

Real Life vs. Virtual Life: Big Five Personality Traits, Facebook Use and Leisure Activity Engagement

ABSTRACT

The popularity of using Facebook (FB) is widespread among all generations all around the world. This study investigates connections between FB use, leisure activity engagement, and personality traits. Older users' FB usage was more intensive than younger users', confirming that FB is aging as well as its users' age. Frequent and longer hours FB users found less time to see their relatives and friends. But at the same time, those who spend more time with their relatives and friends and less time with FB are the ones who had a high number of FB friends. This may be because of a firm connection between online and offline friendship. Lots of real-life friends have also resulted in a large number of friends with FB. Extraverts and agreeable people had a high number of FB friends, but preferred spending times with their relatives and friends instead of being connected to FB online. Consequently, intensive FB usage resulted in less leisure activity engagement.

Keywords: Big Five personality traits, Facebook attitude, Facebook use and activities, online and offline friendship, leisure activities.

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Gerçek Hayat ve Sanal Hayat: Beş Büyük Kişilik Özellikleri, Facebook Kullanımı ve Boş Zaman Aktivitelerine Katılım

ÖZET

Facebook (FB) kullanımı tüm dünyadaki tüm nesiller arasında yaygındır ve popülerdir. Bu çalışma FB kullanımı, boş zaman aktivitelerine katılımı ve kişilik özellikleri arasındaki olası bağlantıları araştırmaktadır. Yaşlı kullanıcıların FB kullanımı, genç kullanıcılarınkinden daha yoğun çıkmıştır ve FB kullanma yaşının eskiye oranla gittikçe arttığı doğrulanmıştır. Sık sık ve daha uzun süre FB kullananlar akrabalarını ve arkadaşlarını görmek için daha az zaman ayırmışlardır. Fakat aynı zamanda, akrabaları ve arkadaşları ile daha fazla ve FB ile daha az zaman geçirenler, çok sayıda FB arkadaşı olanlardır. Bunun nedeni çevrimiçi ve çevrimdışı arkadaşlık arasındaki sıkı bağlantı olabilir. Gerçek hayattaki çok sayıda arkadaş aynı zamanda FB ile de çok sayıda arkadaşla sonuçlanmıştır. Dışadönük karakteri olan ve kolay hemfikir olan karakterdekiler çok sayıda FB arkadaşı olanlardır; ancak bunlar, çevrimiçi FB'ye bağlanmak yerine akrabaları ve arkadaşlarıyla vakit geçirmeyi tercih etmektedirler. Sonuç olarak, yoğun FB kullanımı daha az boş zaman aktivitelerine katılım ile sonuçlanmıştır.

Keywords: Beş büyük kişilik özellikleri, Facebook'a karşı tutumlar, Facebook kullanımı ve aktiviteleri, çevrimiçi ve çevrimdışı arkadaşlık, boş zaman aktiviteleri

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INTRODUCTION

Leisure activities reduce anxiety and depression and increase positive emotions, thus, have benefits for mental and physical health (Weng & Chiang, 2014) Jankovi, Nikoli, Vukonjanski, and Terek (2016) examined Facebook (FB) and smart phone usage on students' free time activities and found there was no decisive influence of FB and smart phone use on the allocation of time for leisure activities. Źumárová (2015) examined the effects of computer games and social networks in the leisure of children and found the negative effects of them. Błachnio, Przepiorka, Durak, Durak, and Sherstyuk (2017) found in their studies that there was a negative relation between Internet addiction and emotional stability, conscientiousness, and extraversion. Zhou, Fong, and Tan (2014) compared higher Internet users and non-Internet users' engagement of leisure activities and found that higher Internet dependence tended to be more active in their leisure time than non-Internet users.

The majority of studies are devoted to investigating a relation between either internet/social media usage and personality traits (Ferris & Hollenbaugh, 2018) or internet/social media usage and leisure activities (Francisco, López-Sintas, & García-Álvarez, Social leisure in the digital age, 2016). Not much research reveals the relation among "personality trait, leisure activity, and FB use". One research is about those three variables with a case of Taiwanese college students (Kuo & Tang, Relationships among personality traits, Facebook usages, and leisure activities – A case of Taiwanese college students, 2014). However, similar to other research about FB use, research by Kuo and Tang collected data from college students with the same age group, similar life style, and leisure activities. Thus, there is a need to collect data from different demographic groups and, in turn, different leisure activities. Additionally, Kuo and Tang collected their data from Taiwan which makes it a very culture specific research and it is worthwhile to conduct a similar research comparing different cultures in personality traits, FB use and leisure activities.

Compared to all social media types, specifically FB usage can be considered more demanding and habitual. By considering this characteristic of FB, a similar question arise based on: Are more FB users engaged in more leisure activities or less FB users engaged in more leisure activities? How about the number of friends? Those who have more FB friends are engaged in more leisure activities or less? Do those who have a high number of FB friends

compared to less number of FB friends spend more or less time to see their relatives and friends in their leisure time?

Personality trait is a good indicator of whether or not an individual heavily or lightly use FB and participate in certain leisure activities. Since their personalities are different from each other, the type of recreational activities they prefer will be different too. So, those leisure activities vary based on the personality of people. That's why personality trait is an important factor for examining many aspects of FB users and was included in this study.

1. THEORETICAL FRAMEWORK

1.1. Big Five Personality Trait

It is certain that there are individual differences among people and those differences shape their individual leisure time activities, such as how much time they allocate and spend on those activities. Some may prefer outdoor activities (e.g., playing basketball), while others prefer homey activities (e.g., reading books). People preferring outdoor or indoor activities also differ a lot from each other. One may prefer cycling, while another chooses wind surfing. Similarly, one individual may read books; while another surfs the Internet. Or a socially active person may connect to online friends in a cafe instead of a home environment.

