over 500 million photos a day were shared worldwide on Facebook, Flickr, Twitter, Instagram, and Snapchat (Meeker & Wu, 2013). Dutton, Blank & Groselj (2013) in their national survey in Britain showed that the rate of posting photos increased from 53% in 2011 to 64% in 2013 and browsing photos became the most frequent online leisure activity, exceeding even listening to music. Among the various SNS, Facebook was the biggest and fastest-growing photo-sharing site (Rainie, Brenner & Purcell, 2012), with a daily uploading rate of over 210 million photos (Osman, 2018). From this data, we can see that digital images have become the preferred medium for social media communication. As a result, "the changing function of photography is part of a complex technological, social, and cultural transformation" (Dijck, van 2008, p. 58), which will be discussed further in the paper.

There are not many studies that examine SNS photo-related activities, especially ones considering teenagers, but some of them confirm that Facebook photos can serve as practical and informative means of interpreting self-image, interpersonal impressions and identity management. (Dhir, Kaur, Lonka, Nieminen, 2015; Eftekhar, Fulwood & Morris, 2014; Mendelson & Papacharissi, 2010; Pempek, Yermolayeva, & Calvert, 2009; Saslow, Muise, Impett, & Dubin, 2013; Siibak, 2009; Strano, 2008; Tosun, 2012; Van Der Heide, D'Angelo, & Schumaker, 2012). For instance, Siibak (2009) showed that 56% of women believed that looking good in photos posted on Facebook was one of the main elements of their profile. He also stated that females usually choose photos of themselves that reflect their personalities and they care more about their appearance in these photos than males. His research also showed

that the posted images most often convey an "ideal self" (the self one would like to be) or the "ought self" (the self one believes one should be in order to be accepted by other users). SNS users chose best-fit photos and untagged themselves from photos they believed to be unflattering (Pempek et al., 2009; Dhir et. al. 2015, Lang & Barton, 2015).

Teenagers nowadays grow up with new media which form an integral part of their daily lives. They spend more time using new media than doing any other leisure activity and the main reason for using them is communication with others (Subrahmanyam & Greenfield, 2008).

Teenagers and social media

In the last few decades technology has become very important for teenagers and they are heavy users of new media. Although teenagers have embraced many tools for communicating with each other, their extensive engagement with social media has been without precedent. boyd (2014) argued that for teenagers today, social media is a part of their daily routine. Teenagers fervently want to find their place in society. Because of social media presence in their daily lives, teenagers' lasting desire for social connection and autonomy is now being expressed in so-called networked publics. As boyd (2014) described them, networked publics are "publics that are restructured by networked technologies. As such, they are simultaneously the space constructed through networked technologies and the imagined community that emerges as a result of the intersection of people, technology and practice" (p. 8). For today's teenagers, networked publics are not much different from malls and parks of the previous generations of teenagers. Teenagers engage with networked publics for the same reasons previous teenagers engaged with publics, that is, they want to be a part of a broader world by connecting with other people and having freedom of mobility. SNSs like Facebook, Twitter and Instagram, each with its own unique features provide teenagers with opportunities to play a part in public life (boyd 2014).

Through social media, people can share their thoughts, media and information with broad audiences around the world which increases the potential visibility of the shared content. Social media are designed to help people spread information, thus making the content people post online spreadable. Facebook has the option to share the content with just one click of the button 'share'

Many scholars have written about the importance of friendships in social and moral development (Corsaro, 1992; Rubin & Fredstrom, 2008; Spencer & Pahl, 2006). The parents of today's' teenagers fear that they spend too much time on social media and fail to understand the importance of social media in their lives. Most teenagers are not drawn to their smartphones, laptops and other gadgets as such; they are drawn to friendships (boyd 2014; Sheer, 2011). Various gadgets only enable them to stay in touch with their friends in today's culture where getting together in a public place has become increasingly constrained. They have fewer places to be together in public than they did before (Valentine, 2007). Teenagers are also limited by their schoolwork and parents who fear for their safety, so they often meet in each other's homes rather than in public places such as malls. Teenagers want to be with their friends on their own terms, without adult supervision. The networked publics allow them to feel the desired privacy and this is very important in the context of understanding the teenagers' relationship to social media. SNSs are not only their new public places but, in many cases, they are the 'only' public spaces where they can meet and connect with a large group of their peers (boyd, 2014).

New media provide possibilities for self-presentation which is closely related to identity development. Researchers argue that identity development is a main task of adolescence and teenagers use new media as a tool to perform presentations of self (boyd, 2008, 2014; Heim et

al., 2007; Jensen & Gilly, 2003; Livinstone, 2003, 2008; Turkle, 1995). The notion of identity and self-presentation will be discussed further in the paper.

Profile creation on Facebook: Identity, self-presentation and impression management

Subrahmanyam & Greenfield (2008), as well as boyd (2014) stated that new media are an important social variable for today's teenagers, and that the physical and virtual worlds are psychologically connected. In that regard, social media serve as a playground for developmental issues from the physical world such as identity construction and expression. Self-presentation can be seen as a way of dealing with constructing one's identity. It is necessary to understand how new media affect teenagers' identity construction and expression, therefore, it is important to examine teenagers' self-presentation through new media, in this case, placing a special focus on photography.

