



# Social networking sites and relationship social comparison: Effect of relational and individual factors

Burak Emre Gursoy <sup>1\*</sup>

 0000-0001-6813-1996

Bengi Oner Ozkan <sup>2</sup>

 0000-0002-9050-2818

<sup>1</sup> Department of Psychology, Altinbas University, Istanbul, TURKEY

<sup>2</sup> Department of Psychology, Middle East Technical University, Ankara, TURKEY

\* Corresponding author: [gursoyburakemre@gmail.com](mailto:gursoyburakemre@gmail.com)

**Citation:** Gursoy, B. E., & Oner Ozkan, B. (2023). Social networking sites and relationship social comparison: Effect of relational and individual factors. *Online Journal of Communication and Media Technologies*, 13(1), e202308. <https://doi.org/10.30935/ojcm/12864>

## ARTICLE INFO

Received: 17 Aug 2022

Accepted: 23 Dec 2022

## ABSTRACT

The widespread use of the Internet and the popularity of mobile devices have greatly changed our communication habits. Due to their popularity, social networking sites (SNS) are at the center of online relationships, including romantic ones. This paper explores the emerging role of SNS on relationship social comparison (RSC) and individual and relational predictors of RSC. The present study used an experimental design to evaluate the role of relational posts of others' on SNS. Specifically, RSC based on posts by others on SNS were analyzed. In addition, possible other factors that influence the tendency to make RSC, namely relationship satisfaction, investment, quality of alternatives, and adult attachment orientation were examined. The sample of the study consist of 251 participants. 180 (71%) were females and 71 (29%) were males. The sample's mean age was 28.16 ( $SD=6.32$ ). According to the results, there was no significant effect of exposure to relational posts on RSC. On the other hand, the results showed that anxious attachment style and investment in romantic relationships positively predicted RSC tendency. On the contrary, relationship satisfaction negatively predicted RSC tendencies. This study provided an important insight for understanding the effects of SNS on RSC in terms of individual and relational factors.

**Keywords:** romantic relationships, social networking sites, relationship social comparison, relationship satisfaction, investment, quality of alternatives, adult attachment

## INTRODUCTION

Communication is a fundamental property of interpersonal relationships, and we depend on technological devices to communicate with the world from radio broadcasting to the Web 2.0. However, today technology is shaping our way of communication like never before. Recent developments in technology and smartphones are important actors that shape our social life. Today, almost half of the world's population has access to the Internet (ICT Facts & Figures, 2020), and new online platforms, such as social networking sites (SNS), have become a new medium for interpersonal communications. Billions of people can be reached via SNS, it is making our world seem smaller. Leading SNS, Facebook has 2.8 billion active monthly users, followed by Instagram with one billion (Statista, 2021). Combined with the wide-reaching zone of the internet, these numbers clearly show that the SNS have a significant role in interpersonal relationships (Walther, 2011). The term SNS can be defined as any web-based tool that allows to share any user generated content publicly or semi-publicly, establish communications, and check for others' online connections as a new form of socialization which can affect users' daily life (Obar & Wildman, 2015). The term "user generated content" implies any content that helps users to share their ideas or interests. From this perspective, SNS can be seen as a platform for self-presentation that allows us to present and perform who we are (Moncur et al., 2016).

## Social Networking Sites and Romantic Relationships

As SNS entered our lives, our way of experiencing romantic relationships became closely related to them. To illustrate, almost half of the teens in the USA stated that they reached out to others with whom they were romantically interested via SNS. Moreover, 47% of them showed their interest by leaving comments or liking photos. In addition, 63% of teens sent flirtatious messages to someone they were interested in via SNS, and 47% of the teens stated that they shared something interesting or funny with their crush via SNS (Perrin, 2015).

These high numbers are clear evidence of the important role SNS plays to foster relationships with ease, and researchers have studied this topic for almost a decade now (Fox et al., 2014). Studies show that people use SNS to gather information about potential partners via online surveilling activities (Fox & Anderegg, 2014). In addition, they can check for third parties, such as mutual friends, to discover more about appealing ones (Gibbs et al., 2011; Van Ouytsel et al., 2016). However, the role of SNS is not restricted to reaching out for information about appealing ones. It is also used to show people's romantic relationships with their virtual community. Announcing a relationship on SNS is an important way of showing emotions to the public (Rueda et al., 2015). Facebook seems to be the most popular way of declaring relational information and changing status to "in a relationship" is called becoming "Facebook official" (FBO) (Fox et al., 2013). Becoming FBO or announcing romantic involvement on SNS can be seen as a message that "we are off the market" to online community (Orosz et al., 2015).

In addition to all these partner selection processes and the visibility of relationships online, it is possible to access many studies in the literature on how SNS are affecting romantic relationship dynamics. Mounting evidence on this topic suggest that SNS might have a negative impact on relationship dynamics. Studies draw attention to the excessive use of social networks and show that this factor might have an adverse consequences on romantic relationships, especially when the intimacy between partners decreases (Bouffard et al., 2021; Hand et al., 2013). In addition to these findings, there are also studies showing that SNS have a negative effect on romantic relationships through jealousy and partner monitoring (Arikewuyo et al., 2020; Van Ouytsel et al., 2016).

Although studies show the effect of social networks on romantic relationships, it is useful to consider some additional variables, such as relationship comparison, relationship satisfaction, investments, quality of alternatives, and individual factors, whose effects on romantic relationships have been discussed before, to better understand this effect.