What affects an individual behavior in a certain way is the concept of individual differences. "The term individual differences refer to how people differ with respect to a wide variety of factors such as personality, motives and abilities" (Briñol & Petty, 2004, p. 575). Personality determines a person's unique tailoring to his/her environment (Sappenfield, 1954). "Personality may be defined as the underlying causes within the person of individuals behavior and experience" (Cloninger, 2004, p. 3). Personality differences show whether or not an individual gets along with others, in work or in different cultures, and adapt and maintain some traditions (McCrae & Costa, 2003).

Personality traits can be observed, in other words, it finds its reflection in behavior (Cloninger, 2004; Hogan, 1996; Wiggins, 1973). The trait approach is the most popularly studied among personality theories, because traits are good at clarifying much of human behavior (Costa & McCrae, Trait and factor theories, 2006) and revealing important outcomes (McCrae & Costa, 2013).

For the evaluation of the personal traits, the Big Five or the five-factor model has been the most popular (Panayiotou, Kokkinos, & Spanoudis, 2004), and the most widely used classification system (Peterson, 2007). The Big Five includes the personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, shortly called OCEAN to remember easily (Cloninger, 2004; Costa & McCrae, 1992 a; Peterson, 2007). In this study, the Big Five Personality Trait scale developed by Rammstedt and John (2007) was used. They created five domains and 10 facets (two facets in each domain) by combining the NEO-PI-R (Costa & McCrae, 1992 a) and AB5C-IPIP (Goldberg, 1999).

1.1.1. Extraversion

Extraversion is also called Dominance-Submissiveness or surgency. Extraverts, in contrast to introverts, are dominant, outgoing, socially active, talkative, and sociable individuals. They are usually energetic and talkative; they do not mind being at the center of attention, and make new friends more easily. They value cheerfulness and exiting life. High extraverts interact with more people than low extraverts (Cloninger, 2004). Extraverts are friendly and seek for company, and show a strong bound to Facebook use (Murphy, 2012). Introverts, in contrast to extraverts, are more likely to be solitary or reserved and seek environments characterized by lower levels of external stimulation.

1.1.2. Agreeableness

Agreeableness relates to a focus on maintaining positive social relations, being friendly, compassionate, and cooperative. People scoring high on Agreeableness tend to trust others and adapt to their needs. Agreeable people are altruistic in nature and eager to help others. Non-agreeables are egocentric, more focused on themselves, and self-involved rather than altruistic (Costa & McCrae, 1992 b).

1.1.3. Neuroticism

Neuroticism is described best by anxiety, guilt, frighten, anger, embarrassment, sadness, low self-esteem, and depression. People scoring low on emotional stability (high neuroticism) are more likely to experience stress and nervousness, are hot-blooded and easily get angry and mad. People scoring high on emotional stability (low neuroticism) tend to be calmer and self-confident (Cloninger, 2004). Among other personality traits, extraversion and neuroticism display important social aspects of the Internet (Murphy, 2012).

1.1.4. Conscientiousness

Conscientiousness is another personality trait in Big Five and its difference from other traits can be explained in this line: “Conscientiousness has been drawn upon as a source in situations where achievement is an important value, that is, in contexts of work, learning and education” (Raad & Perugini, 2002, p. 8). Conscientious people prefer an organized approach to life contrary to a spontaneous individual. People scoring high on conscientiousness are well organized, reliable, and consistent, enjoy planning, seek achievements, and pursue long-term goals. Low conscientiousness individuals are generally more easy-going, spontaneous, and creative. People low in conscientiousness are more tolerant and less bound by rules and plans (Strang, 2006).

1.1.5. Openness

Openness is related to imagination, creativity, curiosity, and tolerance. People who are open to experience are open to change, and appreciate new and unusual ideas, have a broad range of interests and are open to new and unusual experiences without having hesitation and anxiety, but having pleasure (Rolland, 2002).

1.2. Facebook and Personality Traits

Personality linked to FB use (Amichai-Hamburger & Vinitzky, 2010). SNSs have provided a comfortable way of communication with people who are less confident in their communications and connections (Vaughn, 2013). A study conducted by Chen (2014) displayed extroverts had a high number of Facebook friends and spent most of their time on Facebook. Extraversion has been considered to be the most crucial personality trait in predicting SNS use. According to the ‘rich-get-richer’ hypothesis, extraverts transfer their offline sociability to CMC platforms (Ong, et al., 2011). Transferring online sociability to offline platform is also possible. A new type of community called electronic-to-face (e2f) communities that forms online for the purpose of meeting face-to-face (Torres, 2017). Jonson (2016, p. 58) compared an individual’s online and offline extraversion tendency in his study and concludes that:

This finding suggests if an individual has tendencies for extroversion in the offline world, he or she does not have the same tendency online. Conversely, those displaying

traits of being a “loner” will disclose more on Facebook, possibly compensating for their lack of extroversion and out-goingness in the offline world.

Extraverts are sociable both online and offline. Extraverts, compared to introverts, have more online friends and are more likely to self-disclose online. Introverts, on the other hand, spend more time using SNSs than extraverts (Ong, et al., 2011). Chua and Chua’s (2017) findings revealed extraverts’ and open to experience people’s attitudes toward FB was positive, while conscientious, users possessed a negative attitude. They found no connection between FB attitude and neuroticisms or agreeableness. A study conducted by Shen, Brdiczka, & Liu (2015) showed the difference between extraverts’ and neurotics’ FB usage. They found extroverts shared more photos, longer videos, and more status updates; and neurotics tended to write longer posts. Comparison of their posts revealed that extraverts used few negative words in their posts, but neurotics used more negative sentiment words. Moreover, neurotics were more successful in gaining social support and getting more comments from friends. Horzum (2016) in his study found for maintaining existing relationship agreeable and conscientious users use FB more than other personal traits.