Identity

First, it is necessary to discuss what identity is since it is an elusive concept, with no single clear-cut definition. It is used in many different contexts and for a variety of purposes, extending from authentication by a bank to be allowed access to our money to our understanding of who we are within a community (Warburton & Hatzipanagos, 2013). Two people can share certain characteristics, such as having brown eyes or being female or being able to sew, but, in practice, no two identities are ever the same. Our identities evolve over time and therefore the notion of identity remains in a state of constant change. Abelson & Lessing (1998) defined identity as "a unique piece of information associated with an entity [...] a collection of characteristics which are either inherent or assigned by another". Vybíral, Šmahel, & Divínová (2004) defined it as a "continual experience of individual self, of that individual's uniqueness and authenticity as well as the identification with life roles and the experience of belonging to bigger and smaller social groups" (p. 171). Zhao, Grasmuck & Martin (2008, p. 1817) argued that identity is an important part of self-concept, which is the totality of a person's thoughts and feelings in reference to oneself as an object (Rosenberg, 1986 in Zhao et.al 2008), and identity is that part of the self "by which we are known to others" (Altheide, 2000, in Zhao et al., 2008). The construction of an identity is, therefore, a public process that involves both the "identity announcement" made by the individual claiming an identity, and the "identity placement" made by others who approve the claimed identity, and, consequently, an identity is settled when there is a "coincidence of placements and announcements" (Stone, 1981 in Zhao et al., 2008, p. 1817). In face to face communication and interaction in general, identity is created under a specific set of restrictions. Since in face to face interaction there is an observable body, it prevents people from claiming false identities when it comes to their physical characteristics, such as sex, race and looks. Identity construction under those circumstances involves mostly the manipulation of the physical setting and personal front (language, manners, and general appearance) to generate the desired impression on others. In situations where face to face interactions happen among strangers, people may pursue hiding their background and personality and produce a whole new identity to be better liked (Zhao et al., 2008). Zhao et al. (2008) also explained the term "hoped-for possible selves" in an online context and they defined it as "socially desirable identities an individual would like to establish and believes that they can be established given the right conditions" (p.1819). On Facebook, the hoped-for possible selves are well-crafted personalities which individuals create through socially acceptable and desirable attributes.

Shafie, Nayan & Osman (2012) argued that "online identity is anonymous and flexible and not tied with offline identity" (p. 135). Online identity is constructed of online social identity and online personal identity. Online identity involves symbolic communication and textual communication. Self-concept consists of personal and social aspects which lead to self-presentation (Canary et al. 2003 in Shafie et al. 2012). On SNSs, people openly communicate and trust each other while sharing their identity behaviors, such as interests, hobbies, favorites, groups and affiliations (Shahrinaz, 2010). A lack of anonymity seems to have become an integral part of online world. People use their real names in most of online communication, on various SNSs such as Facebook, LinkedIN (a business-oriented SNS), in email communication and other venues.

boyd (2014) claimed that when a teenager chooses to identify herself as "Jessica Smith" on Facebook and "littlemonster" on Twitter, she is not creating several different identities in the psychological sense. "She is just choosing to represent herself in different ways on different sites with the expectation of different audiences and different norms" (boyd, 2014, p. 38). At times, these choices are conscious attempts by individuals seeking to control their self-presentation; but often, they are imaginative responses to the sites' prerequisite to provide a username. While some teenagers choose to use the same username across multiple sites, others find that their favorite nickname is already taken or feel as though they have outgrown their previous identity. Regardless of the reason, the product is a mishmash of online identities that leave plenty of room for interpretation, and in doing so, teenagers both interpret and produce the social contexts which they inhabit (boyd, 2014).

Whereas Shafie et al. (2012) argued that online identity is not tied to offline identity, Zhao et al. (2008) believed that it is incorrect to think that the online and offline world are two separate worlds. Experimental research has proven that online, teenagers present their true selves more often than they would in face-to-face encounters (Manago, Graham, Greenfield & Salimkhan, 2008) and online presentations of selves are rather accurate (DiMicco & Millen, 2007 in Young 2013; Krämer & Winter, 2008). Back et al. (2010) showed that Facebook profiles indeed reflect actual personalities of their users.

In the beginning, the research regarding online identity focused on questions of anonymity and identity experimentation rather than the investigation of the processes through which individuals create and explore their own identities (Young, 2013). As was previously mentioned, sites such as Facebook require authentic representation of self, moreover, the users are forced to use their real names in order to be a part of Facebook. If individuals ignored this, they would be limited in acquiring online friends, thus making use of the site superfluous. The online world requires people to write themselves into being (boyd, 2008) and therefore, their profiles provide an opportunity to form the intended impression through language, images and various media. Many researchers argued that SNSs are a relevant and valid means of communicating identity and exploring impression management and impression management appears to be one of the main functions of social networking sites (boyd, 2006, 2008, 2014; Gosling, Augustine & Vazire, 2011; Ivcevic & Ambady, 2012; Krämer et al. 2008; Livingstone, 2008; Manago et al., 2008; Mehdizadeh, 2010; Shahrinaz, 2010; Shafie et al. 2012).