### Relationship Social Comparisons

The instant feedback mechanism of SNS has an important place in our online process of self-representation. Online feedbacks, such as likes and comments are important for many users, and if this feedback is positive, such as a high number of likes, users may prefer to post more of the same type of content (Moncur et al., 2016). Similarly, it is seen that the audience plays a decisive role in the posts on SNS and one of the important sources of motivation in users' self-representations is to get likes (Lowe-Calverley & Grieve, 2018). In self-representations made on social media, users' thinking that they are being watched by their online followers also causes them to represent themselves in the most positive way (Zheng et al., 2020).

Aforementioned self-presentation processes and the general features of social media platforms make these platforms suitable for social comparison. Festinger's (1954) social comparison theory explains how our self-evaluation can be shaped by others and our eagerness to compare ourselves with similar people. Due to recent changes in technology, our socialization process has been changed, and several studies have been conducted to analyze this process from a social comparison theory point of view. Studies showed that more time spent on Facebook correlates with greater social comparisons, and exposure to self-enhancing posts on SNS positively correlates with depressive symptoms (Feinstein et al., 2013; Uhler, 2016; Vogel et al., 2015).

Representations made through SNS not only allow users to represent themselves in the most positive way possible, but also allow them to share their romantic relationships. SNS serve as an area where some users make their relationships visible as they do with their idealized physical appearance in individual level (Utz & Beukeboom, 2011). It is a very human reflex for people to make individual comparisons over the posts they

are exposed to on social media. However, it is quite possible for them to make comparisons about their relationships when exposed to relational posts on SNS.

Before discussing how these comparisons are made over SNS, it would be useful to mention the definition and aspects of Relationship social comparison (RSC) in the field. RSC is a relatively new area in social comparison studies and can be defined as individuals' eagerness to compare and evaluate of his or her own romantic relationship with others. Studies on this subject are mainly based on two theories. The first of these theories, the interdependence theory, suggests that our expectations related to our romantic involvement must be fulfilled to feel satisfaction (Dainton, 2000; Thibaut & Kelly, 1959). The theory states that expectations within a relationship are called comparison level, and if these expectations are not fulfilled, individuals start to evaluate alternatives, which are known as the comparison level of alternatives (Wang, 2004). The second theory studied on this subject, the investment model (Rusbult, 1980), suggests that making such comparisons is heavily depending on the level of commitment to the ongoing association. According to Rusbult (1983), outcome evaluations, anticipated rewards, and costs along with the possible alternatives also depend on the investments we make to our relationship. Investments can increase our commitment to relationships due to the risk of sacrificing the resources we already invest in and influence our perceptions related to alternatives. Studies also show that individuals compare their relationships with other relationships and RSC between couples heavily depends on some relational factors. Relationship satisfaction and insecurity are found to be two important factors related to RSC tendencies. It seems that relationship satisfaction is negatively related to RSC (Røsand et al., 2013; White, 2010), and RSC tendencies are also associated with insecurity, which also leads to a negative evaluation of the current relationship (Lebeau & Buckingham, 2008).

In addition to relational factors, adult attachment orientation is another variable that stands out in studies on RSC. Like satisfaction and insecurity, adult attachment orientation is also found to be related to RSC by leading to negative emotions, low commitment, trust, and satisfaction in romantic relationships in turn (Johnson, 2012).

Despite the place of SNS in our daily lives and its role in announcing/presenting our romantic relationships, the topic of RSC has been the subject of very few studies in terms of the impact of SNS. To the best of our knowledge, only a few studies have investigated the effect of SNS on RSC. To illustrate, the role of Facebook was investigated to determine its effects on RSC, and results suggested that RSC in online settings can affect relationship quality, individuals' well-being, and attention to the alternatives (Morry et al., 2018). Another study shows that exposure to alternative partner candidates via social media has indirect negative effects on commitment to the romantic relationships. (Lenne et al., 2019). In a further study, women with low social comparison orientation are found to show a negative relationship between usage of SNS and relationship satisfaction, and for men, higher social comparison orientation was associated with lower commitment (Quiroz, 2019). In addition to these findings, in a study dealing with the effect of attachment patterns, which is one of the personal factors, only the effect of anxious attachment pattern was found to be significant in the relationship comparison performed on the SNS. Study shows that romantic relationships that individuals with anxious attachment orientation are exposed to SNS are associated with negative emotions and low self-esteem (Leung, 2016).

### Research Question and Hypothesis

When the studies in the literature are examined, it has been seen that in addition to the positive effects of SNS on romantic relationships such as allowing individuals to foster relationships with ease; negative effects are frequently emphasized in such studies. However, it is seen that only a small part of these studies focus on negative effects of SNS posts, where self and relationship representations are made in the most positive way possible. Considering the structure of SNS that is suitable for making relational comparisons over representations, it can be seen as an important gap in the literature. For the purpose of filling this gap in the literature, the main research question of this study was determined as follows:

1. **RQ:** What is the effect of being exposed to the posts (positive posts related to romantic relationships versus neutral posts) of other users' relationships by SNS upon their own romantic relationships?

On the other hand, it is very important to consider relational factors such as relationship satisfaction, investment, quality of alternatives, and individual factors such as anxious attachment pattern, the effect of

which has been proven in previous studies on RSC tendency (Johnson, 2012; Leung, 2016; Røsand et al., 2013; White, 2010). Therefore, another issue that needs to be addressed in this study is the examination of the effects of relational and individual factors that are likely to have an impact on RSC during this exposure process, and the following hypotheses have been formed:

1. **H1:** Relationship satisfaction and investments will be negatively related to RSC tendencies and assessing the quality of alternatives will be positively related to RSC tendencies.
2. **H2:** RSC tendencies will be positively related to anxious forms of attachment.

