

Sosyal Ağ Sitelerinde Sosyal Karşılaştırma Davranışı: Instagram- Twitter Karşılaştırması Social Comparison Behaviour on Social Network Sites: The Comparison Between Twitter and Instagram

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Öz

Bu çalışmada, sosyal ağ sitelerinde sosyal karşılaştırma davranışının incelenmesi amaçlanmıştır. Bu bağlamda çalışmanın amacı: sosyal ağ sitelerinde sosyal karşılaştırma düzeyinin, karşılaştırmaların yönünün, konularının, karşılaştırmalara bağlı hissedilen duyguların, sosyal ağ siteleri kullanım sıklığı ile sosyal ağ sitelerinde karşılaştırma düzeyi arasındaki ilişkinin sosyal ağ sitelerinin içerik yapısına göre (görüntü/metin tabanlı) farklılık gösterip göstermediğini incelemektir. Çalışma kapsamı Instagram ile Twitter içerik ve kullanıcılarından oluşmaktadır. Kapalı uçlu anket tekniğine dayalı nicel araştırma yöntemiyle elde edilen bulgular göstermektedir ki; sosyal karşılaştırma davranışı

sosyal ağ sitelerinden ziyade fiziki ortamlarda daha sık gerçekleşmektedir. Instagram'da sosyal karşılaştırma düzeyi Twitter'a göre daha yüksektir. Hem Instagram hem de Twitter'da aşağı yönlü karşılaştırmadan çok yukarı yönlü karşılaştırma gerçekleşir. Zenginlik (maddiyat), bireylerin Instagram'da en çok karşılaştırma yaptığı konu iken, Twitter'da öne çıkan karşılaştırma konusu başarıdır. Instagram ve Twitter'ın her ikisinde de ilham, yukarı yönlü karşılaştırmalara bağlı olarak en çok hissedilen duygu iken, aşağı yönlü karşılaştırmalara bağlı en çok hissedilen duygu ise sempattir. Sosyal karşılaştırma düzeyi ile sosyal ağ kullanım sıklığı arasında herhangi bir ilişki söz konusu değildir.

Abstract

The purpose of this study is to examine social comparison behavior on social networking sites (SNS). A quantitative research method based on the closed-ended questionnaire technique was used in the study in which social comparison behavior was examined on image-based SNS, Instagram and text-based SNS, Twitter. Findings show that; individuals make social comparisons more in physical environments than on SNS. The level of social comparison is higher on Instagram compared to Twitter. Individuals are more frequently engaged in upward comparisons than downward comparisons

on both Instagram and Twitter. Wealth is the domain in which individuals make comparisons the most on Instagram while the prominent comparison domain on Twitter is success. Inspiration is an emotion experienced most by individuals towards upward comparisons, whereas sympathy is the most experienced emotion by individuals towards downward comparisons on both Instagram and Twitter. There is no relationship between social comparison level and frequency of SNS use.

Anahtar Kelimeler

Keywords

Sosyal Karşılaştırma, Sosyal Ağ Siteleri, Görüntü ve Metin Tabanlı Sosyal Ağ Siteleri, Instagram, Twitter
Social Comparison, Social Network Sites, Image/Text-Based Social Network Sites, Instagram, Twitter

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Introduction

Individuals' active involvement on the Internet with Web 2.0 has increased their commitment to the virtual world and the desire to communicate with each other in virtual environments led to social media. Kaplan and Haenlein (2010) defined social media as each of the internet-based platforms built on the principles of Web 2.0 technology and allowing users to produce and share their own content. Although every platform was created for a specific purpose, it seems that they have acquired similar functions over time. SNS, one of these platforms, allows individuals to establish or maintain relationships with others through a virtual profile. Most of them encourage users to share personal information. Shares reflect the image of individuals, and individuals who mostly desire to strike positively others tend to present themselves on SNS through their ideal image. Thus, users are constantly exposed to information about each other's lives on SNS where the interpersonal interaction network is quite wide without time and space constraints, which may make individuals compare themselves with others. Social Comparison is a theory developed by Festinger (1954) and according to the theory, people get a result by comparing themselves with other people or people if there is no objective criterion when evaluating themselves in any domain. Lateral comparison, upward comparison, or downward comparison occurs depending on the comparison target. It is possible to say that the direction of comparisons also varies according to the motivations that push individuals to compare. In studies conducted on social comparison, researchers have categorized these motivations as self-evaluation, self-development, and self-enhancing (Festinger, 1954; Taylor & Lobel, 1989; Will, 1981). Many studies have shown that some emotions reveal following social comparison associated with the various factors such as the direction of comparison and personal characteristics (see Buunk et al., 2001; Gibbons & Gerard, 1989).

The transfer of social relations to the virtual environment through SNS has extended the examination area of social comparison behavior. Researchers suggest that individuals share a lot of visual and written information about themselves on SNS, and this intense information flow triggers social comparison (see. Lee, 2014; Panger, 2014). While most of the studies have examined comparison behavior on Facebook so far (see Krasnova et al., 2015; Midgley, 2013), it seems that researchers have recently inclined to Instagram (see Hwang, 2019; Jiang & Nigien, 2020). Throughout the studies, the focus is generally on the activity and intensity of individuals' use of SNS, level of social comparison, the direction of comparisons, emotions associated with comparisons, and the relationship of these variables with life satisfaction, well-being, and depression level.

In the literature, there are hardly any studies examining social comparison on SNS by comparing it to the content structure of SNS. The purpose of the present study is to investigate social comparison on SNS. The study aims at examining whether social comparison level, the direction of comparisons, domains of comparisons, emotional outcomes of comparisons, and the relationship between frequency of SNS use and social comparison level on SNS vary according to the contents of SNS (image/text-based) or not. The study comprises users and contents of Instagram and Twitter.

