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A PREDICTIVE ANALYSIS OF FACEBOOK JEALOUSY

FACEBOOK KISKANÇLIĞININ ÖNGÖRÜSEL ANALİZİ

ПРОГНОЗИРОВАННЫЙ АНАЛИЗ ФУНКЦИИ FACEBOOK

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ABSTRACT

Social network sites (SNS) have provided to the lives of romantic partners letting them connect with people, spy on the acquaintances in their social network like never before. This research is based on the disputes of romantic partners about Facebook usage and on the prediction of Facebook jealousy, which manifests itself in the behaviors that restrict/control Facebook usage among partners. The SNS which lead to most dispute with his/her partner is Facebook with 34.4%. In this research, a four-dimensional, 13-item scale, was developed and were subjected to validity and reliability tests. Data collected from 1,304 people were analyzed with the decision tree model, and a prediction on the Facebook jealousy was made. The likelihood of Facebook jealousy at the beginning of the decision tree model was found to be 32.4%. The most influential variable on the "Facebook caused dispute with partner" was found to be the "I know my partner's Facebook password" variable. The fact that the partner's password is known raises the likelihood of Facebook jealousy from 32.4% to 43.2%, and the fact that the partner's password is unknown reduces

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the likelihood of Facebook jealousy from 32.4% to 24.1%. It has been determined that the most important variables, which indicate the Facebook jealousy disputes and thus lead to restriction/control behaviors, are "I know my partner's Facebook password" and "My partner and I jointly indicated 'in a relationship' status on our Facebook accounts". Findings show that restrictive and controlling behaviors cause dispute among partners. It is possible to see statistically significant ones from these behaviors in decision tree model.

Keywords:SNS, Facebook jealousy, restrict/control Facebook, Romantic relationships, Scale development, Decision tree.

ÖZ

Elektronik sosyal ağ siteleri, romantik partnerlere, bugüne kadar benzeri görülmeyen bir erişimi, sosyal ağlarında bulunan insanları gözetleme ve bağlantı kurma olanağını sağlamıştır. Bu araştırma, romantik partnerler arasında, Facebook kullanımından kaynaklanan tartışma ve partnerlerin Facebook'u kısıtlayan/kontrol eden davranışları biçiminde kendini gösteren Facebook kıskançlığının öngörülmesine yöneliktir. Partneriyle en fazla tartışmaya yol açan sosyal ağ sitesi %34,4 ile Facebook olduğu sonucuna ulaşılmıştır. Araştırma için, geçerlik ve güvenirlik testleri yapılan 4 boyutlu 13 maddelik bir ölçek geliştirilmiştir. 1304 kişiden toplanan veriler karar ağacı modeliyle analiz edilerek, partnerlerin Facebook'u kısıtlayan ve/veya kontrol eden davranışları şeklinde kendini gösteren Facebook kıskançlığı öngörüsü yapılmıştır. Karar ağacı modelinin başlangıç noktasında kıskançlık olma olasılığı, %32,4 olarak tespit edilmiştir. "Facebook'un partneriyle tartışmaya neden olduğu" değişkeni üzerinde en etkili değişken "Partnerimin Facebook şifresini biliyorum" değişkeni olduğu görülmüştür. Partnerin şifresinin biliniyor olması, Facebook kıskançlığı olasılığını %32,4 den %43,2 ye çıkarırken, partnerin şifresinin bilinmiyor olması, Facebook kıskançlığı olasılığını %32,4 den %24,1'e düşürmüştür. Facebook kıskançlığına işaret eden tartışmaların yol açtığı en önemli kısıtlama/kontrol davranışlarının "Partnerimin Facebook şifresini biliyorum" ve "Ben ve partnerim birlikte, Facebook hesabımızda 'ilişkisi var' statüsünü seçtik" değişkenleri olduğu saptanmıştır. Yapılan analizler sonrasında kısıtlayıcı ve kontrol edici davranışların partnerler arasında gerçekten bir tartışmaya neden olduğu saptanmıştır. Bu davranışlardan istatistiksel olarak anlamlı olanları karar ağacı modeliyle ifade edilmiştir.

