

Uses and Gratifications of LinkedIn: An Exploratory Study

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Abstract—LinkedIn is one of the most popular social networking sites that is used for professional purposes and it is the world's largest professional network as well. The aim of this study is to explore the uses and gratifications of LinkedIn among users in Turkey. For this, a two-stage approach was used. In the first stage, a total of 45 open-ended questionnaires were collected and 33 closed-ended items were generated based on the results of the open-ended questions so that they could be used in the second stage. In the second stage, a total of 496 surveys were collected from LinkedIn users. Principal Component Analysis was used to extract the factors that identified the uses and gratifications of LinkedIn among members in Turkey. According to the results of PCA, seven factors were formed and labeled as self promotion, group activities, job and job affairs, finding old and new friends easily, follow up, profile viewer data, and professional networking.

Index Terms—LinkedIn, Uses and Gratifications, Exploratory Factor Analysis

I. INTRODUCTION

SOCIAL networking sites (SNS) have become very popular in the last decade. These sites enable individuals to create a personal profile in an online system, make connections, and interact with other users. They are mainly used for keeping in touch with friends or family, making a network, sharing information such as news, ideas, photos, events, and being informed about news, latest trends, and activities.

LinkedIn is one of the most popular social networking sites that is used for professional purposes. LinkedIn officially launched on May 5, 2003 and became the world's largest professional network [1]. Worldwide, the number of registered members of LinkedIn is more than 277 million and it has more than 2 million members in Turkey [1]. The main mission of LinkedIn is to build and maintain a professional network among its members.

Uses and Gratification Theory (UGT) was published by reference [2] to explore people's motives for using a particular media in order to meet their specific needs. It is a mass communication research paradigm that emphasizes the users' role in choosing a form of media that could be used rather than the media's effects on them. This theory is based on how and why people use media [2].

Several studies in the literature explore the uses and gratifications of particular media tools [3], [4], [5], [6], [7], [8], [9], however, to our knowledge, no study has been related to LinkedIn. Therefore, this study aims at determining the uses and gratifications of LinkedIn.

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II. LITERATURE REVIEW

In the literature, the following exploratory studies were conducted to investigate the uses and gratifications of different media tools.

Reference [3] identified the motives for using the Internet. They conducted an exploratory study adopting by the two-stage approach of reference [10]. In the first study, 45 items related to the uses and gratifications of Internet were obtained through open-ended questions and in the second study, a close-ended questionnaire was used to measure the importance degree of the items on a 7-point Likert scale. Then, exploratory factor analysis was performed and according to the results of the analysis, the following three factors were identified: *process gratification*, *content gratification*, and *social gratification*.

In the study of reference [4], the uses and gratifications of the Internet among Indian users were also investigated by applying the exploratory factor analysis. At first, 26 items characterizing the uses and gratifications of the Internet were developed by focus group discussions; afterward, these items were rated by participants using a 5-point Likert scale. After applying exploratory factor analysis, six factors were determined: *self development*, *wide exposure*, *user friendly*, *relaxation*, *career opportunities*, and *global exchange*.

Reference [5] studied the motives for participating in online social networking sites. A survey with 33 items obtained from the was conducted among students attending a large urban Canadian university. The authors used exploratory factor analysis to develop the motivational factors related to usage of social networking sites. The results yielded five components that were identified as *community membership*, *information value*, *participation concerns*, *friendship connections*, and *participation confidence*.

The study of reference [6] determined the uses and gratifications of Facebook. They also applied the same two-stage approach [10] in their study. According to their study results, 46 items were derived from the open-ended questionnaire that was conducted in the first study and then, a close-ended survey was formed as an instrument to measure the importance degree of the items on a 7-point Likert scale. The following seven motivators were extracted: *social connection*, *shared identities*, *photographs*, *content*, *social investigation*, *social network surfing*, and *status updates*.

In the study of reference [7], the motives for using Facebook among Somali youth were investigated. In this study, 38 items adopted from the literature and 5 additional items were used to form a survey. The exploratory factor analysis revealed six factors: *virtual companionship escape*, *interpersonal habitual entertainment*, *self-description of own country*, *information seeking*, *self-expression*, and *passing time*.