Literature Review

Social Comparison Theory

Social comparison theory (Festinger, 1954) implies that individuals socially compare

themselves to others, which has an impact on the self. According to the theory, individuals are by nature programmed to evaluate themselves and have an urge to inquire what their abilities and ideas are like. They compare themselves to others in the absence of an objective criterion when assessing the correctness of their abilities or ideas. Festinger based the social comparison tendency of individuals on the lack of objective criteria in the theory, but many researchers deny this base. These researchers allege that it is very difficult to make sense of the world with objective criteria, because most things in the world are explained by relational reasons. Describing someone as good, slow, long is only possible following a comparison with others. For this reason, although an objective criterion exists in the case of self-evaluation, this criterion makes sense in accordance with the information obtained by social comparison (Arlicke, 2007: 14; Gilbert et al., 1995; Klein, 1997: 772). Social comparison can be defined as the behaviour of an individual to evaluate himself in a particular domain by relating himself to others. Occurring comparisons, even if it is an objective criterion, may be associated with the fact that people are social beings. People need someone else just in the case of meeting their needs such as security, health, and love when making self-evaluation, even if it is an objective criterion. Thus, it seems that the importance and impact of the information obtained at the end of social comparison is great in defining the selves of individuals. Social comparison can be made in many domains such as academic status, physical appearance, ability, thought, lifestyle, mood, destiny, pleasure, performance in working life (Festinger, 1954; Greenberg et al., 2007; Kruglanski and Mayseless, 1990: 204; Locke et al. Nekich, 2000: 865). The other person people to whom an individual compares himself/herself are defined as the comparison target, and the higher the similarity between the individual and the comparison target on the subject being compared, the higher the diagnostic value of the comparison information is (Festinger, 1954: 120; Teközel, 2007: 4; Wood, 1989: 231). In addition, the other characteristics influencing the ability or performance of the individual and the target such as age, gender, experience are important and individuals tend to choose the target that is similar to them in terms of these characteristics (Allan & Gilbert, 1995, p: 294; Wood, 1989: 238). This situation has been termed by Goethals and Darley as the 'related-attributes hypothesis' (1987: 26). Comparing yourself to people you think they are equal to you in any domain is called as lateral comparison. Upward comparison refers to comparing yourself to people better than you while comparing yourself to people worse than you are described as downward comparison (Taylor et al., 1995: 1282). The direction of comparisons differs according to the motivations that push the individual to social comparison. The main motivations are listed as self-evaluation, self-improvement, and self-enhancement (Suls et al., 2002; Wood, 1989). Self-evaluation motivation stems from the individuals' desire to know how good or correct they are in a domain (Festinger, 1954; Goethals&Darley, 1987), and it can be said that lateral comparison information has a higher diagnostic value. Self-development motivation refers the individuals' desire to be better in the future and developing yourself is possible with upward comparisons (Gibbons et al., 2000; Lockwood et al., 2012; Taylor&Lobel, 1989; Taylor et al., 1995; Wood, 1989). Self-empowerment motivation arises when individuals feel a threat against themselves, and they tend to make downward comparisons to protect or strengthen their self-esteem (Martin& Gentry, 1997; Will, 1981). Some emotions are revealed in individuals because of social comparison. After the examination of the theoretical and experimental studies, Smith (2000) unearthed twelve emotions and categorized these emotions as upward contrast emotions (shame, anger, envy), upward assimilation emotions (hope, admiration, inspiration), downward contrast emotions (pride, contempt, schadenfreude) and downward assimilation emotions (fear/worry, pity, and sympathy) in terms of the focal person of the emotion (self/other/dual focus) and the positiveness/negativeness of the emotion. The researcher evaluates positive/negative emotions

according to assimilation and contrast reactions of social comparison. Assimilation and contrast reactions result depending on perceived control. If individuals believe they can not bridge the gap between themselves and others, in other words, if the perceived control level is low, upward contrast or downward assimilation emotions reveal and adversely affect individuals. If the perceived control level is high, upward assimilation or downward contrast emotions reveal and positively affect individuals. The factors such as the quality of the relationship between the individuals and the comparison target (Major et al., 1991; Pelham&Wachsmuth, 1995; Tesser et al., 1988), the level of self-esteem (Buunk et al., 1990), the extent of the value of the comparison domain (Tesser, 1988) determine which emotion reveals.

Social Media and Its Role in Social Comparison

Every person compares themselves with others in various domains consciously or unconsciously. All environments in which interpersonal interaction occurs trigger social comparison. The prominent characteristic of SNS is that they supply continuous interaction. Users share a lot of information about themselves with their virtual identities through SNS while they are exposed to information about others, which makes social comparison unavoidable on SNS.

SNS enable individuals to decide which aspect of their personality to show unlike face-to-face communication environments and they are mostly engaged in presenting themselves selectively (Kramer&Winter, 2008; Walther, 1992). Both the distance between the individual and others and the fact that SNS allow asynchronous interaction to facilitate selective self-presentation (Bullingham&Vasconcelos, 2013:102; Mehdizadeh, 2010: 258; Walther, 2007: 2541). Many researchers examining self-presentation on SNS have concluded that individuals present themselves on SNS toward their ideal image, and thus upward comparison level on SNS is high (see Chou&Edge, 2012; Verduyn et al., 2020; Vogel&Rose, 2016). Each SNS has a different orientation although they function similarly. Some of them are oriented towards image-based content while others mainly include the contents such as text, audio, location. McLuhan stated, “the medium is the message”, which refers to the way the information is conveyed in communication has a more significant impact on the receiver than itself. In other words, the characteristics of the communication environment (face-to-face, e-mail, etc.) affect individuals’ perception of the message. Thus, each SNS may trigger social comparison at a different rate.

The social presence level of image-based SNS is higher than text-based SNS (Kaplan&Haenlein, 2016) and an image is more contrast in contrast to a text because it is directly related to the visual sense (Schnotz 2014), which make image-based SNS more interactive. Many researchers also proposed an image that creates a sense of reality. Sundar (2008) stated that people trust the images they see more than the texts they read, and the pictorial definition of something is more convincing than the textual definition. Newman, et al. (2012) observed in their study that people generally regard photographs as evidence of reality because they have a rich semantic context. Thus, an individual’s photo or video on an image-based SNS and a written post on a subject on a text-based SNS may have a different impact on others. The statistics by Statista in July 2021 show Instagram is the third most used SNS with 1 billion 386 million users and Twitter ranks tenth with 397 million users worldwide. It can be said Instagram is the most used image-based SNS while Twitter is the most used text-based SNS today. The researchers examining social comparison on Instagram mostly focused on the relationship between Instagram use intensity, social comparison level, the direction of comparisons, emotions in associated with comparisons, and the relationship of these variables with life satisfaction, well-being, and depression level (see Jiang & Nigien, 2020; Lup et al., 2015; Tiggeman et al., 2018). Jiang and

Nigien (2020) examined the effect of Instagram use on social anxiety and found that the more individuals use Instagram, the more they are engaged in social comparison, accordingly social anxiety increases. The effect of social comparisons on Instagram on depression was examined by Hwang (2012), and the findings showed that the frequency of Instagram use predicts lateral, upward, and downward comparisons, and upward comparisons are positively related to depression. The studies on social comparison on Twitter have not been sufficiently conducted so far. Panger (2014) focusing on how individuals with low well-being are affected by negative social comparisons on SNS also examined whether negative social comparisons depend on the content structure of SNS or not. The researcher found individuals with low well-being are more vulnerable to negative social comparisons on SNS and likely to feel more envious on Facebook than on Twitter. This result may be since individuals mostly share the posts about social issues on Twitter while shares on Facebook are heavily personal as the researchers stated.