Anahtar Kelimeler: Sosyal medya, Facebook kıskançlığı, Facebook'u kısıtlama/kontrol etme, Romantik ilişkiler, Ölçek geliştirme, Karar ağacı

АННОТАЦИЯ

Электронные сайты социальных сетей обеспечили беспрецедентный доступ к романтическим партнерам на сегодняшний день, а также возможность смотреть и подключаться к людям в их социальных сетях. Это исследование предназначено для прогнозирования ревности Facebook среди романтических партнеров в форме обсуждения использования Facebook и ограничительного / контролирующего поведения партнеров. Было установлено, что сайт социальной сети, который ведет к самому обсуждению со своим партнером, составляет Facebook с 34,4%. Для испытаний на надежность и надежность была разработана шкала из 13 предметов. Данные, собранные от 1304 человек, были проанализированы с помощью модели дерева решений, а ревность Facebook была предсказана как поведение партнеров, ограничивающих и / или контролирующих Facebook. Вероятность ревности в начальной точке модели дерева решений определялась как 32,4%. Видно, что eni я знаю пароль моего партнера в Facebook. Aya - самая эффективная переменная в

переменной üştür Facebook вызывает дискуссию со своим партнером res. Тот факт, что пароль партнера был известен, увеличил вероятность ревности Facebook с 32,4% до 43,2%, тот факт, что пароль партнера не был известен, снизил вероятность ревности Facebook с 32,4% до 24,1%. Наиболее важные правила ограничения / контроля, вызванные противоречием ревности в Facebook, были обнаружены как «Я знаю пароль моего партнера на Facebook» и alar I и мой партнер вместе, в нашем контроле на Facebook мы выбрали переменные статуса контроля tartış. После анализа было установлено, что ограничительное и контролирующее поведение вызвало дискуссию среди партнеров. Из этих поведений статистически значимые выражаются с помощью модели дерева решений.**Ключевые слова:** социальные сети, ревность Facebook, ограничение / контроль Facebook, романтические отношения, развитие шкалы, дерево решений

1. Introduction

Social networking sites (SNS) have changed the usual nature of social relationships. While jealousy and restraint (control) behaviors are the norms in the natural relationship dynamics, the development, diversification, and widespread use of information technologies, such as computer, internet, smartphones, Facebook and other SNS, led to a new dimension of jealousy. The subject of this research is the romantic jealousy caused by Facebook usage and consequently the behaviors of restricting and/or controlling Facebook usage among romantic partners. As Facebook is the world's most used social network (Statista, 2017, Internet live stats, n.d.), we decided to focus on Facebook jealousy in this research. According to the results we obtained, Facebook is also the social network that mainly causes disputes among partners. The objectives of this research are as follows: (1) Prediction of disputes between partners due to Facebook usage and jealousy, which manifests itself in the form of behaviors of restricting/controlling Facebook; (2) Determining the Facebook restrictive/controlling behaviors of partners in order of importance by following the disputes arising from Facebook usage among partners. One of the best predictive models, the decision tree technique, was used in making this evaluation. Therefore, this research has a predictive nature. What distinguishes this research and makes this unique from previous Facebook jealousy researches is we focused on partners' behaviors that restrict or control each other's Facebook usage due to disputes arising from Facebook usage. Another factor that makes our study exceptional from previous researches is the methodology. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed to determine the reliability and validity of the scale, which was developed according to the subject and purpose of the study. Data were collected from 1,304 people and were analyzed through decision tree technique. Furthermore, a prediction of ranking according to meaning and importance was made for the partners' behaviors of restriction/controlling Facebook following their disputes about Facebook usage.

2. Jealousy

Jealousy is a multifaceted phenomenon that has cognitive, emotional, and behavioral dimensions (DeSteno & Salovey, 1996; Pfeiffer & Wong, 1989). Bringle and Boebinger (1990) defined romantic jealousy as "the reaction to a perceived threat to the exclusive romantic nature of the relationship". According to Buunk and Bringle (1987, p. 124), jealousy is an "unpleasant emotional reaction based on the relationship between an individual's current or previous partner and a third person". Pines (1998, p.2) defined jealousy as a "complicated reaction in response to a perceived threat, which would end or

destroy a relationship that is considered important". According to Clanton (2007, p. 411), jealousy is a protective response to the threat perceived as targeted to a valued relationship or to the quality of the relationship. Moreover, White and Mullen (1989, p. 222) defined romantic jealousy as a complex of thoughts, emotions, and actions that follows loss of or threat to self-esteem and/or existence or quality of the romantic relationship.