Impression management and self-expression

In new media, people have more control over their self-presentational behaviour than in face-to-face communication (Krämer & Winter, 2008), which serves as a perfect setting for self-expression and impression management as termed by Goffman (1959). While creating their online self-presentation, people can think about the aspects of themselves they want to present towards their audience. The importance of being perceived in a positive light complies with human nature and has become fundamental in social circles. People can feel great pressure from

their environment to 'fit in' and this can serve as the reason to modify their online presentation in an effort to be better accepted by their preferred groups. The invention of Facebook has enabled identity construction through the abilities to change, shape or even twist the information and photos posted on an individual's profile in order to direct how others perceive them.

In his article "On Face-Work", Goffman (Goffman, 1955) described why people constantly take into consideration the impression they present to others. He defines the 'face' as a positive social value a person effectively claims for themselves. Goffman says that when people meet for the first time, it immediately provokes an emotional reaction. The community in which people show and present themselves needs to be consistent with the community they encounter. For instance, on Facebook, people care about the impressions they make on other people in their network (Angwin, 2009; boyd, 2014, Dorethy et al. 2014; Pempek et al. (2009); Siibak, 2009). Their 'face' could be a product of the people they interact with on Facebook. Their friends can instantly make judgments about the Facebook owner's profile picture or any other data presented on an individual's Facebook site (e.g. religion or relationship status), which can result as an emotional reaction by the Facebook owner. Based on that reaction, the owner can modify his/hers appearance to appear more socially acceptable to their intended audience (Lerner, 2010). Goffman (1955) has furthered this by explaining that if a person has an encounter with another person, he or she is placed in a social relationship. Each person needs to uphold their 'face' in order to gain support from other people inside a group. In order to preserve relationships, individuals must be cautious not to damage other people's 'face'. For example, when a Facebook user becomes friends with another user, they are automatically categorized into a relationship. Facebook users try to preserve their image in order to gain the approval of their friends. On Facebook, users can write on each other's timelines, comment on each other statuses, post photos of each other or 'tag' each other in various posts and photos. All of the above can cause a disruption in the relationship between the users, depending on what is being discussed in the post or what the photos show. The information posted could distort the 'face' of the profile owner, which in turn may destroy how other perceive the owner's image (Lerner, 2010). Goffman (1959) identified these common disruptions as "unmeant gestures, inopportune intrusions, faux pas, and scenes." Unmeant gestures are inappropriate actions that do not correspond with the preferred impression. Inopportune intrusions happen when someone interpolates themselves within another's boundaries without announcement. A faux pas occurs when someone intentionally goes against social norms (with verbal statements or non-verbal acts) which, in turn, could possibly endanger their self-image.

However, 'scenes' as Goffman describes them are a purposeful effort to disrepute the people an individual associates with, oneself, or strangers. On Facebook, a user may become very aggravated with another user and he or she may post inappropriate or embarrassing comments on another's timeline or post inappropriate or embarrassing photos. Some users could also reveal secret or private information about other users, which would create a 'scene', and that could harm the 'face' of the user in question. With those actions, Facebook owners could become embarrassed by these disruptions, and it can affect their identity and may deteriorate their self-image. Goffman (1959) indicated that people create certain impressions on purpose, just to avoid embarrassment or humiliation. For instance, on Facebook, people can change or 'un-tag', their photos to adjust how others see them. If a Facebook user is tagged in a photo that they feel portrays an identity they do not want others to see, they could remove the photo to avoid embarrassment. Goffman argues that when people feel embarrassed, they could be seen throughout society as weak, inferior and defeated, so they are motivated to reduce the shame. Teenagers on Facebook can become friends with others from many different social contexts (friends from school, friends from hobbies, friends from work, parents, relatives...) and when all of those friends are grouped together in one place, a so-called context collapse happens.

boyd (2008) defines context collapse as "the lack of spatial, social, and temporal boundaries that makes it difficult to maintain distinct social contexts." Teenagers may struggle to present themselves in a desirable way for all the different audiences. Facebook features enable them to strategize their desirable identity presentation; for example, they can group family members together, hide their shared content from them, show it just to them, or simply unfriend people who they do not feel comfortable sharing things with.

When it comes to identity, Goffman (1959) addressed it by employing the metaphor of a drama, or the Dramaturgical Perspective. Goffman (1959) distinguished the performance as a front and backstage. The front is a "fixed presentation" where performance takes place in front of an audience. That "fixed presentation" consists of the tools needed in order to perform, as well as a balance between appearance and manner. Appearance refers to personal items that reflect the performer's social status. It also shows an individual's social state or role, for example, if that individual is going to work (wearing the uniform), or if that individual is engaging in informal recreation or formal social activity (wearing a suit). Manner refers to the way the individuals play their roles and it functions to warn the audience of how the performers will act in their roles. Backstage is where the audience is not allowed, and where the performer steps out of character without suppressing him or herself. Facebook enables users to set up their front stage with possibilities to edit privacy settings, profile pictures, and other choices of representation in the information describing their education, work, private beliefs and interests. Offline, the appropriate place is how people choose to express themselves through language, clothes, material things and even other people they associate with. Online, for instance on Facebook, it is a fluid operation. Users can bring themselves into an appropriate place, but it requires time and constant awareness of new privacy settings, updates etc., and choosing the audience (acquaintances, friends, family etc.) at all times. With this, Facebook users can keep in check all of their performances. Goffman's theory of impression management and the construction of identity is crucial for understanding why people may alter their identities on Facebook. Essentially, Goffman provided insight as to why people put on a front stage when they are presenting themselves to particular audiences, and why will they try to accommodate to social expectations. How this translates to photography will be discussed in the next chapter.