Importance and Purpose of the Study

There is hardly any research examining social comparison on SNS by comparing different SNS. The significance of the study lies behind the purpose of the study, which is to investigate social comparison on SNS. Accordingly, the study aims to find in which one of the physical environment and SNS individuals make social comparison more and whether social comparison level, comparison direction, comparison domains, emotional outcomes of comparisons, and the relationship between frequency of SNS use and social comparison level on SNS differ according to the contents of SNS (image/text based) or not. The research questions follow:

In which one of the physical environment and SNS individuals make social comparison more?

Is there any relationship between the frequency of SNS use and social comparison level on SNS?

On which one of the image/text-based SNS do users make social comparison more?

Which direction of social comparison is made more on SNS?

In which domain do users compare themselves to others the most on SNS?

What emotions reveal associated with social comparison on SNS?

Method

Data Collection and Sample

A quantitative research method based on a closed-ended questionnaire technique was used in the study. Quantitative research is the study in which quantitative data are collected and statistically analyzed. It allows the results obtained from a large audience (Büyüköztürk et al., 2019; Cresswell, 2017). A questionnaire is also a technique in which data is gathered orally or in writing from the participants of the research (Arıkan, 2018). The data were obtained between November 15 and December 7, 2020, through a questionnaire created in Google Forms. The sample was formed by snowball sampling, one of the non-probabilistic sampling methods. Snowball sampling is a method especially in the cases it is difficult to reach the target group of the research (Patton, 2005). The researchers, aimed to achieve rich data with snowball

sampling method, distributed the questionnaire to a few people who use both Instagram and Twitter through WhatsApp, Facebook, Instagram, and Twitter, and they also requested them to send the questionnaire to the other users identifying themselves as Instagram and Twitter users after they have answered it. This process continued until a sufficient number of participants was reached. 212 individuals consented to complete the questionnaire; however, the final sample is comprised of 205 participants. While the gender of 2 participants is unknown, 139 of the other participants are female and 64 are male. When it comes to their age, 19% are 18-21, 35.1% are 22-25, 22% are 26-30, 23.9% are 30 and over. The majority (66.3%) have bachelor's degrees and half of the participants (48.3%) earn 3500 Turkish Lira and over per month. Most of them use Instagram (83.4%) and Twitter (61%) for more than 4 years. 79.5% on Instagram and 72.2% on Twitter spend time between 10 minutes and 3 hours a day.

Instrument

The questionnaire of the study consists of 3 parts. The first part includes the statements for demographic information. The participants have reported what frequency they use Instagram and Twitter a day using choices consisting of less than 10 minutes, 10 minutes-3 hours, more than 3 hours, which is adapted from Lup et al. 2015. There are 28 statements related to social comparison on Instagram and Twitter in the form of a 5-point likert scale in the second part, for instance, "I compare myself to others in my physical environment", "When I see others' shares on Instagram, I think I have a better life than them", "When I see others' shares on Twitter, I think they are better than me in terms of wealth". These statements are adapted from Kaşdarma, 2016 and Sözkese, 2017. The Cronbach's alpha coefficients of the statements about social comparison on Instagram and Twitter in the questionnaire were determined as .91 and .88, respectively. The participants have reported what emotions they feel by upward and downward comparisons on Instagram and Twitter with choices including Smith (2000)'s emotions and the emotions of ambition, courage and desire that Kaşdarma (2016) concluded from her study in the third part. They had a choice to report additional emotion.

Analysis

SPSS for the IOS 25 program was used for data analysis. Firstly, the frequency distribution of the participants' demographic information was revealed by frequency analysis. Secondly, descriptive analysis was applied to answer the research questions about the social comparison level of the participants. The distribution of the emotions revealed associated with comparisons was obtained by multiple response analysis. Before the relationship analysis, the skewness and kurtosis values of the variables in the data set were examined and it was determined that the data distribution was not normal. While Tabachnick and Fidell (2013) state that the data are normally distributed when the kurtosis and skewness values are between -1.5 and +1.5, the kurtosis and skewness values of the current study are outside this range. For this reason, spearman correlation analysis, which is used for non-parametric tests, was applied instead of pearson in relational tests.

Results

Social comparison level of the participants in the physical environment is evaluated with the statement: "I compare myself with others in my physical environment." while social comparison level on SNS is tested using the statement: "I compare myself with others on SNS". When the participants' answers on a 5-point Likert scale (from Never to Always) are analyzed, Table 1

shows that participants rarely make social comparisons in the physical environment and on SNS; however, comparisons occur more frequently in the physical environment than on SNS.

Table 1. Social Comparison Level in Physical Environment and on SNS

	N.	Min.	Max.	M.	S.D.
SC. in physical environment	205	1	5	2.16	.91
SC. on SNS	205	1	5	2.07	1.01

Table 2 indicates that the relationship between the frequency of Instagram use and social comparison level on Instagram is insignificant as it is $.687 > 0.05$. Therefore, there is no relationship between them.

Table 2. The Relationship Between Frequency of Instagram Use and Social Comparison Level on Instagram

			SCL. on Instagram
Spearman's rho	The frequency of Instagram use.	Correlation Coefficient	-.028
		Sig. (2-tailed)	.687
		N	205

Note * $p < 0.05$, SCL.: social comparison level

According to Table 3, the relationship between the frequency of Twitter use and social comparison level on Twitter is insignificant as it is $.933 > 0.05$, of which there is no relationship between them.