## THE CURRENT STUDY

---

### Pilot Study

To understand the role of SNS posts on RSC and establish the design of the main study a qualitative pilot study was conducted. By employing qualitative modes of inquiry, we would like to illuminate the possible effects of relational sharing of others on one's evaluation of his or her romantic relationships. This pilot study has 20 participants (14 females, six males). Data was collected via face-to-face interviews and open-ended questions (answered via e-mail). The criteria for participation were being a member of SNS and having been in a romantic relationship at least once. Nine participants were college students, and the rest of the sample were white-collar workers, the mean age of the participants was 25. The responses of almost half of the participants show that they think that exposure to posts about opportunities and activities of other couples harms their relationships, especially by causing comparisons between relationships. On the other hand, the other half of the participants said that they did not experience such an effect.

There are contradictory answers about the relationship of SNS with RSC according to results of the pilot study. While some participants reported that they did not compare their relationships with the relationships they see in the posts on SNS, other participants claimed that posts related with fun activities such as going on vacation lead to comparisons. An example of the views of the participants in the group who said that it can lead to comparison is as follows: "When a friend of mine goes on vacation or somewhere else, I say 'I want to go there, too.'. You see them (on SNS), and you make plans with your partner too.". Although the responses of the participants may seem contradictory, answers similar to the previous example give us an idea of what kind of posts might have an effect on the RSC tendencies and are therefore important for planning the main study.

### Main Study

A quantitative experimental design was used to assess the role of relational posts of others on viewers' romantic relationships and to see the effect of relational and individual factors on RSC tendencies. In this study, participants were deliberately exposed to different sets of visual materials. To boost external validity and produce posts that are close to those that participants are exposed to in their daily lives on SNS, all visual materials utilized in the study were derived from posts posted by actual SNS users by permission.

To be more specific, the first set was involving Instagram posts of two different couples and the second set was involving Instagram posts related to nature. Based on the presented materials participants were divided into two groups namely, group 1 and group 2. By doing so we were aiming to clarify how online posts of others can affect viewers' tendency to make RSC. In addition to this, the current study also analyzed the possible other relational and individual factors which can affect the tendencies to make RSC such as relationship satisfaction, investment, quality of alternatives, and attachment style.

### Procedure

Due to its popularity, Instagram was used as a representative of SNS in this study. Participants in Group 1 were exposed to some mock Instagram posts from two different couples. In these posts, the current study used relational posts of individuals who shared their relationship on different occasions, such as a journey or drinking coffee in a fancy shop. After the exposure, participants were asked to answer some ordinary questions, such as the number of likes or the names of the places that the couple visited, related to the post to make sure that the participant is focused on the presented material ([Appendix A](#)). Finally, the

measurement tools of the study were given to the participants. Namely, demographic information form (DIF), relationship social comparison measure (RSCM), experiences in close relationships revised (ECR-R), and relationship stability scale (RSS). All scales used in the study were previously adapted into Turkish and the study took approximately 25 minutes to complete.

The same procedure was also used for group 2. The only difference between group 1 and group 2 was the content of Instagram posts. In group 2, participants were exposed to posts related to nature and asked to answer similar ordinary questions. The same measurement tools were also used in group 2. Participants of the study randomly assigned to two groups. The data was collected via the online survey tool Qualtrics. Participants were selected via online channels, and they were invited to this study with a link. This software also executed the randomization process. Thus, random dispersal of participants in the formation of groups was ensured.