Photography on Facebook as a tool for crafting impressions

Due to the ubiquity of digital cameras and the popularity of the instant photo-sharing technology, photos are everywhere; there are even special SNSs (for instance, Instagram and Snapchat) solely for sharing photos. More than ever before, photos can be taken by anyone at any time, and can be instantly seen by anyone. The sheer volume of image-making has increased exponentially with the introduction of cheap and accessible digital imaging technology and phones with integrated cameras: today, every two minutes, people take as many photos as all of humanity did in the 1800s (Good, 2011 in Winston 2013). Winston (2013) argued that, compared to the old days of analog photography, people increasingly use digital photography to communicate, construct their identities and understand reality. Vigliotti (2014) claimed that Facebook users utilize photos in order to present certain aspects of themselves for public consumption. On Facebook, a user's profile photo can be understood as an image of self-description and therefore, the language of Facebook photos becomes a narrative tool to express oneself to the world (Vigliotti, 2014). Research shows that online images employed on Facebook profiles are carefully designed to promote their online identities (Shafie et al., 2012) and they are one means by which Facebook users present a favourable image of themselves to other users (Strano & Wattai, 2010). These carefully constructed identities are also managed throughout un-tagging. Dhir et. al. (2015) showed that un-tagging is a common practice with teenagers and that male Facebook users are more likely to un-tag themselves from the

embarrassing photos. Siibak (2009) argued that the posted images most often convey an "ideal self" (the self-one would like to be) or the "ought self" (the self-one believes one should be in order to be accepted by other users). These findings verify Goffman's (1959) theory of impression management in which he claims that people strategically "perform" identities in order to be approved by others.

As was previously mentioned, SNSs, such as Facebook, have provided the necessary tools for people to share their identities through photos with a large number of people and without much trouble or cost. Additionally, phones with integrated cameras eradicate the time it takes for a photo to be shared with others because photos can be uploaded on social networks within an instant. In this way, the combination of camera phones and social networks encourages users to construct and communicate their identities through photos (Winston, 2013).

Dijck,van (2008) argued that today people want their pictures to portray a better version of themselves. This mainly refers to photos that are taken with the intention of being shared to the social network audience. Researchers found that it is common for self-images published on Facebook to be carefully created and well-polished (Siibak, 2009). Zhao et al. (2008), found that individuals seek to construct group-oriented identities by posing pictures with others. Photos are the most prominent way in which users create idealized Facebook identities. Even Though some users' Facebook identities expressed through images can be inaccurate, users do not create fabricated personalities on purpose. Sometimes users craft their identities *as they view themselves*, which can differ from *who they really are* (Winston, 2013). Photos are a crucial element in the attempt to represent oneself as more socially desirable than one really is, without pushing over the limits of plausibility. By publishing only photos of themselves engaging in pro-social behaviour (partying, hanging out with friends or playing sports), Facebook users can make their online personality misrepresent how social they actually are. When it comes to teenagers, the virtual selves exhibited on the photos of SNSs are constructed continuously and re-constructed based on the values associated with the "ideal self" or "the ought self" (Siibak, 2009). Even though there is plenty of research regarding teenagers' identity creation on Facebook, to the best of our knowledge, none of them focused solely on identity creation through photo sharing. There is an increasing popularity of Instagram, especially among teenagers (Yahya et. al., 2018, Greenfield et.al. 2017) and it is becoming obvious that photo sharing is their preferred way of communication and, consequently, a way to explore their impression management, which is, as previously mentioned, one of the primary functions of SNS. It is important to investigate how teenagers craft their identities thorough photo sharing; do they share photos that reflect their personalities, or do they deliberately post photos which present their "ideal selves" in order to be liked by others.

Methodology

Research problems and hypotheses

The first research prblem is to examine the way Facebook users in the age group of 12 to 14 create their online identity by posting photos. The second research problem is to examine whether there are differences in the way Facebook users in the age group of 12 to 14 create their online identity by posting photos with regard to age and gender.

Hypothesis 1: Facebook users in the age group of 12 to 14 post photos which present their "ideal selves" in order to be liked by others rather than photos which represent their true selves.

Hypothesis 2: Female Facebook users in the age group of 12 to 14 give more importance to presenting their "ideal selves" in order to be liked by others than male participants.

Hypothesis 3: When creating their identity on Facebook, older participants give more importance to presenting their "ideal selves" in order to be liked by others than younger participants.