Table 3. The Relationship Between Frequency of Twitter Use and Social Comparison Level on Twitter

	N.	Min.	Max.	M.	S.D.
SC. on Instagram	205	1	4	2.17	.76
SC. on Twitter	205	1	4	1.91	.84

Note * $p < 0.05$, SCL.: social comparison level

Table 4 includes the mean of the answers given by the participants to the statements on the 5-point Likert scale (from Never to Always) about social comparison level on Instagram and Twitter. It is seen that the participants make social comparison more on an image-based social networking site, Instagram (mean of social comparison on Instagram: 2.17) than the text-based social networking site, Twitter (mean of social comparison on Twitter: 1.91).

Table 4. Social Comparison Level on Instagram and Twitter

	N.	Min.	Max.	M.	S.D.
SC. on Instagram	205	1	4	2.17	.76
SC. on Twitter	205	1	4	1.91	.84

SC.: social comparison

Table 5 shows the mean of the frequency of upward and downward comparisons on Instagram. According to the table, participants make upward comparison (2.25) more frequently than downward comparison (2.12) on Instagram.

Table 5. Upward/Downward Comparison Level on Instagram

	N.	Min.	Max.	M.	S.D.
USC. on Instagram	205	1	5	2.25	.89
DSC. on Instagram	205	1	4	2.12	.81

USC.: upward social comparison DSC.: downward social comparison

Table 6 indicates the mean of the frequency of upward and downward comparisons on Twitter. It is seen that upward comparisons (1.94) occur more than downward comparisons (1.91) on Twitter.

Table 6. Upward/Downward Comparison Level on Twitter

	N.	Min.	Max.	M.	S.D.
USC. on Twitter	205	1	4	1.94	.88
DSC. on Twitter	205	1	4	1.91	.91

USC.: upward social comparison DSC.: downward social comparison

The domains in which the participants compare themselves with others has examined. Table 7 shows that participants make social comparison in terms of wealth the most on Instagram. The other domains are success, physical appearance, education, and happiness respectively.

Table 7. Domains Of Social Comparison on Instagram

	N.	Min.	Max.	M.	S.D.
Wealth	205	1	5	2.30	.92
Success	205	1	4	2.22	.87
Physical Appearance	205	1	5	2.17	.89
Education	205	1	5	2.14	.86
Happiness	205	1	4	2.08	.89

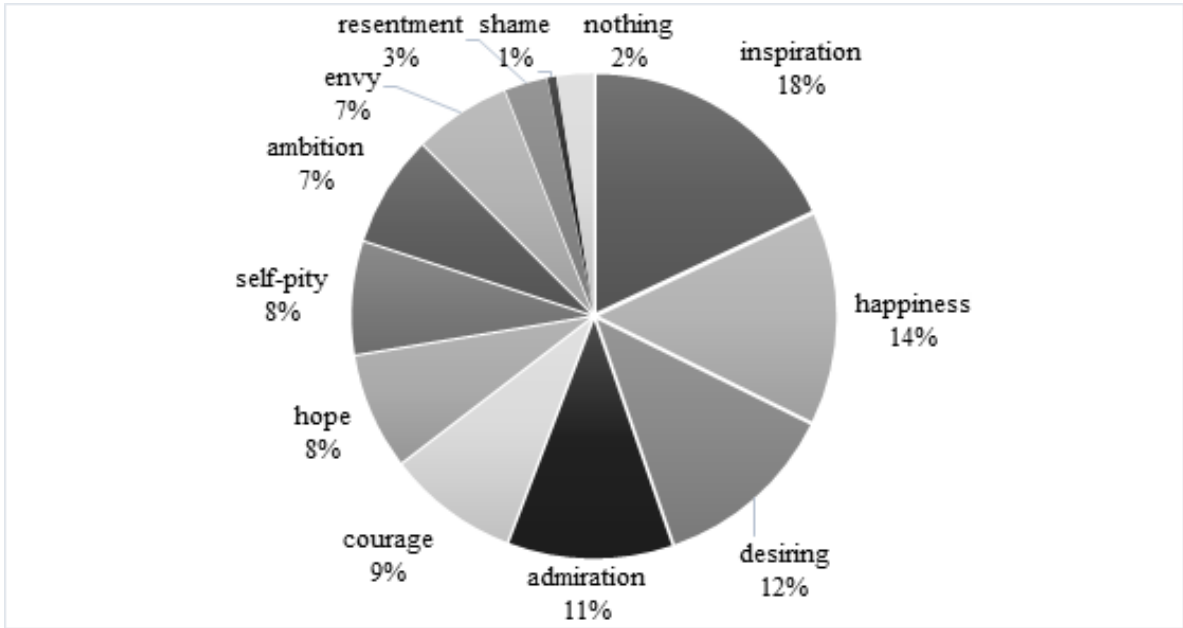
According to Table 8, it is seen that participants compare themselves with others in terms of success the most on Instagram, which are followed by physical appearance, education, and happiness respectively.

Table 8. Domains of social comparison on Twitter

	N.	Min.	Max.	M.	S.D.
Success	205	1	5	2.05	.93
Education	205	1	5	2.01	.95
Wealth	205	1	4	1.90	.94
Happiness	205	1	5	1.90	.90
Physical Appearance	205	1	4	1.81	.90

