

ΠΜΣ σε Διοίκηση, Αναλυτική και Πληροφοριακά Συστήματα Επιχειρήσεων MSc in Business Administration, Analytics and Information Systems Ακαδ. Έτος 2017-18

#### ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

Η εργασιακή κατάσταση διαμορφώνει τη σχέση ανάμεσα στην προσωπικότητα των χρηστών του LinkedIn και στους λόγους χρήσης του μέσου αυτού.

Employment status moderates the relationship between LinkedIn users' personality and LinkedIn motives

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# MSc in Business Administration, Analytics and Information Systems ΠΜΣ σε Διοίκηση, Αναλυτική και Πληροφοριακά Συστήματα Επιχειρήσεων Ακαδ. Έτος 2017-18

## **MASTER THESIS**

# **Employment status moderates the relationship between LinkedIn users' personality and LinkedIn motives**

Η εργασιακή κατάσταση διαμορφώνει τη σχέση ανάμεσα στην προσωπικότητα των χρηστών του LinkedIn και στους λόγους χρήσης του μέσου αυτού

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I hereby certify that the submitted thesis and the work presented is personal and	
that all sources and material used have been properly declared in the text.  Papadopoulou Aikaterini	

# Περίληψη

To LinkedIn είναι μια από τις πλέον δημοφιλείς σελίδες κοινωνικής δικτύωσης που χρησιμοποιούνται για επαγγελματικούς σκοπούς. Σκοπός της παρούσας διπλωματικής εργασίας είναι η διερεύνηση των λόγων για τους οποίους οι χρήστες του LinkedIn στην Ελλάδα χρησιμοποιούν τη συγκεκριμένη πλατφόρμα. Εξετάζεται επίσης η πιθανή συσχέτιση του χαρακτηριστικού γνωρίσματος προσωπικότητας «Locus of Control» (σημείο ελέγχου) και της χρήσης του LinkedIn, καθώς και ο ρόλος που παίζει η εργασιακή κατάσταση του χρήστη στη σχέση αυτή. Για τον σκοπό αυτό, διεξήχθη ηλεκτρονική έρευνα και συλλέχθηκαν 205 ερωτηματολόγια. Τα αποτελέσματα αποκάλυψαν δύο βασικούς λόγους για τους οποίους οι Έλληνες χρήστες προβαίνουν στην χρήση του συγκεκριμένου μέσου κοινωνικής δικτύωσης με τον πρώτο λόγο να αφορά στην «Αναζήτηση/εύρεση εργασίας» και τον δεύτερο στην «Επαγγελματική Δικτύωση». Επιπροσθέτως, η μέθοδος ΕFA εφαρμοζόμενη στο χαρακτηριστικό: «Σημείο ελέγχου», αποκάλυψε τους παράγοντες «Εσωτερικό Σημείο Ελέγχου» και «Εξωτερικό Σημείο Ελέγχου», με τους δύο αυτούς παράγοντες να έρχονται σε συμφωνία με τη σχετική βιβλιογραφία γύρω από το συγκεκριμένο χαρακτηριστικό γνώρισμα της προσωπικότητας. Περαιτέρω ανάλυση με τη μέθοδο CFA επιβεβαίωσε τόσο τους λόγους χρήσης του LinkedIn όσο και τις δύο διαστάσεις του "Locus of Control" που αναγνωρίστηκαν στο προηγούμενο στάδιο. Στο αμέσως επόμενο στάδιο, η κατασκευή ενός μοντέλο SEM, αποκάλυψε μια ισχυρή συσχέτιση ανάμεσα στο Locus of Control και στους δύο λόγους χρήσης του LinkedIn. Σύμφωνα με τα αποτελέσματα του μοντέλου, άτομα με Εσωτερικό Σημείο Ελέγχου επιδεικνύουν μια ισχυρή και θετική σχέση ως προς τη χρήση του LinkedIn, ενώ τα άτομα με Εξωτερικό Σημείο Ελέγχου είναι συσχετισμένα αρνητικά. Τα ευρήματα αυτά εμφανίζουν επίσης διαφορές ανάλογα με την εργασιακή κατάσταση του ατόμου. Ενώ άτομα με Εσωτερικό Σημείο Ελέγχου και τα οποία εργάζονται φαίνεται να χρησιμοποιούν το LinkedIn περισσότερο για να συνδεθούν και να επικοινωνήσουν με το επαγγελματικό τους δίκτυο, άτομα Εσωτερικό Σημείο Ελέγχου αντίστοιχα, τα οποία όμως δεν εργάζονται, χρησιμοποιούν το LinkedIn περισσότερο για θέματα που σχετίζονται με αναζήτηση και εύρεση εργασίας.