3. Facebook usage and Facebook jealousy

Emotional, sexual infidelity, and jealousy resulting from cyber relations are now a reality (Whitty, 2005). SNS can initiate romantic relationships (Sun & Wu, 2012). For example, marking one's "single" status on Facebook may indicate that he/she is open to a romantic relationship on Facebook and that he/she may be in search of it (Young, Dutta, & Dommety, 2009). The use of SNS has made people more inquisitive (Darvell, Walsh, & White, 2011). Owing to electronic surveillance opportunity provided by SNS, it has become widespread among romantic partners to observe secret or surreptitious behavior (Abbasi, 2018; Tokunaga, 2011); it was determined that indicators of low-quality relationships, such as low satisfaction, are associated with online surveillance. Online surveillance on SNS increases, and more time are spent on romantic partners' profile pages (Tokunaga, 2016).

Facebook, which became active in 2004, is the most used e-social network site worldwide as of December 2017 (Statista, 2017). Facebook gives people the power to build communities and bring the world closer together (Facebook, n.d.). While the positive aspects have been previously emphasized, the negative psychosocial effects of Facebook are now being discussed (Blachnio & Przepiorka, 2018). Romantic relationships, as well as friendly relationships, can start on Facebook or move onto Facebook. Research shows that these processes lead to jealousy.

Facebook provides the ability to follow the existing or previous romantic partner's actions and provides evidences of deception (Muscanell & Guadagno, 2016, p.147), thus facilitating obsessive intrusion and threaten users' privacy and security (Chaulk & Jones, 2011; Lyndon, Bonds-Raacke & Cratty, 2011). Facebook intrusion leads to jealousy (Elphinston & Noller, 2011). As the anxiety on the relationship increases, Facebook jealousy and surveillance increase as well (Marshall, Bejanyan, Castro & Lee, 2013).

As the Facebook's privacy settings are open to public and when a partner does not publish photos of their relationship, such can lead to romantic jealousy and adversely affect the relationship. In addition, Facebook jealousy is seen more intensely in women when the evidence of the infidelity is open to public (Muscanell, Guadagno, Rice & Murphy, 2013; McAndrew & Shah, 2013). Furthermore, according to McAndrew and Shah (2013), women are more prone to Facebook-evoked feelings of jealousy and to jealousy-motivated behavior than men and that men are aware of the sex difference in jealousy, unlike women. Misunderstandings about Facebook use are sources of problems in romantic relationships.

Romantic partners are able to connect with each other and integrate their social networks on Facebook; however, some struggle to maintain privacy and independence. As such, SNSs can be a site of and trigger for romantic conflict (Fox, Osborn & Warber, 2014).

Ambiguous information about romantic partner leads to jealousy and encourages further Facebook use to gather more information, which in turn generates more intense jealousy – (Muise, Christofides & Desmarais, 2009) especially individuals with a high need for popularity who want to create an ideal self-image and a perfect romantic relationship image in their SNS. For this reason, these individuals will be sensitive and may

experience SNS jealousy, particularly if their partners share information that could harm their projected image. Thus, the greater the need for popularity is, the greater the likelihood of experiencing SNS jealousy would be (Utz & Beukeboom, 2011). One of the main reasons for Facebook jealousy is the display of holiday photos (Krasnova, Wenninger, Widjaja & Buxmann, 2013). Excessive use of Facebook adversely affects relationships and leads to Facebook jealousy, conflict, separation, and, ultimately, divorce (Clayton, Nagurney & Smith, 2013; Evlilik birliği, İnternet kullanımı, 2015). SNS becomes the source of jealousy (Fox, 2016, p.81-82) and tension in romantic relationships (Fox & Warber, 2014). The use of emotional icons or "emoticons" is another reason for Facebook jealousy; moreover, it was found that men experience greater jealousy with winking emoticon attachments and that women are more jealous in messages that have no emoticon attachment (Hudson et al., 2015). Facebook and Snapchat comparison: Facebook is used to get in touch with friends, whereas Snapchat is rather used for flirting and finding new love interests. On the other hand, Snapchat elicits higher levels of jealousy as compared to Facebook (Utz, Muscanell & Khalid, 2015). It has been found that SNS users involved in a romantic relationship and are geographically distant from each other experience more SNS jealousy and partner surveillance as compared to SNS users who are geographically close (Billedo, Kerkhof & Finkenauer, 2015).

SNS plays an important role in relational information seeking. Photography and status updates seem to be the most important source of information about potential romantic partners. SNS leads to jealousy and control behaviors such as password sharing and partner profile surveillance (Van Ouytsel, Van Gool, Walrave, & Peeters, 2016).