Research instruments

The questionnaire consisted of a series of statements about the motivation behind sharing photos on Facebook. First, the questionnaire had a list of statements about the purpose and ways of using Facebook profiles in regard to photo sharing, e.g., "I created my Facebook profile because my friends have it too," "I created my Facebook profile so I would not feel like an outsider," "I regularly share photos of myself," "I regularly share photos of my friends," etc. Second, there were statements about the reasons to publish photos and the important elements of sharing photos of themselves, e.g., "It is important to look good on a photo," "It is important that the photo reflects my personality," "It is important that the photo reflects my lifestyle," "It is important that the photo is well digitally altered," "It is important that the photo is taken at a modern place," "It is important that the photo gets many likes," "It is important that the photo gets many comments," "It is important that my friends perceive me as a cool person," etc. Third, there were statements about sharing photos with content other than themselves and the meaning behind them, e.g., "I want to share the brands I like," "I want to share activities I enjoy," "I want to share my accomplishments," "I want to get a lot of comments and likes," "I want to share wholesome thoughts and messages I like," "I want those photos to reflect my lifestyle/personality/thoughts," "I want to look like an interesting person," etc. Last, there were statements about feelings in regard to sharing photos, e.g., "I feel good when photos of me get many likes/comments," "I liked other people's photos so they would like mine," "If a photo I published did not get many likes, I deleted it," "I untagged myself from a photo I did not think represents me right," "I worry how others will react to the photos of me on Facebook," etc. The questionnaire was a paper-and-pencil instrument administrated to participants at schools after obtaining the written consent of participants' parents. Participation in the survey was voluntary and anonymous.

Participants specified their level of agreement with each statement on a five-level Likert scale: 1-Strongly disagree; 2-Disagree; 3-Neither agree nor disagree, 4-Agree; 5-Strongly agree. Additionally, demographic data about gender and age were included in the questionnaire. All of the statements were entered into IBM SPSS software and analyzed. First, the factor analysis was made and, consequently, two groups of statements emerged; one which suggests that teenagers create their online identity to be liked by others, and the other which suggests that teenagers create their online identity to represent their true selves. The detailed list with all the questions and results of the factor analysis is provided in Table 1.

Table 1 - Results of the factor analysis

Item	Comp. 1	Comp. 2	Group*
It is important that the photo gets many likes.	.835		1
I want to get a lot of comments and likes	.766		1
I feel good when I get a lot of likes for a photo of me	.741		1

It is important that my friends perceive me as a cool person	.740	.305	1
It is important that the photo gets many comments	.726		1
I liked other people's photos so they would like mine	.711		1
It is important to wear cool clothes on a photo	.669		1
I feel good when photos of me get many comments	.651		1
It is important that my Facebook friends like it	.614		1
If a photo I published did not get many lies, I deleted it	.573		1
I add strangers on Facebook to have more friends	.555		1
It is important to tag myself, my friends and the place we are at	.553		12
It is important to look good on a photo	.545	.323	1
It is important that the photo is well digitally altered (with Retrica or other filters)	.506		1
It is important that the photo is taken at a modern place	.461	.358	1
When I am on an excursion or at some interesting place, I take a photo just to post it on Facebook	.456	.306	1
I want to point out the person I like	.462	.444	2
My other Facebook friends do that	.445		1
I untagged myself from a photo because I did not like the way I looked	.435		1
When I go out with my friends, I take a photo just to post it on Facebook	.433		1
I often post a photo of me just to stay in trend	.426	.411	1
I worry about how others will react to photos of me on Facebook	.385		1
I want to share my accomplishments (in sports, in school…)	.385	.358	2
I have had negative experience with photos of me on Facebook			
It is important that the photo reflects my lifestyle		.671	2
I want those photos to reflect my thoughts		.673	2
I want those photos to reflect my personality		.651	2
I want those photos to reflect my lifestyle		.709	2
I want to visually show my current emotional state		.619	2
It is important that the photo reflects my personality		.603	2
I want to show who I hang out with	.341	.550	12
It is important that the photo captures an important moment in my life		.624	2
I want to seem like an interesting person	.502	.499	1
I untagged myself from a photo I did not think represents me right			1
I want to share wholesome thoughts and messages I like		.540	2
I believe my Facebook profile completely reflects me the way I am		.493	2

It is important to me that my Facebook friends have a positive image of me		.379	12
I created my Facebook profile so I would not feel like an outsider	.305		1
I created a Facebook profile so I would be in contact with the persons I like			2
I regularly post photos of my friends on Facebook		.348	12
I created my Facebook profile because my friends have it too",			1
I regularly post photos of my interests on Facebook		.373	2
I want to share activities I enjoy (hobbies etc.)		.346	2
I want to share the clothes I like		.312	2
I want to share the brands I like (e.g. car or clothes brands)			2
I regularly share photos of myself		.449	2
It is important that my friends are together with me		.349	12

*Group 1 - identity created to be liked by others

*Group 2 - identity created to be represent one's true self

*Group 12 - questions which could not be assigned to either group

Participants

A questionnaire survey was filled out by 200 Facebook users in the age group of 12 to 14 who post photos on Facebook. The questionnaire was distributed in two elementary schools in Zagreb, Croatia and one in Velika Gorica, Croatia between March and June 2015. The schools were selected based on previous cooperation and availability. The demographic characteristics are shown in Table 2.