## METHOD

### Participants

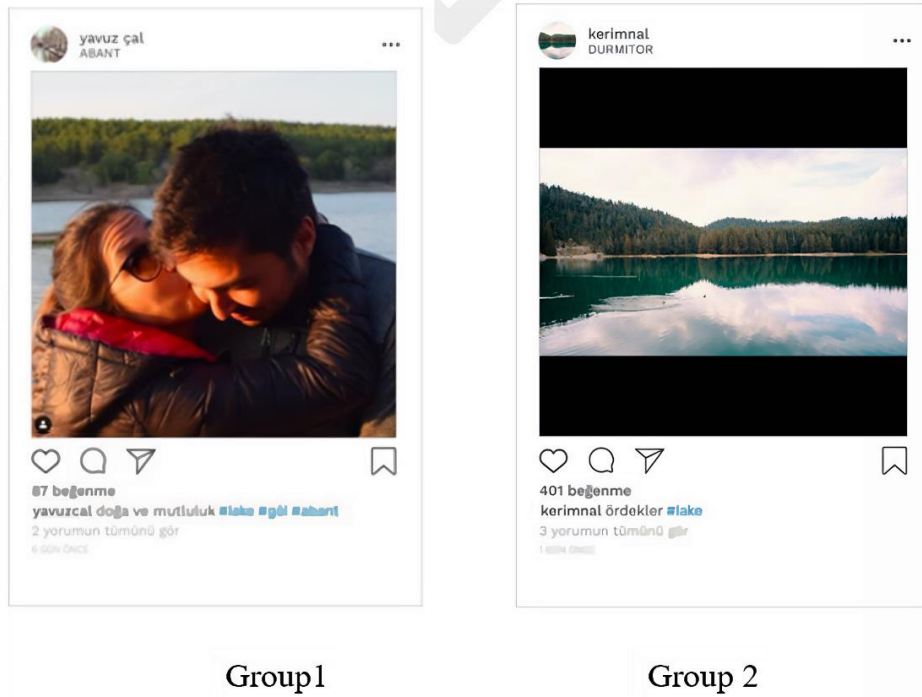
The only criteria for participation were having an SNS account and being in a romantic relationship. Participants of the study were reached out via social media announcements. There were 450 participants recruited in the study. Participation in the study was completely voluntary and the participants were informed that they could leave the study at any time without any responsibility. Before proceeding with the data cleaning, the data set was examined and the answers of the participants who did not complete the study were removed from the data set. After that, the data cleaning process was carried out based on the suggestions of Tabachnick et al. (2007). Finally, there were 251 participants left (180 females, 71 males). After the randomization process, there were 133 participants in group 1 (98 females, 35 males) and 118 participants in group 2 (82 females, 36 males). The sample's mean age was 28.16 ( $SD=6.32$ ). Of the sample, 167 participants stated that they were in romantic relationships, and 84 participants indicated that they were married. The number of participants who stated that their relationship was in the first two years was 97. Moreover, 69 participants indicated that their relationship had been ongoing for two to five years, while 85 participants stated that their relationship had been ongoing for more than five years. A total of 44% of the participants stated that they had graduated from a university ( $n=110$ ), 25% from high school ( $n=63$ ), 24% had a master's degree ( $n=61$ ), and 7% listed other ( $n=17$ ). The majority of the participants stated that they had an Instagram account ( $n=226$ ); while 205 participants stated that they had a Facebook account, and 165 of them had an account on Twitter. Finally, 223 of the participants stated that they were satisfied with their ongoing relationships.

### Measures

#### Visual materials

Visual materials of the study were created based on the interviews conducted by the researchers in the pilot study. Interviews showed that the most compared posts by SNS users about their relationships were posts about the activities of other couples. Therefore, the visual materials to be used in the study were chosen based on this opinion. All visual materials used in the study were chosen from real Instagram accounts with the permission of account owners, to increase external validity and create realistic posts that are close to the posts that participants are exposed to in their daily lives on SNS. In the study, information contained in any Instagram post such as the number of likes and the place where the photo was taken were arranged in accordance with the original posts. The first set of visuals contained 12 posts from two different couples. Posts were chosen based on the activities related to relationship satisfaction, wealth, and opportunities. To be more specific, chosen materials demonstrated joyful events for couples such as a holiday abroad or having coffee in a fancy place with written cues about relationship satisfaction such as comments. The second set contained 12 Instagram posts related to nature and there are no human figures or content related to romantic relationships in these posts. All names were changed, and all comments and likes were manipulated to be the same. Examples of the visuals can be seen in [Figure 1](#).





**Figure 1.** Sample visual materials of group 1 and group 2 (Relational and natural posts were selected via Instagram real posts of three users. Written permission was obtained from the owners of the photos for this study.)

### Demographic information form

A DIF was used to collect each participant's age, sex, occupation, and relationship status. In addition, a 5-point Likert-type question was used to record relationship satisfaction at the beginning of the study.

### Relationship social comparison measure

RSCM was developed by LeBeau and Buckingham (2008) to assess social comparisons in romantic relationships and control the circumstances under which these comparisons occur. RSCM was originally developed as a one-factor scale. It has 24 items with a 5-point Likert-type scale ranging from 1: never to 5: always ( $\alpha=.92$ ). RSCM was translated into Turkish for this study, and permission was granted from LeBeau and Buckingham (2008). The translation back-translation method was used for RSCM. Turkish version of RSCM has high internal reliability as its original form ( $\alpha=.94$ ) and strong psychometric properties in terms of validity. Turkish version of the scale has two sub-dimensions, namely general tendency ( $\alpha=.94$ ) and partner attributions ( $\alpha=.86$ ), addressing the two constructs tapping different aspects of RSC (Gürsoy & Özkan, 2021). In this study, RSCM was used to assess the total score of RSC.

### Experiences in close relationships revised

ECR-R (Fraley et al., 2000) was used to assess adult attachment orientation in this study. The scale was translated into Turkish by Sumer et al. (2005). ECR-R contains 36 7-point Likert-type questions ranging from 1: strongly agree to 7: strongly disagree. ECR-R also has two subcategories to assess different types of attachments, namely anxiety ( $\alpha=.86$ ) and avoidance ( $\alpha=.90$ ). Each subcategory contains 18 questions.

### Relationship stability scale

RSS (Rusbult et al., 1998) was developed to investigate relationship satisfaction, quality of alternatives, investment dimensions, and commitment in romantic relationships and also relationship satisfaction, quality of alternatives and investment can be seen as determinants of commitment in romantic involvements (Rusbult et al., 1998). The Turkish version of the scale was used in this study to assess three dimensions: relationship satisfaction ( $\alpha=.90$ ), quality of alternatives ( $\alpha=.84$ ), investment ( $\alpha=.84$ ), without using the commitment subscale as in the first adaptation study (Buyuksahin et al., 2005). Each of the three subgroups