4. Method

Participants

Participants of the study were selected from Istanbul and its vicinity. To determine the research sample, we used convenience sampling technique to facilitate communication between the participants and researchers and to make the research more cost efficient. One-thousand three hundred four people participated in this research. 54.7% of the participants were female, and 61.9% of participants were from the 19-25 years old age. The most frequently used SNS is Facebook, with 83.8% users.

Procedure and measures

A literature search was done first to prepare the scale in investigating the restricting (controlling) Facebook behaviors of the romantic partners stemming from Facebook jealousy. Then, approximately 50 students studying at Sakarya University were asked to answer open-ended questions through their experiences and observations: (1) Does Facebook usage lead to disputes among partners? (2) What are the reasons of the disputes? (3) What are measures they take to prevent disputes? On the other hand, face-to-face interviews with various groups of students were recorded for the same purpose. In line with the information obtained from these interviews and the answers to the open-ended questions, a pool of 30 questions was established, of which five items were related to the demographic characteristics. The question pool was evaluated by expert researchers to examine its coverage, and 30 items in the measure were reduced to 20 items to make it more applicable. Relevant questions were taken to a pretest on 80 students. The scale was restructured according to the results obtained, and the final scale consisted of 19 items, excluding the demographic features. Twelve of these 19 items were prepared as binary (yes or no) and as a triple Likert type scale [Disagree (1), Undecided (2), Agree (3)] questions. The 1304 participants were asked to answer the scale.

Reliability and validity of measures

After the coverage validation of the scale, an exploratory factor analysis (EFA) was performed primarily for construct validity. Four dimensions were formed in the factor analysis, and the cumulative explained variance for these four dimensions was 68.606%. Kaiser-Meyer-Olkin (KMO) value was found to be 0.84, and Barlett test result of p=0.000 for 10225.266 was found. The results of KMO and Barlett test indicate that the data are appropriate for EFA. As the factor loadings were quite low, five items were excluded from the analysis, and EFA was repeated for the new scale consisting of 14 items. After the new analysis, the total variance explained for four dimensions was found to be 72.010%; KMO value was 0.85, and the Barlett test result was p=0.000 for 9870.005.

For the reliability of the scale in total, Cronbach α was found to be 0.873; the lowest Cronbach α value was 0.855, and the highest was 0.875, when calculated item by item.

In developing a scale, the confirmatory factor analysis (CFA) of the scale, which is the final step and used to test fit values, is as important as the first step or EFA. For this reason, the 14-item scale obtained was taken into the CFA, and the validity of the scale was tested again. First, the model's fit statistics and modification index results for 14 items were examined without any restriction on the model and without adding new links. Fit indices are important in terms of testing the suitability of the obtained data for hypothetical modalities (Meydan & Şeşen, 2011, p.23). Within various goodness-of-fit indices to test the fit of the model and the statistical functions of these indices, the most widely used indices and the suggested statistical functions are Chi-square test statistic, RMSEA, GFI, AGFI, CFI, IFI, NFI and NNFI. Although there is no agreement on a single fundamental index in the literature, the above indices are usually sufficient in model testing. The acceptance intervals of the indicated fit indices are presented in Table 1.

Table 1. *Values of Goodness-of-Fit Indices*

Good fit	Acceptable fit
$0 \leq \chi 2/sd \leq 2$	$2 < \chi 2/sd \leq 5$
$0 <$ RMSEA < 0.05	$0.05 \leq$ RMSEA ≤ 0.10
$0.95 \leq$ NFI ≤ 1	$0.90 \leq$ NFI < 0.95
$0.97 \leq$ CFI ≤ 1	$0.95 \leq$ CFI < 0.97
$0.95 \leq$ IFI ≤ 1	$0.90 \leq$ IFI < 0.95
GFI $0.95 \leq$ GFI ≤ 1	$0.85 \leq$ GFI < 0.95
AGFI $0.90 \leq$ AGFI ≤ 1	$0.85 \leq$ AGFI < 0.90

As a result of the first CFA, the determined model fit value was not significant. For this reason, the model fit value results obtained by excluding "My partner does not want me to open a Facebook of my own" (Q9) item, which has the lowest factor load among all items, and by recalculating CFA, are shown in Table 2.

Table 2. *Values of Goodness-of-Fit Indices for Model*

	χ2/sd	RMSEA	NFI	AGFI	CFI	IFI	GFI
Model	4.44	0.051	0.97	0.95	0.97	0.97	0.97

When the obtained fit values were examined, we found that the model adapted well to the data. Hence, every factor in the scale was able to represent the items, thus presenting a good proportion.