The study of reference [8] explored the uses and gratifications of particular music sharing groups on Facebook by conducting a two-stage study. At first, the participants were asked to respond to 4 open-ended questions adopted from reference [3]; then, the responses of the questionnaire were clustered and 34 items were generated based on the clusters to be used in the second study. In the second study, the members of the group were expected to rate the items on a 7-point Likert scale labeled from strongly disagree to *strongly agree*. According to the results of the exploratory factor analysis, a total of 4 components were obtained and these factors were named as *contribution*, *discovery*, *social interaction*, and *entertainment*.

Reference [9] studied the motives of accessing political candidate profiles on MySpace. A total of 8 items obtained from the literature were used to measure the importance degree of the items through an online survey. According to the results, the following 3 factors were derived: *social interaction*, *information seeking and guidance*, and *entertainment*.

III. METHODOLOGY

A two-stage approach was used in this study [10].

A. First stage

In the first stage, a survey was conducted with 45 LinkedIn members. The questionnaire consisted of two main parts. The first part consisted of demographic questions designed to solicit information about age, gender, educational status, employment status, LinkedIn membership, and average time spent on LinkedIn on a weekly basis. The average age of the respondents was 26.47 years, and 53.22% of the respondents were women. The summary of the demographic profiles of the respondents is given in Table I.

TABLE I
DEMOGRAPHIC PROFILES OF THE RESPONDENTS OF FIRST SURVEY

Age (years) Max: 33	Min: 22	Average: 26.47
Gender (%) Female: 53.22	Male: 46.78	
Educational status (%) Undergraduate: 28.95	Graduate: 23.68	Non-student: 47.37
Employment status (%) Full-time: 62.05	Part-time: 10.45	Non-employee: 27.50
LinkedIn membership (years) Max: 6	Min: 0.5	Average: 2.83
LinkedIn use on a weekly basis (hours) Max: 5	Min: 0.25	Average: 1.33

The second part consisted of four questions that are adapted from reference [3] and which explore the uses and gratifications of LinkedIn members. Participants were expected to answer the following open-ended questions:

- What is the first thing that comes to your mind when you think about what you enjoy the most when using LinkedIn?
- What otherwords describe what you enjoy about interacting via LinkedIn?

- Using single, easy-to-understand terms, what do you use LinkedIn for?
- What LinkedIn activities are the most important to you?

After analyzing and grouping the responses to the open-ended questions, a total of 33 items were derived. The items generated based on the survey results and their frequency of mentions can be found in Table II. These items form the basis for the second stage.

TABLE II
ITEMS GENERATED BASED ON OPEN-ENDED QUESTIONNAIRE

Items	Code	#
Building a network	Q01	21
Seeing who's viewed my profile	Q02	15
Searching for jobs	Q03	13
Following the career progression of my contacts	Q04	13
Getting information about professional world	Q05	9
Being informed about current business affairs	Q06	9
Viewing job ads posted by companies	Q07	8
Skill endorsements	Q08	8
Making new connections	Q09	8
Joining and participating in groups	Q10	8
Finding out job opportunities	Q11	8
Online presence	Q12	7
Marketing myself	Q13	6
Getting into contact with others	Q14	6
Accessing employment information	Q15	6
Jobs you may be interested in	Q16	5
Discussions in groups	Q17	5
Viewing resume of others	Q18	4
Using LinkedIn profile as a Curriculum Vitae	Q19	4
Reaching out to recruiters, company executives etc.	Q20	4
Making a direct contact with business world	Q21	4
Knowledge sharing	Q22	4
Keeping in touch with my contacts	Q23	4
Following companies	Q24	4
Profile updates	Q25	4
Meeting with like-minded professionals through groups	Q26	4
User-friendly search engine	Q27	3
Suggestion of people you may know	Q28	3
Seeing the number of profile view	Q29	3
Personal development opportunities	Q30	3
Helpful in career planning	Q31	3
Finding friends, alumni, etc.	Q32	3
Ease of use	Q33	3

B. Second stage

In the second stage, a survey methodology was used. The target population for this survey was LinkedIn users in Turkey. The final questionnaire was formulated based on two sections. The first section covered the same demographic questions that were used in the first stage, whereas the second section asked participants to indicate their level of importance of 33 items related to the uses and gratifications of LinkedIn using a 7-point Likert scale which ranges from 1 (not at all important) to 7 (very important). A total of 496 surveys were collected by posting the survey link on different LinkedIn groups and sending different LinkedIn users LinkedIn messages. Of the respondents, 60.29% were women and the average age of the respondents was 28.01 years. The summary of the demographic profiles of the participants is given in Table III.