**Table 1.** Intercorrelations for study variables

	1	2	3	4	5	6	7	8
1. RSCM total								
2. RSCM GT	.95**							
3. RSCM PA	.79**	.55**						
4. Anxious	.40**	.46**	.15*					
5. Avoidant	.18**	.26**	-.03	.46**				
6. Investment	.25**	.26**	.15*	.24**	-.06			
7. Satisfaction	-.21**	-.32**	.08	-.31**	-.40**	.18**		
8. Quality of alternatives	.08	.15**	-.06	.10	.12	-.12	-.38**	
Means	2.17	2.03	2.49	3.36	2.48	4.28	7.24	4.50
Standard deviations	.74	.78	.95	.98	.98	2.03	1.51	1.99

Note. RSCM total: Total RSCM score; RSCM GT: General tendency subgroup; RSCM PA: Partner attribution subgroup; & \* $p < .05$  & \*\* $p < .01$

**Table 2.** Summary of regression analysis for RSCM total score

Variables	B	SE B	$\beta$	$p$
Satisfaction	-.070	.03	-.140	.001
Investment	.070	.02	.200	<.001
Quality of alternatives	.010	.02	.030	>.05
Anxiety	.230	.05	.300	<.001
Avoidance	-.002	.05	-.003	<.005

contained ten questions. The first five questions were assessed via a 4-point Likert-type scale, while a 9-point Likert-type scale was used to assess the last five questions in every subscale.

## RESULTS

Pearson correlation was used for finding correlations between variables in this study. According to results, RSC tendencies were found positively correlated with anxious ( $r=.40$ ) and avoidant ( $r=.18$ ) attachment styles; and investments ( $r=.25$ ). On the contrary, negative correlations related to relationship satisfaction ( $r=-.21$ ) were found. Intercorrelations among the variables can be seen in [Table 1](#).

An independent sample  $t$ -test was used to analyze how online posts of others can affect viewers' tendency to make RSC and find the answer to the research question of this study.  $T$ -test results showed no significant differences in the RSC tendencies between group 1 ( $M=2.19, SD=.78$ ) and group 2 ( $M=2.13, SD=.69$ ),  $t(249)=.69, p>.05$ . Even the mean scores of group 1 were higher than group 2, results clearly showed that there were no significant effects of exposure to relational posts on RSC tendencies. This result suggested that relational posts of others have no significant effect on RSC tendencies.

A multiple linear regression was calculated to investigate whether relationship satisfaction, quality of alternatives, investment and adult attachment orientation could significantly predict RSC tendencies and to test the **H1** and **H2**. According to results the model was significantly predicted RSC ( $R^2=.20, F(5, 245)=12.48, p=.00$ ). Specifically, relationship satisfaction negatively predicted RSC tendencies ( $\beta=-.14, p<.05$ ). This result was not surprising; it seems that greater satisfaction in romantic relationships decreases RSC tendencies as expected. Moreover, investments have a significant and positive prediction effect on tendencies to make RSC ( $\beta=.20, p<.001$ ). However, there is no significant prediction effect related to quality of alternatives on RSC tendencies ( $\beta=.03, p>.05$ ). Together, these results showed that participants made more comparisons when their investment was higher, and the quality of alternatives did not have any significant effect on RSC tendencies. Therefore, **H1** was partially supported. In addition to that, results showed that anxious ( $\beta=.31, p=.00$ ) attachment style have a positive predicting effect on RSC tendencies but avoidant ( $\beta=-.003, p<.005$ ) attachment style have no significant prediction effect on RSC ([Table 2](#)). Based on this, it is logical to claim that participants with anxious attachment orientations tend to make more comparisons related to the romantic involvements. Thus, **H2** was supported.

## DISCUSSION

The present study was aiming to evaluate the role of relational posts of others on RSC on SNS. In addition, possible other factors that influence the tendency to make RSC, namely relationship satisfaction, investment, quality of alternatives and adult attachment orientation were examined.

In the light of the findings in the literature, it was decided to organize an experiment for the study. The aforementioned study aims to test the questions subject to the research by controlling the exposure of the participants to relational sharing. In general, it could easily be assumed that if someone was introduced to other people's relational posting on SNS, he or she would begin to compare his or her intimate relationship in comparison to the one seen. However, results clearly showed that there was no significant effect of exposure to relational posts on RSC tendencies. On the other hand, some relational and individual factors are important predictors of RSC. This finding can be interpreted as relational and individual factors are effective on RSC tendency rather than being exposed to relational sharing on social media in general.

*T*-test results yielded that there were no significant differences between the groups on RSC tendencies. Possible explanations for this situation can be listed as follows. A great majority of the participants in the study expressed their relationship satisfaction high in DIF. In this study and previous studies, relationship satisfaction has been found to have negative effects on relationship comparison so, the inconsistency to be created by expressing to make comparisons about their ongoing relationships at the end of exposure may be a situation that the participants avoid. In addition, to express the tendency to make comparisons, can be perceived negatively in society, about their ongoing relationships may have been difficult for the participants when evaluated in terms of the "social desirability bias" which can be defined as a tendency to answer any question in a socially acceptable way rather than providing true answers (Lavrakas, 2008). In this study, participants may have found it difficult to make an overt relationship comparison. It is possible that questions related to RSC tendencies could provoke the urge to answer in a socially acceptable way. Finally, the participants in this study received sample posts from two separate couples with whom they were unfamiliar. It's possible that seeing an odd couple on screen isn't enough to trigger RSC tendencies.