Murphy (2012) found in her study younger FB users’ time spent on FB was higher, and their number of friends was more than older FB users’. On the contrary, participants in a research stated they had more Facebook friends and the average participant age was older than a decade (Visconte, 2016).

Personality is highly connected to online socialising and furthermore the type of SNSs used depends on differences in personality (Hughes, Rowe, Batey, & Lee, 2012). Hughes et al. (2012) found people higher in sociability, extraversion and neuroticism preferred using FB, and people higher in need for cognition preferred using Twitter. Their results suggested that FB users were more sociable and Twitter users were less sociable.

Internet use could have a negative or positive impact on the users’ daily lives depending on how individuals interact socially online (Francisco, López-Sintas, & García-Álvarez, 2016) in addition to individuals’ leisure activities. Kuo and Tang (2014) investigated the connection among personality, use of Facebook, and leisure activities, and found highly extravert and open people were social both in the virtual and real worlds.

Under light of the literature review, the following questions were developed and asked for this study:

RQ1: How do personality traits influence individuals' Facebook attitudes?

RQ2: How do personality traits influence individuals' leisure activities?

RQ3: How do personality traits influence individuals' Facebook usage?

RQ4: How does Facebook usage influence individuals' leisure activities?

RQ5: How do personality traits influence individuals' Facebook activities?

2. METHODOLOGY

2.1. Participant and Sapling

Survey was conducted at one of the private universities in North Cyprus. A purposive sampling method was used to collect data. 165 hard copies of the questionnaire were distributed to students in various classrooms, with 160 valid data sets.

2.2. Instrumentation and Measurement

Questions for demograpfic profile were in the form of multiple choice.

2.2.1. Facebook Use and Frequency

Respondents were first asked if they were Facebook members. Those who had Facebook accounts wanted to continue with the survey. Then they were asked a series of questions related to their Facebook usage. These included: “when they first created a Facebook account”, “average time spent on Facebook per day” and “number of times Facebook is checked per day”. Questions were in the form of multiple choice.

2.2.2. Facebook Intensity Scale (Facebook Attitudes)

In addition to those Facebook use and frequency questions, Facebook Intensity Scale (FBI) developed by Ellison, Steinfield, and Lampe (2007) was used. The scale included 6 items (e.g., I feel I am part of the Facebook community) ranging from “strongly disagree” to “strongly agree”. In their study, Cronbach's Alpha for the scale was 0.83. FBI also included two multiple choice questions asking how many minutes they spent using it each day in the past week, and how many total Facebook friends they had.

2.2.3. Big Five Personality Trait Scale

Participants' personality was assessed by using a short big five scale used in a study by Rammstedt, and John (2007). The questions (1-5 strongly DA-strongly A) were tried to be short and to the point as much as possible so that the respondents' attention can be sustained throughout the participation to the study.

2.2.4. Facebook Activities

Facebook is a SNSs that provides different activities to its users (e.g., uploading photos, commenting a friend's content, and lurking: seeing what other people on Facebook are doing). Beyond frequency and duration of using Facebook, those activities may be affected by personal traits and therefore it is important to explore what participants are involved in when they are on Facebook. Those Facebook activities in the questionnaire were adapted from a study by Junco (Junco, 2011 a; Junco, 2011 b)

The participants were required to give their answers based on "how frequently they performed those activities when they are on Facebook". Facebook activity items were coded using a five-point, positively anchored Likert scale ranging from "Never" to "Very Frequently". For these analyses, "Never" (0%) was coded as 1; "Rarely (25%)" as 2; "Sometimes (50%)" as 3; "Somewhat frequently (75%)" as 4; and "Very frequently (close to 100% of the time)" as 5.

2.2.5. Leisure Activities

1-5 type Likert scale (5: Strongly disagree 4: Disagree 3: Neither agree nor disagree 2: Agree 1: Strongly agree) was used to measure respondents' agreement with the concepts under investigation. The leisure activities of this research was adopted from a study by Zhou, Fong, and Tan (2014). However, it was slightly modified, as their research was conducted in China and some types of leisure activities are considered culture specific (e.g., singing karaoke with friends). Although, it was adopted from a study by Zhou, Fong, and Tan (2014), leisure activities are time bound and culture specific and therefore they were grouped with the application of factor analysis and as a result, 4 types of activities were found to be meaningful for the current study. They are namely: (1) relatives and friends related leisure activities, (2) art related leisure activities, (3) sport related leisure activities, and (4) walking for pleasure. FB users' "leisure activity engagement" is the sum of four types of leisure activities.

2.3. Independent Variables (IVs) and Dependent Variables (DVs)

IVs are demographic variables and big five personality traits. DVs are FB attitudes, FB usage, FB activities, and leisure activities.

2.4. Reliability of Instrumentation

Cronbach alpha of this study can be seen on the following Table 1.

Table 1. Reliability Results for Items

Items	Cronbach alpha
FB attitudes	.894
FB activities	.875
Big Five personality traits	.630
Leisure activities	.726

2.5. Validity of Instrumentation

The validity of leisure activities were assessed by maximum likelihood in factor analysis. Four factors (relatives and friends related activities, and art related activities, sport related activities, and walking for pleasure) were valid (See Table 2).