IV. DATA ANALYSIS

The data was analyzed by conducting Principal Component Analysis (PCA) with Varimax Rotation in SPSS [11].

TABLE III
DEMOGRAPHIC PROFILES OF THE RESPONDENTS OF SECOND SURVEY

Age (years) Max: 60	Min: 18	Average: 28.01
Gender (%) Female: 60.29	Male: 39.71	
Educational status (%) Undergraduate: 25.81	Graduate: 37.50	Non-student: 36.69
Employment status (%) Full-time: 66.33	Part-time: 11.09	Non-employee: 22.58
LinkedIn membership (years) Max: 10	Min: 0.5	Average: 3.80
LinkedIn use on a weekly basis (hours) Max: 18	Min: 0.083	Average: 2.32

At first, the determinant of the correlation matrix was checked and was found to be 0.0000004788. Since the determinant did not equal to zero, a factor analysis was computed and a solution was obtained. However, the determinant should be greater than 0.00001, because such a low value of the determinant is a sign of multicollinearity among variables [12]. Therefore, the correlation matrix was examined to search for variables that correlate to great extent [12]. The items with a higher correlation degree (>0.6) were eliminated one by one until the determinant of the correlation matrix exceeded 0.00001 and the variables were stabilized. In the end, the items coded as Q07, Q11, Q16, and Q30 were eliminated and the determinant of the correlation matrix was found to be 0.00002562. This value indicated that there was no extreme multicollinearity among remaining variables.

Second, the Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO), a measure of sampling adequacy, were used to determine whether the data were appropriate for a factor analysis [13]. The Bartlett's test of sphericity tests the null hypothesis that the correlation matrix is an identity matrix. The rejection of the null hypothesis proves that the variables are sufficiently correlated [13]. In our study, the null hypothesis with a significance value of 0.00 ($p < 0.05$) was rejected with regard to the data being appropriate for a factor analysis. Another kind of appropriateness method, KMO, gives us the degree of intercorrelations among variables ranging from 0 to 1 [13]. In our study, the value of KMO was found to be 0.873 which was interpreted as meritorious [13]. This test also indicated that the data set was suitable for a factor analysis.

V. RESULTS

A. Computational Results

A total of 7 factors with eigenvalues greater than 1 were derived and these factors explained the 58.970% of the total variance. Eigenvalues of the factors and the total variance explained can be seen in Table IV.

Then, the factor matrix of loadings was examined to determine the highest loading of each item on a factor. Although the minimum level of factor loadings is accepted as 0.30 while assessing the significance of loadings, in our study, the factor loadings above 0.50 were considered for

TABLE IV
TOTAL VARIANCE EXPLAINED

Factor	Eigenvalues	% of Variance	Cumulative %
1	3.697	12.750	12.750
2	2.892	9.973	22.723
3	2.397	8.266	30.989
4	2.242	7.729	38.718
5	2.033	7.009	45.727
6	1.988	6.828	52.555
7	1.860	6.415	58.970

practical significance [13]. However, since the factor loading of the item coded as Q13 ($\lambda = 0.496$) is close enough to a value of 0.50, we also considered it a significant element. So, a total of 22 items whose factor loadings were greater than 0.50 were used to construct factors. The items that belong to a factor and their loadings can be seen in Table V.

Finally, Cronbach's alpha statistic was used to measure internal consistency reliability in each factor. Reference [14] suggests that 0.70 is accepted as a lower limit for the value of Cronbach's alpha and it is used to diagnose that a factor has a good internal consistency, however, this value may decrease to 0.60 in an exploratory study [13]. The values of Cronbach's alpha for each factor can be seen in Table V. According to the results, there is a sufficient internal consistency in each factor.