According to linear regression analyses, relationship satisfaction negatively predicted RSC tendencies, but surprisingly investment has a significant and positive prediction effect. In addition, the quality of alternatives had no significant effect on RSC tendencies. Rusbult (1980) describes investments as both intrinsic and extrinsic resources that we "put into" our relationships. As a result, one possible explanation for these findings is that making investments in our relationships could lead us to make more comparisons to assess the quality of our investment. It might be a way of assessing the things we put into our relationships and ensuring that our investment was worth it. Furthermore, since the participants in this study are generally satisfied with their partners, alternatives may not be desirable to them. As a result, in this study, the quality of alternatives has no significant impact on RSC tendencies.

In this study, the dimension of adult attachment was also considered. RSC tendencies were shown to be associated with anxious attachment style. Because of the correlation between secure attachment and relationship satisfaction in romantic relationships, this finding was not surprising. (Johnson, 2012). Secure attachment is an important predictor of relationship satisfaction in several studies (Collins & Read, 1990; Feeney, 2002; Pistole, 1989). Taken together, these findings show that SNS can only be a tool in the comparison process between relationships, and individuals' tendency to make comparisons is the result of certain individual and relational factors.

Several limitations of this study need to be acknowledged. To begin with, this study aimed to analyze some variables that were vulnerable to social desirability bias. Extrinsically measuring relationship satisfaction was attempted in this study; however, it should be noted that expressing dissatisfaction with ongoing relationships can be challenging. Second, even though the study design was created to investigate the effects of social media on intimate relationships in an experimental setting, the use of mock Instagram accounts can be seen as a weakness in this research. To be more specific, participants were not allowed to see the profile pages; instead, they were only allowed to see an Instagram post, which might not be enough to construct a realistic atmosphere.



The implications of this study are important in terms of explaining the effect of the SNS on our romantic relationships. When the results are examined, it is seen that the effect of SNS on romantic relationships cannot be considered independently of relational and individual factors. This may lead researchers working on the impact of SNS on daily life to examine the dynamics in which the SNS plays a role as a tool and the effects can occur through other factors. On the other hand, it can be useful for experts working with couples in the field to find solutions to SNS-oriented relationship problems by addressing different variables. In addition to these, findings of the study can be seen as important in terms of its contribution to the literature.

Finally, future research should use implicit association techniques for assessment to reduce the possibility of social desirability bias. Moreover, future studies should prioritize the roles of individual and relational factors when investigating the impact of social networks on the RSC process. In addition, it will be important to carry out studies in which the third person effect (Davison, 1983), which can be effective in the beliefs of the participants that they are free from the comparison effect, is carried out, and that the third person effect, whose effectiveness has been proven in many media effect studies (Schweisberger et al., 2014; Stavrositu & Kim, 2014), will bring a new perspective to the interaction between the SNS and the romantic relationship.

**Author notes:** The present research is a part of the Ph.D. thesis conducted by Burak Emre Gürsoy under the supervision of Prof. Dr. Bengi Öner Özkan.

**Author contributions:** All authors were involved in concept, design, collection of data, interpretation, writing, and critically revising the article. All authors approved the final version of the article.

**Funding:** The authors received no financial support for the research and/or authorship of this article.

**Ethics declaration:** Authors declared that approval for this study was obtained from the Middle East Technical University Human Subjects Ethics Committee with protocol number 28-ODTÜ-2019.