2.6. Analysis

All statistical analyses were performed using SPSS version 22.0. Factor analysis was employed to display the validity of leisure activities; and Cronbach alpha was employed to show the reliability of the items. Descriptive statistics were run and frequency was used to illustrate the demographic characteristics of the sample and to describe Facebook use. Mean and standard deviation were used to describe personality traits, Facebook activities, and Facebook attitudes. Independent t-test was operated for personality trait and Facebook attitude. Regression analysis was conducted for leisure activities, Facebook use, Facebook attitudes, Facebook activities, and personality traits.

3. RESULTS

3.1. Descriptive Statistics

3.1.1. Demographic Background

The majority of the participants were between 19 to 24 years old (71%). Males (54.4%) were more than females (45.6%). The participants were from Asia (10.0%), Africa (11.3%), Europe (5.6%), Middle East (6.9%), Turkey (47.5%), North Cyprus (16.9%), and other (1.9%). Student participants (90.6%) were more than lecturer/academician participants (9.4%).

3.1.2. Facebook Use

The majority (46.8%) had more than 400 FB friends. 36.3% of the participants reported visiting FB 3 or more times per day. 25.6% of them spent less than 30 minutes, 15% of them spent one hour, 9.4% of them spent 1-2 hours, 11.9% of them spent two hours+ per day, and 37.5% of them didn't visit FB every day. 30% of them started to use FB 6-8 years ago, 25% of them 8-10 years ago, and 17.5% of them 4-6 years ago.

3.1.3. Results for Personality Traits

The mean of extraversion was 3.73 with standard deviation of 1.14, the mean of agreeableness was 4.03 with standard deviation of 1.08, the mean of conscientiousness was 3.84 with standard deviation of 1.08, the mean of Neuroticism was 3.29 with standard deviation of 1.27, and the mean of openness was 4.18 with standard deviation of .97.

3.1.4. Results for Facebook Activities

The mean scores of Facebook activities were: playing games (M = 1.44, SD = .86), posting status updates (M = 2.21, SD = .93), sharing links (M = 2.14, SD = 1.00), sending private messages (M = 3.12, SD = 1.31), commenting (M = 2.39, SD = 1.02), chatting on Facebook chat (M = 2.83, SD = 1.37), checking to see what someone does (M = 2.35, SD = 1.16), creating events (M = 1.38, SD = .74), posting photos (M = 2.25, SD = 1.10), tagging photos (M = 2.07, SD = 1.09), viewing photos (M = 2.93, SD = 1.22), posting videos (M = 1.95, SD = 1.02), tagging videos (M = 1.89, SD = 1.10), viewing videos (M = 3.13, SD = 1.28). Among Facebook activities, viewing videos and sending private messages had the highest mean score; and creating events and playing games had the lowest mean score.

3.1.5. Results for Facebook Attitudes

Among the 6 Facebook attitudes, “Facebook has become part of my daily routine” had the highest mean ($M = 2.61$, $SD = 1.41$) and “I feel out of touch when I haven't logged onto Facebook for a while” had the lowest mean ($M = 1.99$, $SD = 1.20$). The rest were “I am proud to tell people I'm on Facebook” ($M = 2.06$, $SD = 1.17$), “Facebook is part of my everyday activity” ($M = 2.50$, $SD = 1.33$), “I feel I am part of the Facebook community” ($M = 2.38$, $SD = 1.28$), “I would be sorry if Facebook shut down” ($M = 2.48$, $SD = 1.36$). Overall, lower mean scores than 3 indicate that users didn't feel strong attitudinal connection with Facebook.

3.1.6. Relation between Demographic Background and Facebook Use

There was not much difference between males and females for FB experience [males: ($M=5.02$; $SD=1.31$) and females: ($M=4.56$; $SD=1.83$)]; FB visiting frequency per day [males: ($M=2.39$; $SD=1.33$) and females: ($M=2.41$; $SD=1.37$)]; FB duration per day [males: ($M=2.31$; $SD=1.38$) and females: ($M=2.30$; $SD=1.39$)]; and the number of FB friends [males: ($M=6.93$; $SD=2.60$) and females: ($M=6.58$; $SD=2.70$)].

There was a difference for FB experience between younger FB users [17-18 years: ($M=4.09$; $SD=1.64$)] and older FB users [30+ years: ($M=5.46$; $SD=1.66$)]. FB visiting frequency per day was the highest for 27-28 years ($M=3.00$; $SD=1.41$) and it was the lowest for 17-18 years ($M=1.54$; $SD=1.03$). Similarly, FB duration per day was the highest for 27-28 years ($M=3.40$; $SD=1.51$) and it was the lowest for 17-18 years ($M=1.63$; $SD=1.02$).

There was not much difference between academicians and students for FB visiting frequency per day [academicians: ($M=2.76$; $SD=1.23$) and students: ($M=2.38$; $SD=1.35$)]; and FB duration per day [academicians: ($M=2.92$; $SD=1.25$) and students: ($M=2.26$; $SD=1.38$)]; and the number of FB friends [academicians: ($M=7.53$; $SD=2.60$) and students: ($M=6.67$; $SD=2.65$)].

There was a difference between country of origin and FB use. Asians ($M=1.81$; $SD=1.22$) had the least FB visiting frequency per day and Middle Easterns ($M=3.36$; $SD=1.20$) had the most; Turks ($M=1.94$; $SD=1.19$) had the least FB duration per day and Middle Easterns ($M=3.36$; $SD=1.36$) had the most; Europeans ($M=5.11$; $SD=2.75$) had the lowest number of FB friends and Cypriots ($M=8.07$; $SD=1.81$) had the highest. Among all other ethnic groups, Middle Eastern FB users' FB visiting duration and frequency was the highest.