Table 2. Participants' demographic characteristic

GENDER		AGE	AGE%
		12	26,4%
Male	51,2%	13	38,8%
Female	48,8%	14	34,8%

Statistical pre-processing

Before the data was processed, the distribution normality of all dependent variables was tested using the Kolmogorov-Smirnov test. The distribution of all collected dependent variables deviated significantly from the normal Gauss distribution ($p<0,01$), therefore all further data was processed using a non-parametric statistical test and taking non-parametric statistical indicators in consideration.

Results and discussion

Creating identity on Facebook – participants' opinions concerning important factors of publishing photos

As shown earlier, statements about important factors of publishing photos can be assigned to one of the two groups. The first group points out that identity on Facebook is created in order to be liked by others, and the second group points out that identity is created in order to represent one true self. Therefore, the statements in the questionnaire are divided into those two groups based on the results of the factor analysis, and data processing was done correspondingly. The list of questions and their placement in groups is provided as a supplementary material for this paper.

Table 3 shows measures of central tendency of statements considering publishing photos of themselves that point in the direction of creating an identity relying on being liked by others; concerning looks, clothes worn in the photos, Facebook friends' liking, number of likes or comments they receive and leaving a cool impression. Central tendency elements for *looks* and *Facebook friends' liking* categories show a negative asymmetric distribution (Mean<Median<Mode), which indicates that for these statements, a higher percentage of participants chose higher degrees of agreement (Median = 4).

Table 3 - Creating identity on Facebook being liked by others - measures of central tendency

	Looks	Cool clothes	Facebook friends' liking	Amount of likes	Amount of comments	Impression of being cool
Mean	3,80	2,76	3,40	2,80	2,38	2,58
Median	4	3	4	3	2	2
Mode	5	1	4	1	1	1

Figure 1 shows that with regard to publishing photos of themselves, most participants agree or strongly agree that it matters to them that they look good in a photo (69,2%) and that their Facebook friends like it (54,8%). Other factors show that a large percentage of participants fully disagree. The percentages of participants who disagree or strongly disagree with statements about the importance of wearing cool clothes, number of likes and comments or leaving a cool impression is significantly higher than those of other degrees of agreement. But, when the feelings invoked by Facebook are investigated, 50,7% of participants agree or strongly agree that they like it when photos of themselves receive a lot of likes (40,3% in case of comments), which shows a discrepancy compared to their assessment how important they find it when publishing photos (35,8% for like, 22,6% for comments). 32,3% of participants agree or strongly agree that they want to leave a cool impression on others, and 55,8% agree or strongly agree that they want to leave a positive impression on others.
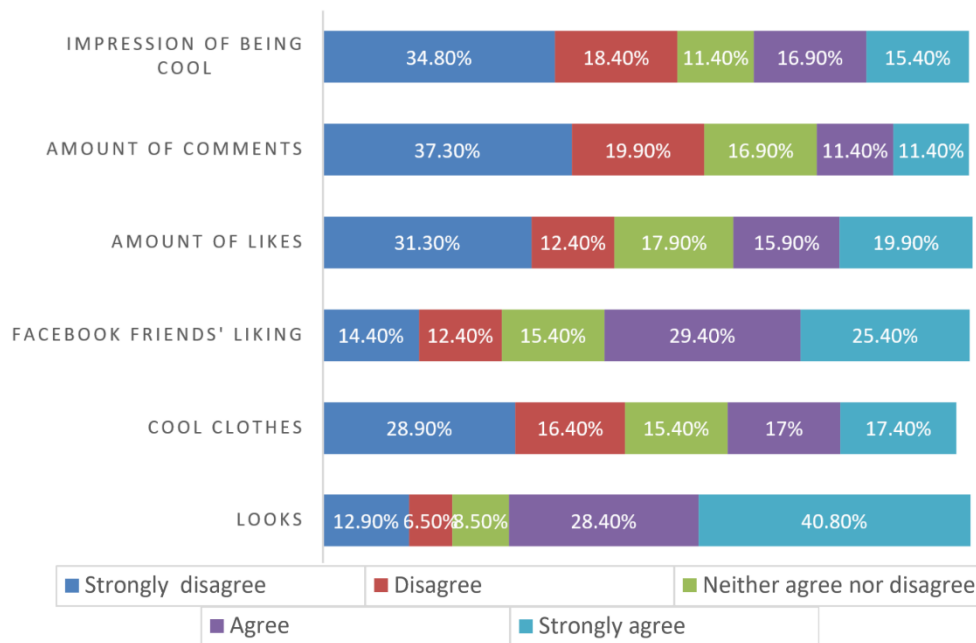
Figure 1 - Creating identity on Facebook: being liked by others - frequencies

Considering the measures of central tendency, four statements relating to users representing their true selves produce a positively asymmetric distribution which indicates that more participants registered lower degrees of agreement. Median values for all statements are 3 or lower. The results are shown in Table and 5**.**

Table 4 - Creating identity on Facebook: representing their true selves

	Reflection of personality	Reflection of the lifestyle	Reflection of their current emotional state	Sharing clothes they like
	2,95	2,72	1,87	1,75
Median	3,00	3,00	1,00	1,00
Mode	1	1	1	1