**Declaration of interest:** Authors declare no competing interest.

**Data availability:** Data generated or analyzed during this study are available from the authors on request.

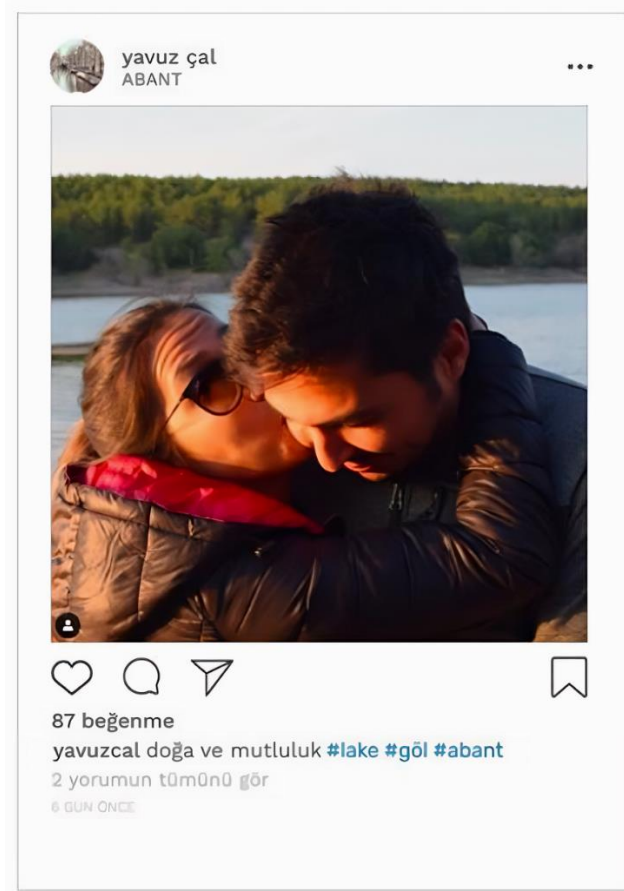
## REFERENCES

- Arikewuyo, A. O., Efe-Ozad, B., Dambo, T. H., Abdulbaqi, S. S., & Arikewuyo, H. O. (2021). An examination of how multiple use of social media platforms influence romantic relationships. *Journal of Public Affairs*, 21(3), e2240. <https://doi.org/10.1002/pa.2240>
- Bouffard, S., Giglio, D., & Zheng, Z. (2021). Social media and romantic relationship: Excessive social media use leads to relationship conflicts, negative outcomes, and addiction via mediated pathways. *Social Science Computer Review*, 40(6), 08944393211013566. <https://doi.org/10.1177/08944393211013566>
- Buyuksahin, A., Hasta, D., & Hovardaoglu, S. (2005). İlişki istikrarı ölçeği (İİÖ): Geçerlik ve güvenilirlik çalışması [Relationship stability scale (CIS): Validity and reliability study]. *Türk Psikoloji Yazıları [Turkish Psychology Articles]*, 8(16), 25-35.
- Collins, R. L. (1996) For better or for worse: The impact of upward social comparisons on self-evaluations. *Psychological Bulletin*, 119, 51-69. <https://doi.org/10.1037/0033-2909.119.1.51>
- Dainton, M. (2000). Maintenance behaviors, expectations for maintenance, and satisfaction: Linking comparison levels to relational maintenance strategies. *Journal of Social and Personal Relationships*, 17(6), 827-842. <https://doi.org/10.1177/0265407500176007>
- Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly*, 47(1), 1-15. <https://doi.org/10.1086/268763>
- Feeney, J. A. (2002). Attachment, marital interaction, and relationship satisfaction: A diary study. *Personal Relationships*, 9, 39-55. <https://doi.org/10.1111/1475-6811.00003>
- Feinstein, B. A., Hershenberg, R., Bhatia, V., Latack, J. A., Meuwly, N., & Davila, J. (2013). Negative social comparison on Facebook and depressive symptoms: Rumination as a mechanism. *Psychology of Popular Media Culture*, 2(3), 161-170. <https://doi.org/10.1037/a0033111>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117-140. <https://doi.org/10.1177/001872675400700202>
- Fox, J., & Andereg, C. (2014). Romantic relationship stages and social networking sites: Uncertainty reduction strategies and perceived relational norms on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 17(11), 685-691. <https://doi.org/10.1089/cyber.2014.0232>

- Fox, J., Osborn, J. L., & Warber, K. M. (2014). Relational dialectics and social networking sites: The role of Facebook in romantic relationship escalation, maintenance, conflict, and dissolution. *Computers in Human Behavior, 35*, 527-534. <https://doi.org/10.1016/j.chb.2014.02.031>
- Fox, J., Warber, K. M., & Makstaller, D. C. (2013). The role of Facebook in romantic relationship development: An exploration of Knapp's relational stage model. *Journal of Social and Personal Relationships, 30*(6), 771-794. <https://doi.org/10.1177/0265407512468370>
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*, 350-365. <https://doi.org/10.1037/0022-3514.78.2.350>
- Gibbs, J. L., Ellison, N. B., & Lai, C. H. (2011). First comes love, then comes Google: An investigation of uncertainty reduction strategies and self-disclosure in online dating. *Communication Research, 38*(1), 70-100. <https://doi.org/10.1177/0093650210377091>
- Gürsoy, B. E., & Özkan, B. Ö. (2021). Adaptation study of relationship social comparison scale. *Nesne* 19.
- Hand, M. M., Thomas, D., Buboltz, W. C., Deemer, E. D., & Buyanjargal, M. (2013). Facebook and romantic relationships: Intimacy and couple satisfaction associated with online social network use. *Cyberpsychology, Behavior, and Social Networking, 16*(1), 8-13. <https://doi.org/10.1089/cyber.2012.0038>
- ICT Facts & Figures. (2020). *Measuring digital development: Facts and figures 2020*. <https://www.itu.int/en/ITU/Statistics/Documents/facts/ICTFactsFigures2015.pdf>
- Johnson, K. R. (2012). *Adult attachment, social comparison, romantic relationship experience, and well-being* [Doctoral dissertation, Heriot-Watt University].
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. SAGE. <https://doi.org/10.4135/9781412963947>
- LeBeau, L. S., & Buckingham, J. T. (2008). Relationship social comparison tendencies, insecurity, and perceived relationship quality. *Journal of Social and Personal Relationships, 25*(1), 71-86. <https://doi.org/10.1177/0265407507086806>
- Lenne, O. D., Wittevronghel, L., Vandenbosch, L., & Eggermont, S. (2019). Romantic relationship commitment and the threat of alternatives on social media. *Journal of International Association for Relationship Research, 26*, 680-693. <https://doi.org/10.1111/per.12299>
- Leung, P. (2016). *Please stop rubbing your relationship in my Face(book): An investigation of online romantic social comparison* [Master thesis, Queen's University].
- Lowe-Calverley, E., & Grieve, R. (2018). Thumbs up: A thematic analysis of image-based posting and liking behavior on social media. *Telematics and Informatics, 35*(7), 1900-1913. <https://doi.org/10.1016/j.tele.2018.06.003>
- Moncur, W., Orzech, K. M., & Neville, F. G. (2016). Fraping, social norms and online representations of self. *Computers in Human Behavior, 63*, 125-131. <https://doi.org/10.1016/j.chb.2016.05.042>
- Morry, M. M., Sucharyna, T. A., & Petty S. K. (2018). Relationship social comparisons: Your Facebook page affects my relationship and personal well-being. *Computers in Human Behavior, 83*, 140-167. <https://doi.org/10.1016/j.chb.2018.HO01.038>
- Obar, J. A., & Wildman, S. S. (2015). Social media definition and the governance challenge—an introduction to the special issue. *Telecommunications Policy, 39*(9), 745-750. <https://doi.org/10.1016/j.telpol.2015.07.014>
- Orosz, G., Szekeres, Á., Kiss, Z. G., Farkas, P., & Roland-Lévy, C. (2015). Elevated romantic love and jealousy if relationship status is declared on Facebook. *Frontiers in Psychology, 6*, 1-6. <https://doi.org/10.3389/fpsyg.2015.00214>
- Perrin, A. (2015). Social networking usage: 2005-2015. *Pew Research Center*. <http://www.pewinternet.org/2015/10/08/2015/Social-Networking-Usage-2005-2015/>
- Pistole, M. C. (1989). Attachment in adult romantic relationships: Style of conflict resolution and relationship satisfaction. *Journal of Social and Personal Relationships, 6*(4), 505-510. <https://doi.org/10.1177/0265407589064008>
- Quiroz, S. (2019). *Are online comparisons damaging our in-person connections? Effects of social media use on romantic relationships* [Master thesis, Arizona State University].
- Røsand, G. M. B., Slinning, K., Røysamb, E., & Tambs, K. (2014). Relationship dissatisfaction and other risk factors for future relationship dissolution: A population-based study of 18,523 couples. *Social Psychiatry and Psychiatric Epidemiology, 49*(1), 109-119. <https://doi.org/10.1007/s00127-013-0681-3>