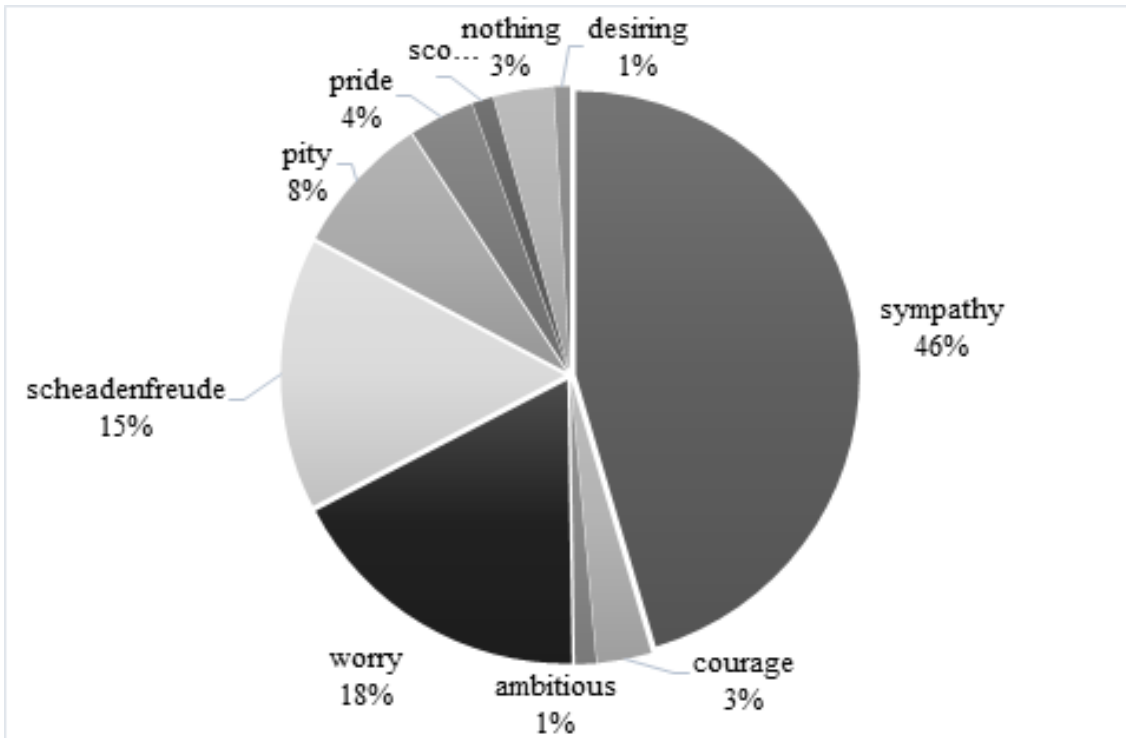
In the study, the participants are offered the emotions (admiration, courage, ambition) which are obtained in the study of Kaşdarma (2016) as a choice, in addition to the emotions categorized by Smith (2000). Also, they are allowed to state an additional emotion. When Graph 1 is examined, it is seen that the most experienced five emotions by the participants following upward comparisons on Instagram are inspiration (18%), happiness (14%), desiring (12%), admiration (11%), and courage (9%) respectively.

Graphic 1. Emotional Outcomes of Upward Comparisons on Instagram



Graphic 2 indicates that sympathy (46%) is an emotion experienced most by individuals towards downward comparisons on Instagram. It is followed by worry (18%), schadenfreude (15%), pity (8%), pride (4%), courage (3%), ambitious (1%), scorn (1%), desiring (1%).

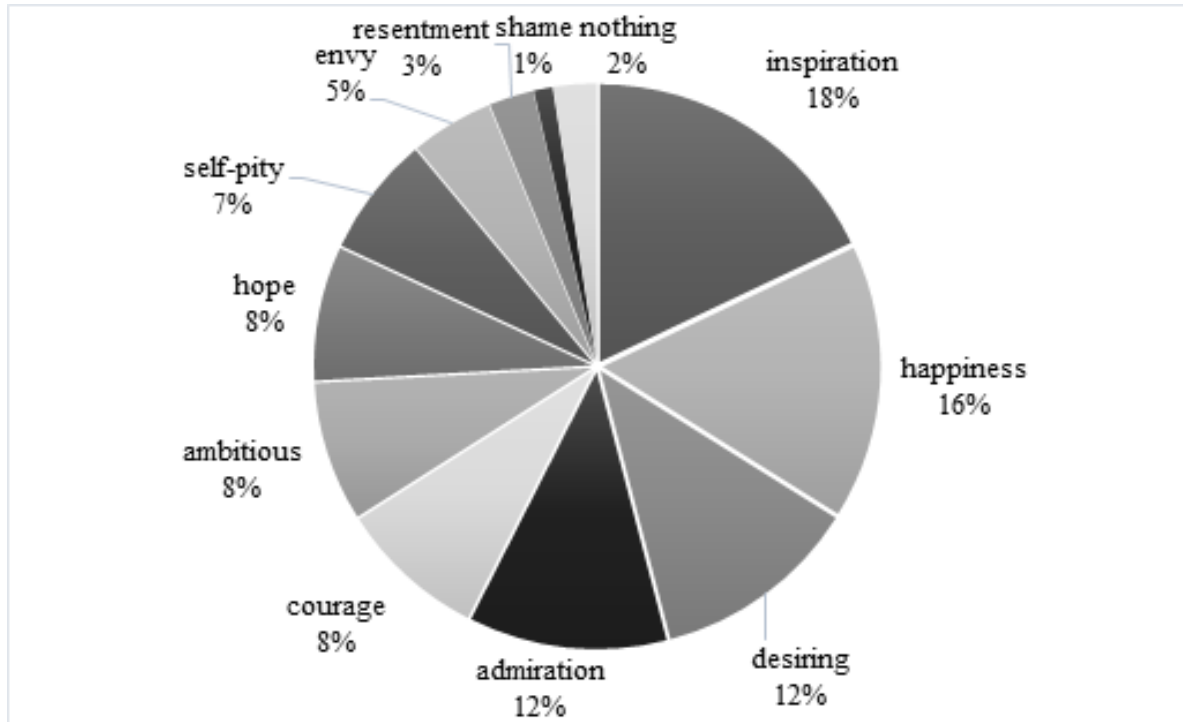
Graphic 2. Emotional Outcomes of Downward Comparisons on Instagram



Graphic 3 shows the emotional outcomes of upward comparisons on Twitter and it is seen that inspiration (18%) reveals the most in accordance with upward comparisons on Twitter.