After CFA, as shown in Figure 1, a four-dimensional, 13-item Facebook jealousy and Facebook- restricting behavior scale were created.

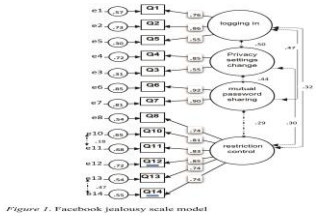

Figure 1. Facebook jealousy scale model

Four dimensions, which are considered to cause disputes among the partners due to Facebook jealousy, and the items are shown in Table 3.

Table 3. *Dimensions and items of Facebook jealousy scale*

Logging in
Q1 - My partner and I jointly closed our personal Facebook accounts Q2 - My partner and I jointly created a new joint Facebook account Q5 - My partner wants to create an account with our names under the same account
Privacy settings change
Q3 - My partner and I jointly changed the privacy settings of our Facebook accounts Q4 - My partner and I jointly indicated “in a relationship” status on our Facebook accounts
Mutual password sharing
Q6 - My partner knows my Facebook password Q7 - I know my partner's Facebook password

Restriction / control
Q8 - My partner does not want to share a single photo of me on Facebook Q10 - My partner does not want me to reply to friendly relationship offers Q11 - My partner does not want me to accept the friend requests from my school or workplace buddies Q12 - My partner does not want anyone else to like my pictures that I share Q13 - My partner does not want me to share my photo with a person of opposite sex Q14 - My partner does not want me to share my attractive photo

Analysis and findings

The aim of this analysis is to develop a predictive model for dispute stemming from Facebook jealousy and restriction/control behaviors of partners. Predictive modeling is the process of using known results to create, process, and validate a model that can be used to forecast future outcomes. Decision trees are one of the most commonly used predictive modeling techniques (Larose & Larose, n.d). Decision trees are Boolean functions that classify variables of a multidimensional feature space into classes (Ferre, Puig & Tost, 2004). A decision tree is composed of nodes, wherein each node contains a test on an attribute, with each branch from a node corresponds to a possible outcome of the test, and each leaf contains a class prediction (Cichosz, 2014, p.72; Bar-or, Keren, Schuster & Wollf, 2005). Decision tree methods are C&RT, CHAID, QUEST, C4.5, and ID3 (Ture, Tokatlı & Kurt, 2009). In addition, CHAID method is based on the $\chi 2$-test of association, and it is a well-known decision tree algorithm first published by John A. Hartigan in 1975. As the phrase "automatic interaction detector" implies, the original motivation for CHAID was for detecting statistical relationships between variables by building a decision tree; hence, this method is used as a classification tool as well. CHAID makes use of the Chi-square test in several ways: first it merges classes that do not have significantly different effects on the target variable, then it chooses a best split, and finally it decides whether any additional splits is worth performing on a node (Linoff & Berry, 2011, p.258). To determine the best split at any node, any allowable pair of categories of the predictor variables is merged until there is no statistically significant difference within the pair with the target variable. This CHAID method naturally deals with interactions between the independent variables that are directly available from an examination of the tree. The final nodes identify subgroups defined by different sets of independent variables (Biggs, De Ville & Suen, 1991).

Decision tree prediction model shows that the relationship between the dependent variant of "Facebook caused dispute with partner" and the independent variables of "(1) I know my partner's Facebook password", "(2) My partner and I have jointly changed the privacy settings of our Facebook accounts", "(3) My partner and I are jointly indicated 'in a relationship' status on our Facebook accounts", and "(4) My partner does not want me to reply to friendly relationship offers" were statistically significant. When the decision tree was examined, it was noted that the variable "I know my partner's Facebook password" is the most influential variable on the "Facebook caused dispute with partner" variant. The fact that the partner's password is known increases the likelihood of "Facebook caused dispute with partner" from 32.4% to 43.2%. The fact that the partner's password is unknown reduces the likelihood of "Facebook caused dispute with partner" from 32.4% to 24.1% (Figure 2).