Table 5 - Creating identity on Facebook: representing their true selves

	Sharing brands they	Sharing activities they like	Sharing achievements	Sharing wholesome thoughts and quotes
Mean	2,46	3,23	3,03	2,63
Median	2,00	3,00	3,00	2,00
Mode	1	5	4	1

Considering the positively asymmetric distribution and frequencies shown in Figure 2 it is clear that 71,6% of participants do not consider photos that they publish as indication of their current emotional state, and approximately 30% of participants agree or strongly agree that those photos reflect their personality and lifestyle correctly.
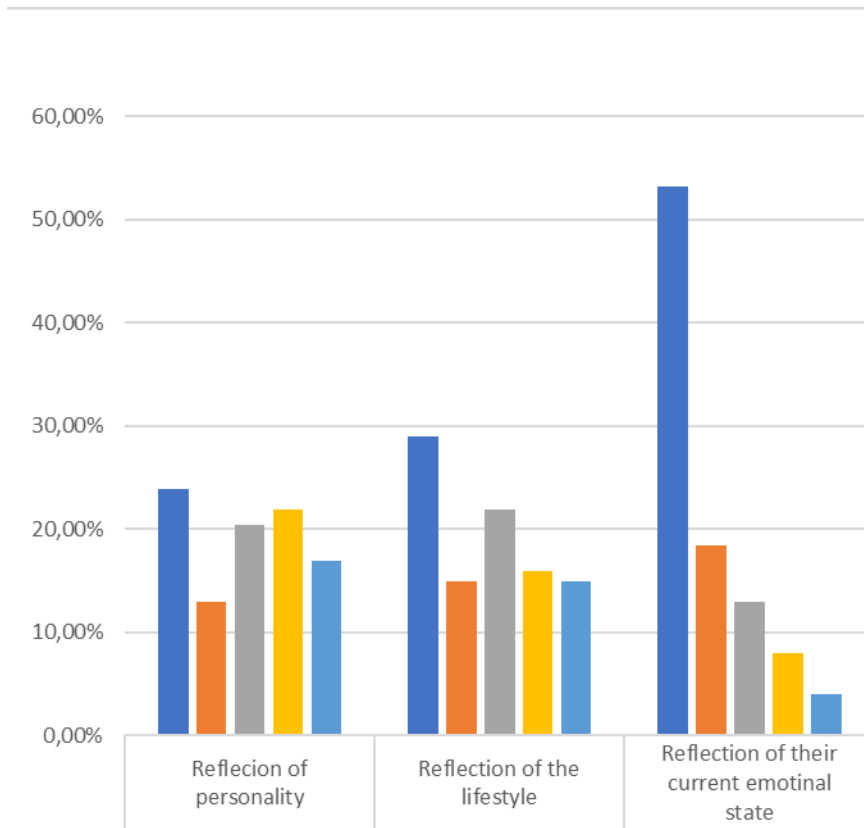
Figure 2 - Creating identity on Facebook: –representing their true selves

Regarding photos other than those of themselves (Figure 3), most participants disagree or strongly disagree that clothes, brands or wise thoughts and quotes are the subjects that they like to share (positive asymmetry). Most participants sometimes or always publish photos in order to display activities that they like (47,8%) or showcase their achievements (44,3%). Only 30,3% of participants strongly agree that their Facebook profile completely reflects their true selves.
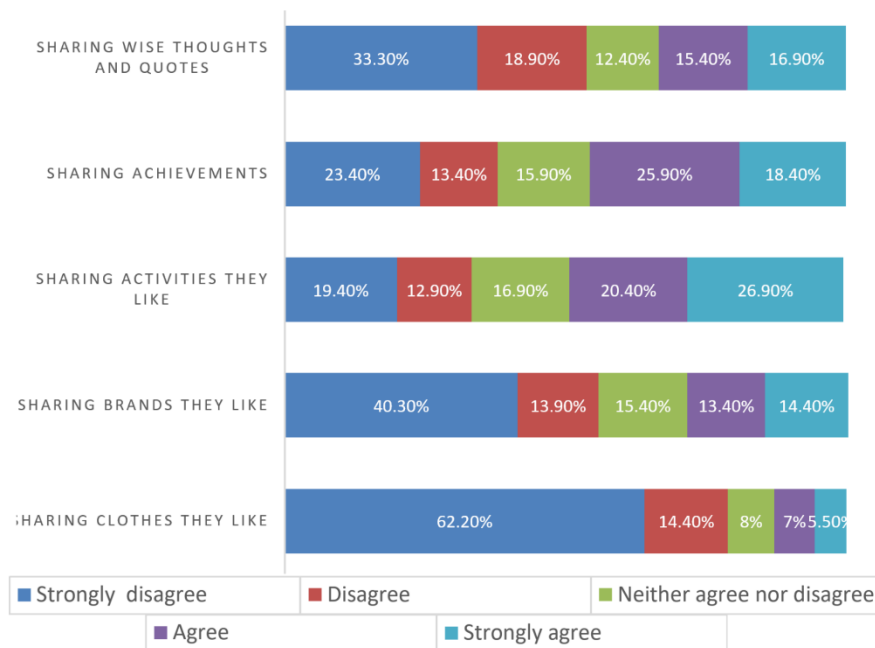