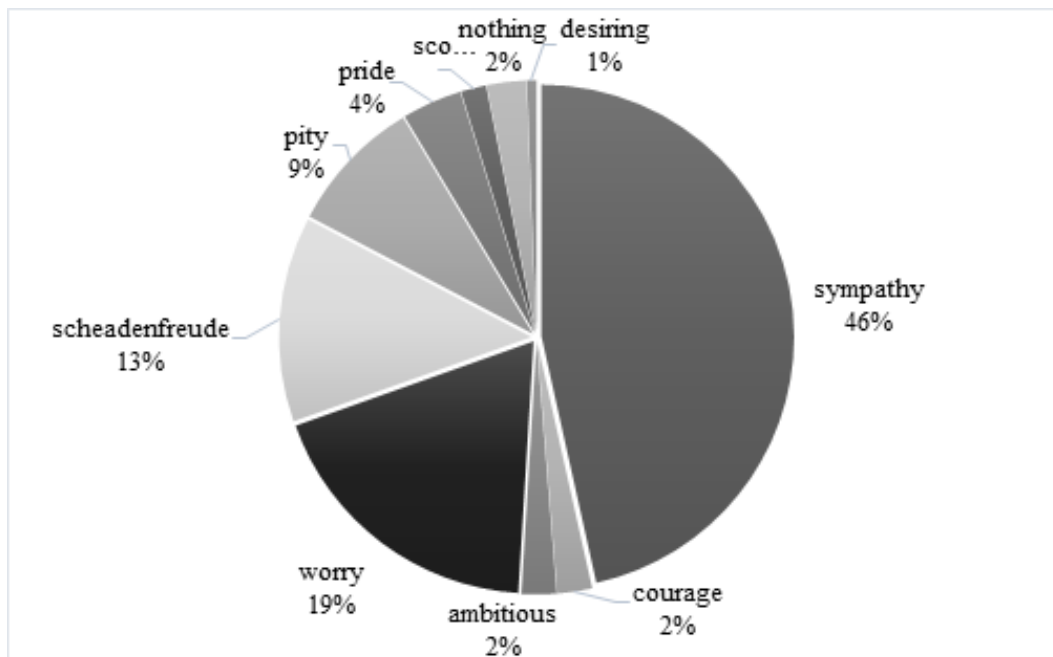
Happiness (16%), desiring (12%), and admiration (12%) are also the commonly experienced emotions.

Graphic 3. Emotional Outcomes of Upward Comparisons on Twitter



Graphic 4 includes the emotional outcomes of downward comparisons on Twitter and it indicates that sympathy is the most commonly experienced emotion after making social comparisons on Twitter. It is followed by worry (19%), schadenfreude (13%), pity (9%), pride (4%), ambitious (2%), scorn (2%), courage (2%) and desiring (1%).

Graphic 4. Emotional Outcomes of Downward Comparisons on Twitter



Discussion and Conclusion

The current study examined social comparison behavior on SNS, namely Instagram (image) and Twitter (text), intending to make a comparison between SNS consisting of different contents. The results of the study are interpreted under the six headings below.

An evaluation of social comparison level in the physical environment and on SNS: The finding of social comparison level in the physical environment and on SNS shows social comparisons occur more in the physical environment than on SNS. This may be a result of the fact that the participants' perception of reality of the virtual environment has been damaged. Köse (2015) examined the opinions of individuals about the reality of people, identity, and events on SNS. 61.8% of the participants stated it is difficult for individuals to get to know each other well because shares on SNS are perfected. 86.7% stated that they create fictional identities on SNS, and therefore 62.8% stated that they are suspicious about the authenticity of shares. SNS seems to be an attractive environment for social comparison as they unite a tremendous amount of people and encourage users to share personal information. However, SNS allow users to introduce themselves selectively, which can raise doubts about the authenticity of shares, which may decrease individuals' tendency to make social comparisons on SNS.

An evaluation of the relationship between the frequency of SNS use and social comparison level on SNS: When it comes to the finding of the relationship between the frequency of SNS use and social comparison level on SNS, there is no relationship between them on both Instagram and Twitter. Our finding is consistent with the study of Lup et al. (2015). On the other hand, Jiang and Nigien (2020) reported that the frequency of Instagram use is positively associated with social comparison.

An evaluation of social comparison level on image and text-based SNS: When social comparisons on image and text based SNS are evaluated, it is seen that the individuals compare themselves with others more on Instagram than Twitter. This finding is partially consistent with Panger (2014)'s study. The researcher examined how unfavorable social comparisons on Facebook and Twitter affect users and reported that users are more prone to feel envious toward comparisons on Facebook than Twitter. Throughout the literature, many researchers concluded for the research on the credibility of images and texts that the visual definition of something is more convincing than the textual definition since a photograph is more concrete than a text. People are more likely to believe what they see than what they read because they regard a photograph as evidence of reality (see Newman, 2012; Schnotz, 2014; Sundar, 2008). Thus, individuals may make social comparisons more on image-based SNS since they are convinced of the reality of shares. Schnotz (2014) stated that a photograph is directly related to the visual sense, which is comprehended faster than a text. Therefore, each photo can be a stimulus to social comparison, whereas tweets cannot trigger social comparison unless read. Instagram is a platform where personal shares are predominant while shares on current events intensely take place on Twitter. Therefore, it can be commented that Instagram is a more attractive platform for social comparison behavior than Twitter.

An evaluation of the direction of social comparison on SNS: The findings that upward comparisons occur more on both Instagram and Twitter than downward comparisons support the previous studies (see Kaşdarma, 2016; Vogel & Rose, 2016: 295; Verduyn et al., 2020: 33). It can be explained as follows: SNS allow individuals to present themselves selectively. Individuals often idealize their shares on SNS because they desire to make a positive impression on others, and thus idealized shares are more likely to trigger upward rather than downward comparisons.

An evaluation of social comparison domains on SNS: The findings of domains of comparisons on Instagram and Twitter indicate that individuals compare themselves with others the most in terms of wealth on Instagram, which may be a result of a preference for conspicuous consumption on SNS. Tosun (2017) examined the photos shared by couples on Instagram by semiotic analysis and determined that individuals tend to show luxury goods on Instagram and strive to be recognized by others. Success is the domain in which individuals make social comparisons the most on Twitter. This result may be because Twitter is mostly used by individuals with a professional occupation. There is barely any research conducted on demographic characteristics (age, education, etc.) of Twitter users, thus further studies may aim to examine the demographic characteristics of Twitter users.

An evaluation of the emotions revealed associated with social comparisons on SNS: According to the findings on upward comparisons, the top five emotions aroused by upward comparisons on both Instagram and Twitter are inspiration, happiness, desiring, admiration, ambition, and courage respectively. It is seen that contrast emotions such as envy and resentment that negatively affect the self are stated by fewer participants. The finding that inspiration reveals the most by upward comparisons is partially inconsistent with Meier and Schafer (2018)'s study. There is not enough research in the literature examining the emotional outcomes of social comparisons on SNS. Most of the studies are conducted on the interplay between SNS use and envy and examine the mediating role of social comparisons on some matters such as depression, well-being, etc. The results show that individuals often feel envious associated with social comparisons on SNS (see Krasnova et al., 2015; Tandoc et al., 2015). The findings on downward comparisons indicate that sympathy is the most aroused emotion by downward comparisons on both Instagram and Twitter. This is followed by anxiety, schadenfreude, and pity. Other contrasting emotions, contempt and pride were stated by fewer participants. All findings of emotional outcomes of social comparisons on SNS point that the participants tended to state positive emotions. This situation can be explained as follows: The participants may have been under the influence of social desirability. They might have been likely to report positive emotions because of thinking that the researcher would shame them if they reported negative emotions. This is not unique to the present study. The same result was observed in several previous studies (see Buunk, 1990; Kaşdarma, 2016).