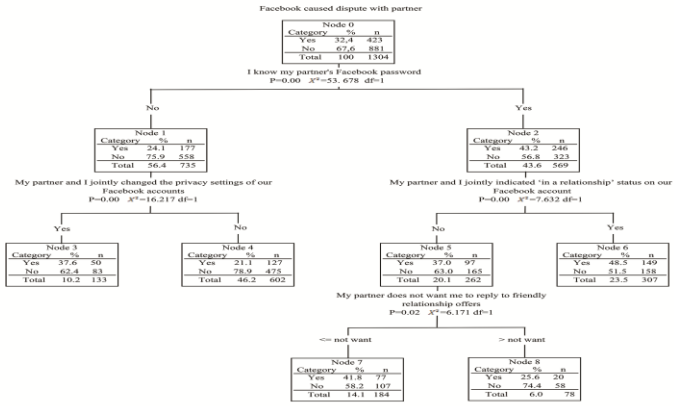

Figure 2. Analysis of Facebook jealousy and partners restriction/control behaviors by decision tree

On the dependent variant, the second most influential variable emerged is "My partner and I jointly indicated 'in a relationship' status on our Facebook accounts" after the first variable "I know my partner's Facebook password"; this second variable increased the likelihood of "Facebook caused dispute with partner" to 48.5%. The likelihood of "Facebook caused dispute with partner" dropped to 21.1% for people who do not know their partner's password, as well to those who replied "no" to the phrase "My partner and I jointly changed the privacy settings of our Facebook accounts".

As a result, it was determined that "I know my partner's Facebook password" variable, which is among the most important restriction/control behaviors caused by the disputes pointing at Facebook jealousy, and "My partner and I jointly indicated 'in a relationship' status on our Facebook accounts" variables significantly increased the likelihood of Facebook jealousy.

5. Discussion

In this study, disputes between romantic partners based on Facebook usage and the behaviors of partners restricting and/or controlling Facebook (sort of limiting e-communication) were determined. The most important ones were predicted with a decision tree model.

In literature review, the Facebook Jealousy Questionnaire, developed by Lukacs and Quan-Haase (2015) and Muise, Christofides, and Desmarais (2009), is the most outstanding on the topic of Facebook jealousy. The new scale we have developed in this research differs from other scales. Through this scale the following were determined: (1) SNS leads most to dispute among the partners; (2) Behaviors of partners that restrict or control Facebook usage; and (3) Facebook jealousy manifests itself in behaviors that restrict/control Facebook.

The subject, purpose, and design of this research distinguish this research from other studies. The research was designed to predict romantic partners' Facebook jealousy, which is stemming from the dispute due to Facebook usage has caused and which also manifests itself in behaviors that restrict or control Facebook usage. An important and strong point that distinguishes this research from previous researches is the methodology employed. The research sample was quite large, and a new scale was used in the research.

We believe that the new scale we developed from all necessary steps will be an important source for future researches. It is necessary to retest the reliability of the new scale when to be used in future studies. The number of items in the new scale could be increased in future surveys to enable the model to be more effective in terms of coverage. This research may be a leading factor for other researchers or studies in terms of subject and scope. Predictive research on Facebook jealousy can be continued with new dimensions. For example, studies comparison of the dispute stemming from Facebook and the behavior of partners that restrict/control Facebook with other SNSs may be executed. Nevertheless, the current research did not take into account the age and gender differences of the participants, which may be treated as constraints; hence, we suggest that such factors to be considered in the design of future studies.

Current research has an interdisciplinary character. Therefore, the research may contribute to different disciplines. We think that this research will contribute to the existing knowledge in the field of psychosocial effects of e-communication or information technology and to the theories that will be established to protect the relationships, in private and social terms. One of the practical contributions of this research will be, for example, to the clinicians responsible for the treatment of the psychological effects of the use of excessive SNS. Another practical contribution of the research may be to those partners who wish to maintain the quality of their relationships. Media literacy course responsibles and human relations specialists may also include the results of the research in their debates. Lastly, we believe that this research is an original study in terms of the subject and method, and that this study will lead many researchers in their future studies and be able to make a significant contribution, both theoretically and practically.

REFERENCES

Abbasi, I. S. (2018). Social Media and Committed Relationships: What Factors Make Our Romantic Relationship Vulnerable? *Social Science Computer Review*, *First published online*(June 13), 1–10.

Bar-Or, A., Schuster, A., Wolf, R., & Keren, D. (2005). Hierarchical Decision Tree Induction in Distributed Genomic Databases. *IEEE Transactions on Knowledge and Data Engineering*, *17*(8), 1138–1151.

Biggs, D., De Ville, B., & Suen, E. (1991). A method of choosing multiway partitions for classification and decision trees. *Journal of Applied Statistics*, *18*(1), 49–62.