3.2. Factor Analysis Results

The factorability of the 22 Leisure Time Activities Scale items displayed four criteria. The Kaiser–Meyer–Olkin measure of sampling adequacy was .79 and Bartlett’s test of sphericity was significant ($\chi^2(231) = 1070.599, p=000$).

Eigen values showed that the first five factors explained a total of 45.7% of the variance (20.8% for factor 1, 8.3% for factor 2, 6.4% for factor 3, and 5.0% for factor 4). The fifth, and sixth factors had Eigenvalues less than 4% of the variance.

A total of fourteen items were removed because they did not meet the criteria of having a factor loading of .5 or above.

By using oblimin rotations of the factor loading matrix and employing maximum likelihood factor analysis, the factors were examined. The acceptance of the five factor solution based on the decision of: (1) its suitability to the theoretical foundation (see Taylor, Lewin, & Strutton, 2011), (2) ‘flattening out’ of Eigen values on the scree plot after five factors, and (3) difficulty in interpretation.

Table 2. Factor Analysis Results for Leisure Activities

Items	Factor -1	Factor-2	Factor-3	Factor 3
Going on a family/friend outing	.610	-.172	.045	.213
Going to café or bar	.829	.035	-.025	.017
Going out for the evening	.911	.196	.032	-.165
Visiting art galleries and museums	-.055	.626	.049	.175
Attending opera ballet or dance perf.	-.017	.676	.081	.122
Competing in team sports	.035	.024	.796	-.053
Competing in individual sports	-.015	.240	.709	.039
Walking for pleasure	.172	.042	.008	.688

3.3. T-test and Regression Analysis Results

3.3.1. Results for Personality Trait and Facebook Attitude

The first research question asked how personality traits influenced individuals’ Facebook attitudes. Table 3 shows t values of Facebook attitudes between high personality trait people and low personality trait people. A negative t value represents high personality trait people have a higher intensity than low personality trait people; and a positive t value represents

vice versa (low personality trait people have a higher intensity than high personality trait people).

Table 3. Independent t Test Between Personality Trait and Facebook Attitude

	Extraver.	Agree.	Conscie.	Neurot.	Opennes
FB is part of my everyday activity	-1.565	-2.449	-.447	-1.599	.229
I am proud to tell people I'm on FB	-2.726*	-1.061	-1.387	-2.487*	.200
FB has become part of my daily routine	-1.476	-2.683*	-.834	-1.341	-.213
I feel out of touch when I haven't logged onto FB	-1.249	-2.000	-1.455	-2.207	.000
I feel I am part of the FB community	-3.015**	-1.225	-1.109	-3.139*	-.400
I would be sorry if FB shut down	-5.933***	-2.530	-5.657**	-7.529***	.000

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

High extraversion people compared to low extraversion people felt they were more connected with Facebook in 3 attitudes (e.g., I feel I am part of the FB community). People high in extraversion, conscientiousness, and neuroticism felt they would be sorry if FB shut down more than people low in extraversion, conscientiousness, and neuroticism. High p value ($p=0.000$) for neuroticism showed people high in neuroticism showed very high emotional reactions if FB shut down with regard to people low in neuroticism. High extraversion and high neuroticism people compared to low extraversion and low neuroticism people showed strong proud associated with FB. High agreeableness people agreed FB became part of their daily routine compared to low agreeableness people.

3.3.2. Results for Personality Trait and Leisure Activities

The second research question elicited how personality traits influenced individuals' leisure activities. Regression analysis result was significant between extraversion and walking for pleasure ($\beta=0.264$, $p \leq 0.05$) ($R^2=0.070$), and extraversion and relatives and friend based leisure activities ($\beta=0.302$, $p \leq 0.05$) ($R^2=0.091$). Similarly, the result was significant between open to experience and walking for pleasure ($\beta=0.229$, $p \leq 0.05$) ($R^2=0.052$), open to experience and relatives and friends related leisure activities ($\beta=0.180$, $p \leq 0.05$) ($R^2=0.033$), and between agreeableness and relatives and friend related leisure activities ($\beta=0.198$, $p \leq 0.05$) ($R^2=0.039$). Both extraverts and open to experience people preferred walking for pleasure and spending time with their relatives and friends. Regression analysis result was significant between leisure activity engagement and extraversion ($\beta=0.296$, $p \leq 0.05$) ($R^2=0.087$).

Table 4. Regression Results for the Predictors of Leisure Activity Engagement by Personality Traits

	Extraversion	Agreeableness	Conscienc.	Neuroticism	Openn.
Relatives/friends re. leis. act.	.302***	.198**	.135	.121	.180*
Sport related leisure activities	.066	.093	.004	-.070	-.015
Art related leisure activites	.128	-.073	.046	-.264***	-.004
Walking for pleasure	.264***	.106	.051	.039	.229**
Leisure activity engagement	.296***	.146	.103	-.043	.143

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

The result was also significant between emotional stability and art related leisure activities ($\beta = -0.264$, $p \leq 0.05$) ($R^2 = 0.070$). Neurotic individuals engaged in less art related activities and emotionally stable individuals engaged in more art related activities. The possible explanation of this might be when emotionally stable individuals engaged in art related activities (e.g., visiting art galleries and museums, and attending opera, ballet or dance performances), they could get rid off stress, and anxiety; and remained stable in their emotions.