Figure 3 - Creating identity on Facebook: representing their true selves

We can infer certain differences in degrees of agreement among the different groups of statements and in regard of median values. To get a better picture of the differences among these three groups of factors concerning publishing photos, for every participant the mean degree of agreement was calculated specifically for every group of statements. The significance of differences between groups was determined by the Friedman test. Results **Hiba! A hivatkozási forrás nem található.** show that a statistically significant difference exists (χ^2=10,907; df=1; p=0,001), and that the mean values of degree of agreement related to the statements regarding showing their true selves differ significantly compared to those regarding being liked by others (see Table 6). This rejects Hypothesis 1: When creating their identity, Facebook users in the age group of 12 to 14 post photos which present their "ideal selves" in order to be liked by others rather than photos which represent their true selves.

Table 6- Creating identity on Facebook - Friedman Test of differences between groups of statements

	M+sd	M ranked	Friedman Test
Creating identity on Facebook: being liked by others	2,52+0,86	1,38	χ^2=10,907 df=1
Creating identity on Facebook: representing their true selves	2,65+0,80	1,62	p=0,001

Differences with regard to gender and age

In Table 7, the results of Mann-Whitney U test of differences in average degree of agreements among the groups of statements show that the sample contains a statistically significant difference of average degree of agreements with regard to both groups in favour of female participants.. These results confirm Hypothesis 2: Female Facebook users in the age group of 12 to 14 give more importance to presenting their "ideal selves" in order to be liked by others than male participants. The results show that they also want to represent their true selves significantly more than male participants.

Table 7 - Creating identity on Facebook - Mann Whitney U Test of differences between groups of statements according to gender

Grouping variable: GENDER	Creating identity on Facebook: being liked by others		Creating identity on Facebook: representing their true selves	
	M	F	M	F
Me	2,36	2,72	2,46	2,84
Mann-Whitney U Test	**MWU=3770; Z=-2,899; p=0,004**		**MWU=3546; Z=-3,356; p=0,001**	

The differences with regard to the age of participants were assessed by Kruskal Wallis test. Results have shown that in the first group of statements, *Creating identity on Facebook: being liked by others*, no statistically significant difference was found (p>0,05). The second group of statements, *Creating identity on Facebook, representing their true selves*, produced a statistically significant difference (p<0,05) (Table 8 and 9). Younger participants, generally,

placed higher importance on these statements (higher degrees of agreement). This rejects Hypothesis 3: When creating their identity on Facebook, older participants give more importance to presenting their "ideal selves" in order to be liked by others than younger participants, since no statistical difference was found in that category. However, the results show that younger participants placed more importance to showing their true selves than older participants.

Table 8 - Creating identity on Facebook - Kruskal Wallis Test of differences between groups of statements according to age.

Grouping variable: AGE (12-14)	Creating identity on Facebook: being liked by others	Creating identity on Facebook: representing true selves
χ²	5,637	11,761
df	2	2
p	0,60	**0,003**

Table 9 - Creating identity on Facebook – median scores per age group

Grouping variable: AGE (12-14)	Creating identity on Facebook: representing true selves		
	12	13	14
Me	2,94	2,43	2,66

Conclusion

The aim of this paper was to examine the way Facebook users aged 12 to 14 create their online identity by posting photos and whether there are differences in creating their online identities with regard to age and gender. The research showed that out of the two groups the statements were classified into, the second group, containing statements concerning identity creation based upon showing their true identities, proved to be most important. Even though the teenagers who participated in this study want to be perceived in a positive light and be liked by others, they find it more important to show their true selves. When it comes to differences regarding gender, female participants placed more importance on both groups. They wanted to show their true identities more than their male counterparts, but they also wanted to be liked by others more than male participants. In regard to differences between age, younger participates placed more importance on showing their true selves than older participants.

According to Siibak (2009), the posted images most often convey an "ideal self" (the self-one would like to be) or the "ought self" (the self-one believes one should be in order to be accepted by other users). These findings verify Goffman's (1959) theory of impression management in which he claims that people strategically "perform" identities that they believe others will approve of. This study differs from those statements and shows that although teenagers create their identities on Facebook with a great consideration of other people's opinions, they want to present who they really are even more. The finding in this paper is in agreement with previous research that showed that online presentations of selves are rather

accurate (DiMicco & Millen, 2007 in Young 2013; Krämer & Winter 2008). Back et al. (2010) showed that Facebook profiles indeed reflect the actual personalities of their users. This research showed that 47.7% of participants agree or fully agree that their Facebook profile entirely reflects who they really are. For the participants in this study, the importance of being liked is less important than posting photos that reflect their identity (their feelings, thoughts, lifestyle, etc.). This could indicate that they use photos to create their identity to showcase who they really are.

For future research, it would be advisable to dig deeper into this subject, so we propose a qualitative research in the form interviews. Since teenagers grow up surrounded by new media and their daily lives are intertwined with them, we need to acquire a deeper understanding of their online behaviour.

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