Billedo, C. J., Kerkhof, P., & Finkenauer, C. (2015). The Use of Social Networking Sites for Relationship Maintenance in Long-Distance and Geographically Close Romantic Relationships. *Cyberpsychology, Behavior, and Social Networking*, *18*(3), 152–157.

Blachnio, A., & Przepiorka, A. (2018). Be Aware! If You Start Using Facebook Problematically You Will Feel Lonely: Phubbing, Loneliness, Self-esteem, and

Facebook Intrusion. A Cross-Sectional Study. *Social Science Computer Review*, *First published online*(February 1), 1–9.
Bringle, R. G., & Boebinger, K. L. G. (1990). Jealousy and the "third" person in the love triangle. *Journal of Social and Personal Relationships*, *7*(1), 119–133.
Buunk, B., & Bringle, R. G. (1987). Jealousy in love relationships. In *Intimate relationships: Development, dynamics, and deterioration* (Daniel Perlman, Steve Duck, pp. 123–147). Beverly Hills: Sage.
Chaulk, K., & Jones, T. (2011). Online Obsessive Relational Intrusion: Further Concerns About Facebook. *Journal of Family Violence*, *26*(4), 245–254.
Cichosz, P. (2015). *Data Mining Algorithms*. UK: John Wiley & Sons.
Clanton, G. (2007). Jealousy and envy. In *Handbook of the Sociology of Emotions* (Jan Stets, Jonathan H. Turner, pp. 410–423). USA: Springer.
Clayton, R. B., Nagurney, A., & Smith, J. R. (2013). Cheating, Breakup, and Divorce: Is Facebook Use to Blame? *Cyberpsychology, Behavior, and Social Networking*, *16*(10), 717–720.
Darvell, J., Walsh, S. P., & White, K. M. (2011). Facebook Tells Me So: Applying the Theory of Planned Behavior to Understand Partner-Monitoring Behavior on Facebook. *Cyberpsychology, Behavior and Social Networking*, *14*(12), 717–722.
DeSteno, D. A., & Salovey, P. (1996). Evolutionary Origins of Sex Differences in Jealousy? Questioning the "Fitness" of the Model. *Psychological Science*, *7*(6), 367–372.
Elphinston, R. A., & Noller, P. (2011). Time to Face It! Facebook Intrusion and the Implications for Romantic Jealousy and Relationship Satisfaction. *Cyberpsychology, Behavior, and Social Networking*, *14*(11), 631–635.
Evlilik birliği, İnternet kullanımı. (2015). *İstanbul Barosu Dergisi*, *89*(4), 316–317.
Facebook. (n.d.). About Mission. Retrieved from https://www.facebook.com/pg/facebook/about/
Ferre, M., Puig, A., & Tost, D. (2004). Using a Classification Tree to Speed up Rendering of Hybrid Surface and Volume Models. *Journal of WSCG*, *12*(1–3). Retrieved from http://wscg.zcu.cz/wscg2004/wscg_program.htm#full
Fox, j, & Warber, K. M. (2014). Social Networking Sites in Romantic Relationships: Attachment, Uncertainty, and Partner Surveillance on Facebook. *Cyberpsychology, Behavior, and Social Networking*, *17*(1), 3–7.
Fox, J. (2016). The Dark Side of Social Networking Sites in Romantic Relationships. In *The Psychology of Social Networking Vol.1: Personal Experience in Online Communities* (Giuseppe Riva, Brenda K. Wiederhold, Pietro Cipresso, pp. 78–89). Berlin: DeGruyter Open.
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.
Hudson, M. B., Nicolas, S. C., Howser, M. E., Lipsett, K. E., Robinson, I. W., Pope, L. J., … Friedman, D. R. (2015). Examining How Gender and Emoticons Influence Facebook Jealousy. *Cyberpsychology, Behavior, and Social Networking*, *18*(2), 87–92.
İnternet live stats. (n.d.). Facebook active users. Retrieved from http://www.internetlivestats.com
Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2013, February 1). Envy on Facebook: A Hidden Threat to Users' Life Satisfaction? Retrieved from