3.3.3. Results for Personality Trait and Facebook Use

The third research question seeked for an answer of how personality traits influenced individuals' Facebook usage. FB duration was significantly related with extraversion ($\beta = -0.158$, $p \leq 0.05$) ($R^2 = 0.025$) and agreeableness ($\beta = -0.187$, $p \leq 0.05$) ($R^2 = 0.035$). Extravert people and agreeable people tended to use less FB in time per day (see Table 5). This also supports the fact that extraverts and agreeables devoted more time for lesire activites (e.g., for being together with their relatives and friends).

Table 5. Regression Results for the Predictors of Facebook Use by Personlaity Traits

	Extraversion	Agreeableness	Conscient.	Neuroticism	Openness
FB experience	-.076	.145	.107	.237**	.140
FB frequency	-.118	-.073	.057	.121	-.029
FB duration	-.158*	-.187*	-.077	.052	-.122
FB friends	.129	.121	.066	.150	.075

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

FB experience (FB usage in years) was also significantly related with neuroticism ($\beta=0.156$, $p\leq 0.05$) ($R^2=0.024$). Neurotic people had more Facebook experience. The possible explanation of this might be when people felt less emotional stability, they may have tended to behave cautiously in their communications and found alternative communication vehicles (in place of face-to-face communication) for their conversations, and therefore they may have started to use FB before than users with other personal traits.

3.3.4. Results for Facebook Use and Leisure Activities

The fourth research question asked how Facebook usage influenced individuals' leisure activities. Regression analysis result was significant between relatives and friends related leisure activities and FB use frequency ($\beta=-0.152$, $p\leq 0.05$) ($R^2=0.023$), FB use duration ($\beta=-0.298$, $p\leq 0.05$) ($R^2=0.089$), and FB friends ($\beta=0.166$, $p\leq 0.05$) ($R^2=0.027$). Regression analysis result was also significant between sport related leisure activities and FB use duration ($\beta=-0.183$, $p\leq 0.05$) ($R^2=0.033$). When users' daily FB usage duration and frequency increased, they found less time to see their relatives and friends; and similarly, the duration of FB usage has a negative effect on their daily sport activities. Regression analysis result was significant between leisure activity engagement and FB use duration ($\beta=-0.288$, $p\leq 0.05$) ($R^2=0.083$). When FB usage increased, the participants engaged in less leisure activities.

Table 6. Regression Results for the Predictors of Leisure Activity Engagement by Facebook Use

	FB experience	FB frequency	FB duration	FB friends
Relatives/friends related leisure activities	.016	-.152*	-.298***	.166*
Sport related leisure activities	-.014	-.073	-.183**	.004
Art related leisure activities	-.104	-.075	-.121	-.126
Walking for pleasure	-.041	.024	-.037	-.017
Leisure activity engagement	-.041	-.133	-.288***	.046

* $p\leq 0.05$

** $p\leq 0.01$

*** $p\leq 0.001$

In contrast to FB duration and frequency, the number of FB friends was positively significant with relative and friend based leisure activities. The possible explanation of this might be a link between online and offline friendship.

3.3.5. Results for Personality Trait and Facebook Activities

The last research question was about how personality traits influenced individuals' Facebook activities. Regression analysis result was significant between open to explore and playing games ($\beta=-0.158$, $p\leq 0.05$) ($R^2=0.025$). Open to explore people played less FB games compared to close to explore people. Regression analysis result was significant between agreeableness and sharing links ($\beta=-0.154$, $p\leq 0.05$) ($R^2=0.024$). High agreeable people shared less FB links compared to low agreeable people.

Table 7. Regression Results for the Predictors of Facebook Activities by Personality Traits

	Extraver.	Agreeableness	Conscient.	Neuroticism	Openness
Playing games	-.088	-.028	-.020	.086	-.158*
Posting status updates	-.046	.124	.051	.165*	-.023
Sharing links	.050	-.154*	-.135	-.013	.011
Sending private messages	-.086	.002	-.067	.113	.070
Commenting	.064	.028	-.023	.060	-.055
Chatting on Facebook chat	-.044	-.060	-.101	.038	-.052
Checking to see what sm. does	-.014	-.009	.069	.045	-.075
Creating events	.020	-.054	.000	.036	-.081
Posting photos	.019	.056	-.125	.108	.026
Tagging photos	.076	.088	-.048	.092	-.019
Viewing photos	-.057	-.008	-.021	.048	-.080
Posting videos	-.015	-.044	-.006	-.009	-.042
Tagging videos	-.112	-.055	-.135	-.053	-.138
Viewing videos	-.009	-.017	.048	.252***	.009

* $p\leq 0.05$

** $p\leq 0.01$

*** $p\leq 0.001$

Regression analysis result was significant between neuroticism and posting status updates ($\beta=0.165$, $p\leq 0.05$) ($R^2=0.027$), and viewing videos ($\beta=0.252$, $p\leq 0.05$) ($R^2=0.063$). People high in neuroticism preferred posting their status updates and viewing FB videos more than emotionally stable people.

4. DISCUSSION AND CONCLUSION

The current study agreed that age is an important factor for FB usage. However, in contrast to Murphy's (2012) study, in which younger users spent more time on FB than older users; in this study it was older users whose FB visiting frequency and duration per day was higher than younger users. With the introduction of newer and better type of social media, new generations may prefer spending their times with other alternatives. This result confirms the statement "the average age of FB users are older than a decade" (Visconte, 2016).

4.1. Personality Traits and Facebook Attitude

The independent t-test between personality traits and Facebook attitude showed that there were some dependencies of Facebook attitudes on personality traits. Extraverts showed strong attitudes toward Facebook (Murphy, 2012). As Extraversion reflects a person's tendency to show positive feelings, extraverts showed more favorable attitude toward FB (e.g., I feel I am part of the FB community, I am proud to tell people I'm on FB, and I would be sorry if FB shut down) than intraverts. Neuroticism is related to emotional stability. People high in neuroticism tend to be nervous, sensitive, and vulnerable; low in neuroticism (emotionally stable) tend to be calm, relaxed, secure, and confident (Shen, Brdiczka, & Liu, 2015). Both extraversion and neuroticism show close, friendly, and social aspects of the Internet (Murphy, 2012). People higher in neuroticism displayed more favorable attitude toward FB than lower in neuroticism.