TABLE V
ITEMS, LOADINGS, AND CRONBACH'S ALPHA

Factor	Item	Factor loading	Cronbach's alpha
Factor 1	Q21	0.661	0.799
	Q20	0.655	
	Q14	0.646	
	Q23	0.628	
	Q24	0.569	
	Q13	0.496	
Factor 2	Q10	0.805	0.781
	Q17	0.784	
	Q26	0.697	
Factor 3	Q06	0.694	0.754
	Q04	0.693	
	Q05	0.685	
Factor 4	Q32	0.811	0.628
	Q33	0.657	
	Q28	0.591	
Factor 5	Q18	0.771	0.672
	Q15	0.734	
	Q04	0.693	
Factor 6	Q02	0.779	0.694
	Q29	0.738	
Factor 7	Q08	0.698	0.604
	Q01	0.629	

B. Labeling the Factors

Factors derived from PCA were labeled as seen in Table VI.

TABLE VI
FACTOR LABELS

Factor Number	Factor Name
Factor 1	Self promotion
Factor 2	Group activities
Factor 3	Job and job affairs
Factor 4	Finding old and new friends easily
Factor 5	Follow up
Factor 6	Profile viewer data
Factor 7	Professional networking

1) *Self Promotion*: This factor comprised 6 items related to introducing oneself to others through communication. Making a direct contact with the business world, reaching out to recruiters and company executives, getting into contact with others, following companies, keeping in touch with contacts, and marketing himself/herself are the ways of introducing oneself and exhibiting professional qualifications in the business world. Therefore, this factor is named *self promotion*.

2) *Group activities*: This factor includes 3 items related to engaging in LinkedIn groups. LinkedIn users may join and participate in groups that share common interests, start or follow a group discussion, and add a comment to a discussion. Users may meet like-minded professionals through groups. Therefore, this factor is termed *group activities*.

3) *Job and job affairs*: This factor comprises 3 items related to job affairs. LinkedIn users may get information about the professional world, may be informed about current business affairs, and may search for jobs so, they are able to track job and job affairs through this Website. Therefore, this factor is labeled *job and job affairs*.

4) *Finding old and new friends easily*: This factor contains 3 items related to finding people easily on LinkedIn. LinkedIn users may find old and new friends based on the suggestions of people they may know, running a people search, and visiting an alumni page owing to the ease of use of the Website. Therefore, this factor is termed *finding old and new friends easily*.

5) *Follow up*: This factor includes 3 items related to the following users' career story. LinkedIn members may follow the career progression of their contacts, access employment information, and view resumes in a similar manner to viewing profiles of other members or seeing their updates on newsfeed. Thus, members become of the careers of other contacts. Therefore, this factor is named *follow up*.

6) *Profile viewer data*: This factor comprises of 2 items related to a particular feature of LinkedIn: Who Has Viewed Your Profile. LinkedIn maintains the data of the people who have viewed your profile and the number of times that your profile has been viewed. Thanks to this feature, users may see who has been looking at their profiles and how many times their profiles have been viewed in the last 90 days. Therefore, this factor is labeled *profile viewer data*.

7) *Professional Networking*: This factor includes 2 items related to networking. Since building a professional network and making new connections are the main missions of LinkedIn, this factor is termed *professional networking*.

C. Conclusion and Discussion

The aim of this study was to explore the uses and gratifications of LinkedIn among users in Turkey. For this, a two-stage approach was used [10]. In the first stage, a total of 45 open-ended questionnaires were collected and 33 closed-ended items were generated based on the results of the open-ended questions to use in the second stage. In the second stage, a total of 496 surveys were collected from LinkedIn users.

Principal Component Analysis was used to construct the factors that identified the uses and gratifications of LinkedIn among members in Turkey. According to the results of

PCA, the following seven factors were determined: *self promotion*, *group activities*, job and job affairs, *finding old and new friends easily*, *follow up*, *profile viewer data*, and *professional networking*. These items were labeled based on the interpretation of the items related to each factor.

Although the findings of this study provide a better understanding of the factors identifying the uses and gratifications of LinkedIn among members in Turkey, a future study that predicts LinkedIn use, may be conducted to see the significant effects of the factors identified in this study on the average time spent. A similar study including demographic characteristics such as educational status, employment status, age, or gender may also be a subject for future research. Moreover, by increasing the size of the data collected, group differences between students and non-students, and also between employees and non-employees may be analyzed as a further study.

In conclusion, although there are several studies explore and cover many factors related to the uses and gratifications of different media tools [3], [4], [5], [6], [7], [8], [9], to our knowledge, no study has been investigated the motives for using LinkedIn. Therefore, the results of this study contribute to the literature of the uses and gratification theory introducing by new factors solely related to the uses and gratifications of LinkedIn.

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