https://www.researchgate.net/publication/256712913_ENVY_ON_FACEBOOK_A_HIDDEN_THREAT_TO_USERS_LIFE_SATISFACTION
Larose, D. T., & Larose C D. (n.d.). Data Mining Techniques. WILEY. Retrieved from https://doc.lagout.org/Others/Data%20Mining/Data%20Mining%20and%20Predictive%20Analytics%20%5BLarose%20%26%20Larose%202015-03-16%5D.pdf
Linoff, G. S., & Berry, M. J. A. (2011). *Data Mining Techniques* (Third). Canada: WILEY.
Lukacs, V., & Quan-Haase, A. (2015). Romantic breakups on Facebook: new scales for studying post-breakup behaviors, digital distress, and surveillance. *Information, Communication & Society*, *18*(5), 492–508.
Lyndon, A., Bonds-Raacke, J., & Cratty, A. D. (2011). College students' Facebook stalking of ex-partners. *Cyberpsychology, Behavior, and Social Networking*, *14*(12), 711–716.
Marshall, T. C., Bejanyan, K., Castro, G. D., & Lee, R. A. (2013). Attachment styles as predictors of Facebook-related jealousy and surveillance in romantic relationships. *Personal Relationships*, *20*(1), 1–22.
McAndrew, F. T., & Shah, S. S. (2013). Sex differences in jealousy over Facebook activity. *Computers in Human Behavior*, *29*(6), 2603–2606.
Meydan, C. H., & Şeşen, H. (2011). *Yapısal Eşitlik Modellemesi, AMOS Uygulamaları*. Ankara: Detay yayıncılık.
Muise, A., Christofides, E., & Desmarais, S. (2009). More Information than You Ever Wanted: Does Facebook Bring Out the Green-Eyed Monster of Jealousy? *CyberPsychology & Behavior*, *12*(4), 441–444.
Muscanell, N., & Guadagno, R. (2016). Social Networking and Romantic Relationships: A Review of Jealousy and Related Emotions. In *The Psychology of Social Networking Vol.1: Personal Experience in Online Communities* (Giuseppe Riva, Brenda K. Wiederhold, Pietro Cipresso, pp. 143–158). Berlin: De Gruyter Open.
Muscanell, N. L., Guadagno, R. E., Rice, L., & Murphy, S. (2013). Don't it make my brown eyes green? An analysis of Facebook use and romantic jealousy. *Cyberpsychology, Behavior, and Social Networking*, *16*(4), 237–242.
Pfeiffer, S. M., & Wong, P. T. P. (1989). Multidimensional Jealousy. *Journal of Social and Personal Relationships*, *6*(2), 181–196.
Pines, A. M. (1998). *Romantic Jealousy: Causes, symptoms, cures*. New York: Routledge.
Statista. (2017). Most famous social network sites 2017, by active users. Retrieved from https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/
Sun, T., & Wu, G. (2012). Traits, Predictors, and Consequences of Facebook Self-Presentation. *Social Science Computer Review*, *30*(4), 419–433.
Tokunaga, R. S. (2011). Social networking site or social surveillance site? Understanding the useof interpersonal electronic surveillance in romantic relationships. *Computers in Human Behavior*, *27*(2), 705–713.
Tokunaga, R. S. (2016). Interpersonal surveillance over social network sites. *Journal of Social and Personal Relationships*, *33*(2), 171–190.
Ture, M., Tokatlı, F., & Kurt, I. (2009). Using Kaplan–Meier analysis together with decision tree methods (C&RT, CHAID, QUEST, C4.5 and ID3) in determining

recurrence-free survival of breast cancer patients. *Expert Systems with Applications*, *36*(2), 2017–2026.

Utz, S., & Beukeboom, C. J. (2011). The Role of Social Network Sites in RomanticRelationships: Effects on Jealousy and Relationship Happiness. *Journal of Computer-Mediated Communication*, *16*(4), 511–527.

Utz, S., Muscanell, N., & Khalid, C. (2015). Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use. *Cyberpsychology, Behavior, and Social Networking*, *18*(3), 141–146.

Van Ouytsel, J., Van Gool, E., Walrave, M., & Peeters, E. (2016). Exploring the role of social networking sites within adolescent romantic relationships and dating experiences. *Computers in Human Behavior*, *55*(Part A), 76–86.

White, G. L., & Mullen, P. E. (1989). *Jealousy: Theory, research, and clinical strategies*. New York: The Guilford Press.

Whitty, M. T. (2005). The Realness of Cybercheating Men's and Women's Representations of Unfaithful Internet Relationships. *Social Science Computer Review*, *23*(1), 57–67.

Young, S., Dutta, D., & Dommety, G. (2009). Extrapolation psychological insights from Facebook profiles:A study of religion and relationship status. *CyberPsychology and Behavior*, *12*(3), 347–350.