- Rueda, H. A., Lindsay, M., & Williams, L. R. (2014). "She posted it on Facebook" Mexican American adolescents' experiences with technology and romantic relationship conflict. *Journal of Adolescent Research*, 30(4), 419-445. <https://doi.org/10.1177/0743558414565236>
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16, 172-186. [https://doi.org/10.1016/0022-1031\(80\)90007-4](https://doi.org/10.1016/0022-1031(80)90007-4)
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, 45, 101-117. <https://doi.org/10.1037/0022-3514.45.1.101>
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, 5, 357-387. <https://doi.org/10.1111/j.1475-6811.1998.tb00177.x>
- Schweisberger, V., Billinson, J., & Chock, T. M. (2014). Facebook, the third-person effect, and the differential impact hypothesis. *Journal of Computer-Mediated Communication*, 19(3), 403-413. <https://doi.org/10.1111/jcc4.12061>
- Statista. (2021). *Global social networks ranked by number of users 2021*. <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-numberof-users/>
- Stavrositu, C. D., & Kim, J. (2014). Social media metrics: Third-person perceptions of health information. *Computers in Human Behavior*, 35, 61-67. <https://doi.org/10.1016/j.chb.2014.02.025>
- Sumer, N., Selcuk, E., Gunaydin, G., & Uysal, A. (2005). Yetişkin bağlanma boyutları için yeni bir ölçüm: Yakın ilişkilerde yaşantılar envanterinin Türk örnekleminde psikometrik açıdan değerlendirilmesi [A new measure for adult attachment dimensions: Psychometric evaluation of the experiences in close relationships inventory in a Turkish sample.]. *Türk Psikoloji Yazıları [Turkish Psychology Articles]*, 8, 1-13.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics*. Pearson.
- Thibaut, J. W., & Kelly, H. H. (1959). *The social psychology of groups*. Wiley.
- Uhlir, J. L. (2016). *Social comparison and self-presentation on social media as predictors of depressive symptoms* [Senior thesis, Scripps College].
- Utz, S., & Beukeboom, C. J. (2011). The role of social network sites in romantic relationships: Effects on jealousy and relationship happiness. *Journal of Computer-Mediated Communication*, 16(4), 511-527. <https://doi.org/10.1111/j.1083-6101.2011.01552.x>
- Van Ouytsel, J., Van Gool, E., Walrave, M., Ponnet, K., & Peeters, E. (2016). Exploring the role of social networking sites within adolescent romantic relationships and dating experiences. *Computers in Human Behavior*, 55, 76-86. <https://doi.org/10.1016/j.chb.2015.08.042>
- Vogel, E. A., & Rose, J. P., Okdie, B., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences*, 86, 249-256. <https://doi.org/10.1016/j.paid.2015.06.026>
- Walther, J. B. (2011). Theories of computer mediated communication and inter-personal relations. In M. L. Knapp, & J. A. Daly (Eds.), *The SAGE handbook of interpersonal communication* (pp. 443-479). SAGE.
- Wang, E. (2004). Social exchange theory applied to romantic relationships. *Paper III: Rewriting the Textbook*, 3, 1-8.
- White, G. A. (2010). *Implications of relationship social comparison tendencies among dating and married individuals* [Doctoral dissertation, University of Iowa].
- Zheng, A., Duff B. R. L., Vargas P., & Yao, M. Z. (2020). Self-presentation on social media: When self-enhancement confronts self-verification. *Journal of Interactive Advertising*, 20(3), 289-302. <https://doi.org/10.1080/15252019.2020.1841048>

## APPENDIX A: EXAMPLE FROM GROUP 1 OF VISUAL MATERIALS & QUESTIONS USED FOR EXPOSURE



**Figure A1.** Example post (Relational and natural posts were selected via Instagram real posts of three users. Written permission was obtained from the owners of the photos for this study.)

Please carefully review the Instagram post in **Figure A1** and give appropriate answers to the questions below:

1. In which province was the shared photo taken?  
Answer: ABANT
2. How many comments has it received?  
Answer: 2
3. What is the total number of likes of the post?  
Answer: 87