Overall, this study presents that social comparison behaviour arises more in the physical environment than on SNS and there is no relationship between the frequency of SNS use and comparisons on SNS. Social comparison level is higher on image-based SNS in contrast to text-based SNS. Otherwise, upward comparisons occur more frequently on image and text-based SNS than downward ones. The prominent comparison domain differs as richness on Instagram and success on Twitter while the most experienced emotions associated with upward and downward comparisons on both Instagram and Twitter are the same. The participants were more likely to disclose that they made social comparisons or felt negative emotions associated with comparisons in the study. Accordingly, future research could examine the social desirability bias of the participants and use longitudinal methods.

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References

Allan, S. & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences*, 19(3), 293-299. [https://doi.org/10.1016/0191-8869\(95\)00086-L](https://doi.org/10.1016/0191-8869(95)00086-L)

Arlicke, M. D. (2007). In defense of social comparison. *RIPS/IRSP*, 20(1), 11-29.

Arıkan, R. (2018). Anket yöntemi üzerinde bir değerlendirme. *Haliç Üniversitesi Sosyal Bilimler Dergisi*, 1, 97-159.

Bulligham, L., & Vasconcelos, A. C. (2013). The presentation of self in the online world: Goffman and the study of online identities. *Journal of Information Science*, 39(1), 101-112. <https://doi.org/10.1177%2F0165551512470051>

Buunk, B. P., Collins, R. L., Taylor, S. E., VanYperen, N. W., & Dakof, G. A. (1990). The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology*, 59(6), 1248-1249. <https://doi.org/10.1037/0022-3514.59.6.1238>

Buunk, B. P., Van der Zee, K., & VanYperen, N. W. (2001). Neuroticism and social comparison orientation as moderators of affective responses to social comparison at work. *Journal of Personality*, 69(5), 745-762. <https://doi.org/10.1111/1467-6494.695162>

Büyüköztürk, Ş., Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2019). *Eğitimde bilimsel araştırma yöntemleri*. Pegem Akademi.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140. <https://doi.org/10.1177%2F001872675400700202>

Chou, H.-T. G. & Edge, N. (2012). They are happier and having better lives than I am: The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior and Social Networking*, 15(2), 117-121. <https://doi.org/10.1089/cyber.2011.0324>

Cresswell, J. W. (2017). *Karma yöntem araştırmalarına giriş* (M. Bilir, Ed. & Trans.). Pegem Akademi. (Original work published 2014).

Gibbons, F. X., Blanton, H., Gerard, M., Buunk, B. & Eggleston, E. (2000). Does social comparison make a difference? Optimism as a moderator of the relation between comparison level and academic performance. *Personality and Social Psychology Bulletin*, 26(5), 637-648. <https://doi.org/10.1177%2F0146167200267011>

Gilbert, D. T., Giesler, R. B. & Morris, K. A. (1995). When comparisons arise. *Journal of Personality and Social Psychology*, 69(2), 227-236. <https://doi.org/10.1037/0022-3514.69.2.227>

Greenberg, J., Aston-James, C. E. & Ashkanasy, N. M. (2007). Social comparison processes in organizations. *Organizational Behavior and Human Decision Processes*, 102(1), 22-41. <https://doi.org/10.1016/j.obhdp.2006.09.006>

Hwang, H. S. (2019). Why social comparison on Instagram matters: its impact on depression. *KSI Transactions on Internet and Information Systems*, 13(3), 1626-1638. <https://doi.org/10.1177%2F2056305120912488>

Goethals, G. R. & Darley, M. (1987). Social comparison theory: Self-evaluation and group

life. In B. Mullen & G. R. Goethals (Editörler), *Theories of group behavior* (pp. 21-47). New York: Springer-Verlag.

Jiang, S. & Nigien A. (2020). The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore. *Social Media Plus Society*, 1-10. <https://doi.org/10.1177%2F2056305120912488>

Kaplan, A. M. & Haenlei, M. (2016). Dünyanın bütünü kullanıcıları birleşin! Sosyal medyanın zorlukları ve sağladığı fırsatlar. In H. Kültür & C. Yaşın (Editörler), *Yeni medya: kullanıcının yükselişi* (ss.352-372). Ütopya Yayınevi.

Kaşdarma, E. (2016). Facebook'daki sosyal karşılaştırma sürecinin ve bu süreçle ilişkili faktörlerin incelenmesi. Master Thesis. Bursa: Uludağ University Institute of Social Sciences.

Klein, W. M. (1997). Objective standards are not enough: affective, self-evaluative and behavioral responses to social comparison information. *Journal of Personality and Social Psychology*, 72(4), 763-774. <https://doi.org/10.1037/0022-3514.72.4.763>

Köse, A. (2015). Hayat oyununun yeni perdesi: sosyal ağlar ve gerçeklik algısının değişimi. *Academic Journal of Information Technology*, 6(1), 57-70. <https://doi.org/10.5824/1309-1581.2015.1.004.x>

Kramer, N. C. & Winter, S. (2008). Impression management 2.0: the relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106-116. <https://doi.org/10.1027/1864-1105.20.3.106>

Krasnova, H., Widjaja, T., Buxmann, P., Wenninger, H. & Benbasat, I. (2015). Research note- why following friends can hurt you: An exploratory investigation of the effects of envy on social networking sites among college-age users. *Information Systems Research*, 26, 585-605. <https://doi.org/10.1287/isre.2015.0588>

Kruglanski, A. W. & Mayselless, O. (1990). Classic and current social comparison research: Expanding the perspective. *Psychological Bulletin*, 108(2), 195-208. <https://doi.org/10.1037/0033-2909.108.2.195>

Lee, S. Y. (2014). How do people compare themselves with others on social networksites?: The case of Facebook. *Computers in Human Behavior*, 32, 253-260. <https://doi.org/10.1016/j.chb.2013.12.009>

Locke, K. D. & Nekich, J. C. (2000). Agency and communion in naturalistic social comparison. *Personality and Social Psychology Bulletin*, 26(7), 864-874. <https://doi.org/10.1177/0146167200269011>

Lockwood, P., Shaughnessy, S. C., Fortune, J. L. & Tong, M-O. (2012). Social comparisons in novel situations: Finding inspiration during life transitions. *Personality and Social Psychology Bulletin*, 38(8), 985-996.