4.2. Personality Traits and Leisure Activities

The regression analysis suggested that there were some dependencies of leisure activities on personality traits. As expected, people high in extraversion, agreeableness, and openness compared to people low in them, preferred spending time with their relatives and friends in their leisure times. People open to experience and extraverts liked walking for pleasure as a leisure activity. When it comes to engage in art related activities, however, emotionally stable individuals preferred spending more time than neurotic individuals, which may explain that art related leisure activity engagement helps them to relax and reduce their stress levels. This is consistent with a study done by Weng and Chiang (2014) on the effects of leisure activities.

4.3. Personality Traits and Facebook Use

Some other studies found extraverts had high number of FB friends (Chen, 2014). In the current study, extraverts and agreeable people had high number of FB friends, confirming the previous findings. The regression analysis results showed extravert and agreeable people used less hours of FB per day. They were the ones who devoted more time for their leisure activities instead. Individuals high in neuroticism had more FB usage experience (FB use in years). Less emotionally stable people may have preferred having their conversations cautiously in a more technologically mediated environment. This result confirms the statements that SNSs have given better means of communication to people who are less comfortable in their face-to-face communications (Vaughn, 2013).

4.4. Leisure Activities and Facebook Use

The regression analysis results of leisure activities on FB use displayed that relatives and friends related leisure activities showed dependencies on FB use frequency, FB use duration, and FB friends. Depending on using FB more frequently and more hours per day, FB users found less time to see their relatives and friends. In contrast, less frequency and shorter hours of FB use was associated with more time spend with relatives and friends. Shorter hours of daily FB use was also positively contributed to sport related leisure activities. FB users who have found time for seeing their relatives and friends and spending time with them had more number of FB friends. So, there is a high connection between offline and online friendship. The possible explanation of this may be due to a new type of community called e2f (Torres, 2017).

4.5. Personality Trait and Facebook Activities

People closed to explore spent more time on playing games than people open to explore. High agreeable people shared less FB links than low agreeable people. People high in neuroticism preferred posting their status updates and viewing FB videos compared to emotionally stable people.

5. LIMITATIONS AND FURTHER IMPLICATIONS

First, to collect data, non-probability sampling was used, and therefore the findings may not be generalized to the general population. In further research, probability sampling can be applied with a bigger sample. Second, for the participants' leisure activities, questions were

gathered from Zhou, Fong, and Tan's (2014) study. The participants were asked to rate their leisure activities engaged in the past two months. The current survey was conducted in April, and due to the season of the year, some leisure activities like swimming may not be considered by the majority of the participants. Third, in the future reseach the answers of those questions can be elicited: why do younger users' FB visiting frequency and FB duration per day less than older users'?, and in place of spending time on FB which type of social media do they prefer to use and what gratificants do they get? Last but not least, a possible connection between offline and online friendship and a new type of community called e2f (electronic to face-to-face) are invaluable to be investigated.

GENİŞLETİLMİŞ ÖZET

İnsanlar arasında bireysel farklılıklar vardır ve bu farklılıklar, bazı faaliyetlere ne kadar zaman ayırdıkları gibi bireysel boş zaman faaliyetlerini şekillendirir. Bazıları açık hava aktivitelerini (örneğin basketbol oynamak) tercih ederken, diğerleri ev içinde yapılabilecek aktiviteleri (örneğin kitap okumak) tercih edebilir. Dış mekan veya iç mekan aktivitelerini tercih eden insanlar da birbirinden çok farklıdır. Biri bisiklete binmeyi, diğeri rüzgar sörfü yapmayı tercih edebilir. Benzer şekilde, bir kişi kitap okuyabilir; bir başkası internette gezinmeyi tercih edebilir. Veya sosyal olarak aktif bir kişi, ev ortamı yerine bir kafede çevrimiçi arkadaşlarla bağlantı kurabilir.

Bireysel bir davranışı belirli bir şekilde etkileyen, bireysel farklılıklar kavramıdır. "Bireysel farklılıklar terimi, insanların kişilik, güdüler ve yetenekler gibi çok çeşitli faktörlere göre nasıl farklılaştığını ifade eder" (Briñol & Petty, 2004, p. 575). Kişilik farklılıkları, bir bireyin başkalarıyla, işte veya farklı kültürlerde iyi geçinip geçmediğini ve bazı gelenekleri uyarlayıp sürdürmesini gösterir (McCrae & Costa, McCrae, Introduction to the empirical and theoretical status of the Five-Factor Model of personality traits, 2003).

Kişilik özellikleri gözlemlenebilir, yani davranışta yansımaları bulur (Cloninger, 2004; Hogan, 1996; Wiggins, 1973). Kişilik özelliği, bir bireyin çok veya az FB kullanıp kullanmadığının ve belirli boş zaman etkinliklerine katılıp katılmadığının iyi bir göstergesidir.

Kişisel özelliklerin değerlendirilmesi için beş faktör modeli (Beş Büyük diye de adlandırılır) en popüler (Panayiotou, Kokkinos, & Spanoudis, 2004) ve en yaygın kullanılan (Peterson, 2007) sınıflandırma sistemi olmuştur. Beş faktör modeli, Açıklık, Çalışkanlık,

Dışadönüklük, Uyumluluk ve Nevrotiklik kişilik özelliklerini içerir (Cloninger, 2004; Costa & McCrae, 1992 a; Peterson, 2007).