Lup, K., Trub, L. & Rosenthal, L. (2015). Instagram #Instasad? exploring associations among Instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychology, Behavior and Social Networking*, 18(5), 247-252. <https://doi.org/10.1177%2F0146167212447234>

Major, B., Testa, M. & Bylsma, W. H. (1991). Responses to upward and downward social comparisons: The impact of esteem-relevance and perceived control. In J. Suls & T. A. Wills (Ed.), *Social comparison: contemporary theory and research* (pp.237- 260).Erlbaum.

Martin, M. C. & Gentry, J. W. (1997). Stuck in the model trap: The effects of beautiful models in ads on female pre-adolescents and adolescents. *Journal of Advertising*, 26(2), 19-33.<https://doi.org/10.1080/00913367.1997.10673520>

McLuhan, M. (1964). *Understanding media: The extensions of man*.The MIT Press.

McLuhan, M. (2001). *The medium is the massage: An inventory of effects*.Gingko Press.

Mehdizadeh, S. (2010). Self-presentation 2.0: narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior and Social Networking*,13(4), 357-364.<https://doi.org/10.1089/cyber.2009.0257>

Meier, A. & Schafer, S. (2018). The positive side of social comparison on social network sites: How envy can drive inspiration on Instagram. *Cyberpsychology, Behavior and Social Networking*, 21(7), 411-417.<https://doi.org/10.1089/cyber.2017.0708>

Midgley, C. E. (2013). Keeping in touch or keeping score? Social comparisons on Facebook. Master Thesis. Toronto University.

Newman, E. J., Garry, M., Bemstein, D. M., Kantner, J. & Lindsay, D. S. (2012). Nonprobative photographs (or words) inflate truthiness. *Psychonomic Bull Rev.*, 19(5), 969-974.<https://doi.org/10.1037/0022-3514.69.5.825>

Panger, G. (2014). Social Comparison in social media: A look at Facebook and Twitter. CHI EA.

Patton, M. Q. (2005). *Qualitative research*. NJ: John Wiley & Sons, Ltd.

Pelham, B. W. & Wachsmuth, J. O. (1995). The waxing and waning of the social self: Assimilation and contrast in social comparison. *Journal of Personality and Social Psychology*, 69(5), 825-838.<https://doi.org/10.1037/0022-3514.69.5.825>

Ramelb, M. (2016). Twitter and identity: Living up to the social comparison.*Pop Culture Intersections*, 10.

Schnotz, W. (2014). An integrated model of text and picture comprehension. In R. E. Mayer (Editörler), *The Cambridge handbook of multimedia learning* (pp. 72-103). Cambridge University Press.

Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls & L. Wheeler (Editörler), *Handbook of social comparison: Theory and Research* (pp. 173-200). New York: Plenum Publisher.

Sözkesen, M. (2017). Sosyalmedyaüzerindesosyalkıyaslama: Instagram üzerinebiraraştırma. Master Thesis. Fırat University Institute of Social Sciences.

Suls, J., Martin, R. & Wheeler, L. (2002). Social comparison: why, with, whom, and with what effect?.*Current Directions in Psychological Science*, 11, 159-163.<https://doi.org/10.1111%2F1467-8721.00191>

Sundar, S. S. (2008). The main model: a heuristic approach to understanding technology effects on credibility. In M. J. Metzger & A. J. Flanagin (Editörler). *Digital media, youth, and credibility* (pp.73-100). The MIT Press.

Taylor, S. E. & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review*, 96(4), 569–575. <https://doi.org/10.1037/0033-295X.96.4.569>

Taylor, S. E., Neler, E. & Wayment, H. A. (1995). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review*, 96(4), 569–575. <https://doi.org/10.1037/0033-295X.96.4.569>

Teközel, M. (2007). Gerçekliğin inşaatkinliği olarak sosyal karşılaştırma: Sosyal karşılaştırmaların üreçlerinde gerçekçi ve kurgusal karşılaştırma enformasyonunun kullanılması eğilimlerinin incelenmesi. Dissertation, Ege University Institute of Social Sciences.

Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. *Advance In Experimental Social Psychology*, 21, 181-227. [https://doi.org/10.1016/S0065-2601\(08\)60227-0](https://doi.org/10.1016/S0065-2601(08)60227-0)

Tiggeman, M., Hayden, S., Brown, Z. & Veldhuis, J. (2018). The effect of Instagram “likes” on women’s social comparison and body dissatisfaction. *Body Image*, 26, 90-97. <https://doi.org/10.1016/j.bodyim.2018.07.002>

Tosun, O. B. (2017). Genç çiftlerin sosyal medyada yaşam tarzı temsilleri: Instagram örneği. *Global Media Journal TR Edition*, 8, 15.

Verduyn, P., Gugushvili, N., Massar, K., Taht, K. & Kross, E. (2020). Social comparison on social networking sites. *Current Opinion in Psychology*, 36, 32-37. <https://doi.org/10.1016/j.copsyc.2020.04.002>

Vogel, E. A. & Rose, J. P. (2016). Self-reflection and interpersonal connection: Making the most of self-presentation on social media. *Translational Issues in Psychological Science*, 2(3), 294–302. <https://doi.org/10.1037/tps0000076>

Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication Research*, 19(1), 50-88. <https://doi.org/10.1177/0000365092019001003>

Walther, J. B. (2007). Selective self-presentation in computer-mediated communication: Hyperpersonal dimensions of technology. *Language, and Cognition, Computer in Human Behavior*, 23, 2538-2557. <https://doi.org/10.1016/j.chb.2006.05.002>

Will, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90(2), 245-271. <https://doi.org/10.1037/0033-2909.90.2.245>

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