Mevcut çalışma, yaşın FB kullanımını için önemli bir faktör olduğunu ileri sürmüştür. Daha önce yapılan çalışmalarda, genç kullanıcıların FB’da yaşlı kullanıcılardan daha fazla zaman geçirdiği bulunmuştur. Bu çalışma öncekilerin aksine, günlük FB ziyaret sıklığı ve süresi yaşlı kullanıcıların genç kullanıcılardan daha fazla olduğu görülmektedir. Sosyal medya sürekli daha iyi ve daha yeni alternatifler sunmakta ve bunların gelişile birlikte yeni nesiller zamanlarını başka alternatiflerle geçirmeyi tercih etmekte. Bu araştırmanın sonucu, “Facebook kullanıcılarının yaşı on sene öncesine göre daha da yaşlanmaktadır” ifadesini doğrular.

Kişilik özellikleri ile Facebook tutumu arasındaki bağımsız t-testi, Facebook tutumları ve kişilik özellikleri arasında bağlantılar olduğunu gösterdi. Dışadönükler Facebook'a karşı güçlü tutumlar sergiledi. Dışadönüklük bir kişinin olumlu duygular gösterme eğilimini yansıttığı için, dışadönükler içedönüklere göre FB'ye karşı daha olumlu bir tutum sergiledi. Örneğin, “FB topluluğunun bir parçası olduğumu hissediyorum, insanlara FB'de olduğumu söylemekten gurur duyuyorum ve FB kapanırsa çok üzülürüm” ifadeleri incelendiğinde, dışadönükler daha yüksek puanlar almışlardır.

Nevrotiklik duygusal istikrarla ilgilidir. Nevrotikliği yüksek olan insanlar gergin, hassas ve savunmasız olma eğilimindedir. Nevrotikliği düşük (duygusal olarak dengeli) olan insanlar sakin, rahat, güvenli ve kendinden emin olma eğilimindedir. Hem dışadönüklük hem de nevroitiklik, internetin yakın, arkadaş canlısı ve sosyal yönleri ile ilgilidir. Nevrotikliği daha yüksek olan insanlar, nevroitikliği daha düşük olanlara göre FB'ye karşı olumlu bir tutum sergilediler.

Regresyon analizi, boş zaman etkinlikleri ile kişilik özellikleri arasında bazı bağlantılar olduğunu gösterdi. Beklendiği gibi, dışadönüklük, uyumluluk ve açıklık açısından yüksek olan kişiler, düşük olanlara kıyasla, boş zamanlarında akrabaları ve arkadaşlarıyla zaman geçirmeyi tercih ediyordu. Deneyime açık insanlar ve dışadönükler bir boş zaman etkinliği olarak zevk için yürümeyi seçmekteydiler. Bununla birlikte, sanatla ilgili faaliyetlerde bulunmaya gelince, duygusal açıdan dengeli bireyler, nevroitik bireylerden daha fazla zaman geçirmeyi tercih etmekteydiler. Bu durum, duygusal açıdan dengeli bireylerin, sanatla ilgili boş zaman etkinliği katılımının, rahatlamalarına ve stres seviyelerini azaltmalarına yardımcı olduğunu açıklayabilir.

Diğer bazı araştırmalar, dışa dönüklerin çok sayıda FB arkadaşı olduğunu buldu. Bu çalışmada, dışadönükler ve uyumlu insanlar, önceki bulguları doğrulayan çok sayıda FB arkadaşına sahip olarak bulunmuştur. Regresyon analizi sonuçları, dışa dönük ve uyumlu insanların gün içinde daha az saat FB kullandığını gösterdi. Bunun yerine onlar boş zaman aktivitelerine daha fazla zaman ayırdılar. Nevrotikliği yüksek bireyler daha fazla FB kullanım deneyimine sahipti (yıl olarak FB kullanımı). Nevrotikler, konuşmalarını daha teknolojik olan bir ortamda temkinli bir şekilde yapmayı tercih etmiş olabilirler. Bu sonuç, yüz yüze iletişimlerinde daha az rahat olan insanların sosyal ağ sitelerini kullandıkları, çünkü daha iyi bir iletişim aracı olduğu ifadelerini doğrulamaktadır.

FB kullanımıyla ilgili boş zaman etkinliklerinin regresyon analizi sonuçları, akraba ve arkadaşlarla ilgili boş zaman etkinliklerinin FB kullanım sıklığına, FB kullanım süresine ve FB arkadaşlarına bağlantılı olduğunu gösterdi. FB'yi daha sık ve gün içinde daha fazla saat kullanmaya bağlı olarak, FB kullanıcıları akrabalarını ve arkadaşlarını görmek için daha az zaman buldular. Aksine, daha az sıklık ve daha kısa süre FB kullanımı, akraba ve arkadaşlarla daha fazla zaman geçirilmesiyle ilişkilendirildi. Günlük FB kullanımının daha kısa süreli olması da sporla ilgili boş zaman aktivitelerine olumlu yönde katkıda bulundu.

Akrabalarını ve arkadaşlarını görmek ve onlarla vakit geçirmek için zaman bulan FB kullanıcılarının daha fazla FB arkadaşı vardı. Yani, çevrimdışı ve çevrimiçi arkadaşlık arasında yüksek bir bağlantı vardı. Bunun olası açıklaması, elektronik ortamda tanışıp arkadaşlıklarını yüz yüze iletişime taşıyan yeni bir topluluk türünden kaynaklanıyor olabilir.

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