Λέξεις κλειδιά: LinkedIn, Locus of Control, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Structural Equation modeling (SEM)

### **Abstract**

LinkedIn is one of the most popular social networking sites that is used for professional purposes. The aim of this study is to explore the motives/uses of LinkedIn across LinkedIn members in Greece. It also examines the potential relationship between Locus of Control and LinkedIn use, as well as whether the employment status of a user plays a role in that dynamic. For this purpose, an online survey was conducted and a total sample of 205 questionnaires was collected. Results revealed that two factors would explain why Greek users would be willing to use LinkedIn for and those were labeled as Job search/Job affairs and Professional Networking. Also, EFA on Locus of Control, extracted the factors Internal Locus of Control and External Locus of Control, both being consistent with relative literature regarding the examined personality trait. Further analysis using CFA method confirmed both LinkedIn uses/motives as well as Locus of Control construct. In later stage, the construction of a SEM model, revealed a strong relationship between Locus of Control and LinkedIn use. Results suggest that people with Internal Locus of Control have a strong positive relationship with LinkedIn use, while those with External Locus of Control are negatively related. These finding also differ by employment status. While Internal working people are more likely to use LinkedIn in order to connect with their professional network, Internal non-working people tend to use LinkedIn more for Job related issues such as Job search.

Keywords: LinkedIn, Locus of Control, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Structural Equation modeling (SEM)

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# 1. Introduction

#### 1.1 LinkedIn

LinkedIn is one of the most popular social networking sites that is mostly used for professional purposes (LinkedIn Press center). LinkedIn officially launched on May 5, 2003 and became the world's largest professional network. The main mission of LinkedIn is to build and maintain a professional network among its members. With headquarters in Mountain View, CA and offices all around the globe, LinkedIn counts today 8700 employees and 546 million users worldwide (Figure 1) becoming of the most popular social networks in terms of active users across 200 countries (Basak & Calisir, 2015; LinkedIn Press center).

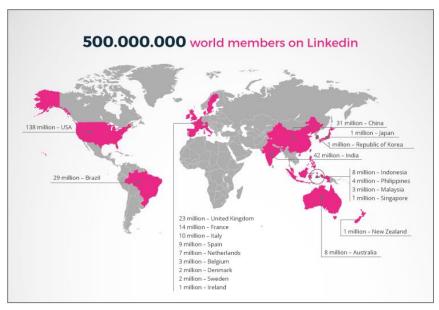


Figure 1 – LinkedIn members around the world – Source: novelus.eu

LinkedIn connects professionals, allows them to market their skills, to share knowledge and experiences, and to plan future career steps (Trusov, Bucklin, & Pauwels, 2009). It enables users to keep in touch with their business partners and other professionals, thus enabling them to stay up to date with recent developments. A LinkedIn member can also follow organizations, utilize the network to research people and companies, to connect with past business associates and colleagues as well as to build new relationships. LinkedIn is also a popular tool for online recruiting with a near-universal usage amongst social recruiting channels (Damaschke, 2012).

The use of LinkedIn among other social media platforms remains predominant among recruiters and is being largely used at percentage of 68% (Zanella & Pais, 2014).

LinkedIn by numbers
Percentage of users that use LinkedIn daily: 40%
Number of new LinkedIn members per second: 2
70% of LinkedIn users are outside US
57% male users and 44% female users on LinkedIn
The average CEO has 930 connections.
44% of LinkedIn users earn more than \$75.000 in a year.
There are 40 million students and recent college graduates on LinkedIn.

Figure 2 - LinkedIn by numbers - Source: OmnicoreAgency.com

As for job seekers, results of Adecco study show that 55% of Job Seekers use social media for job search purposes. In this regard, LinkedIn is largely the most used social networking site (35%) followed by Facebook (17%). A reported 49% of job seekers use social media to distribute their CV online, 29% of job seekers were contacted through social media by a recruiter at least once, and 9% received a job offer. Moreover, LinkedIn is considered to be the most effective social networking site in terms of matching Job Seekers with open positions (figure 3) (Zanella & Pais, 2014).

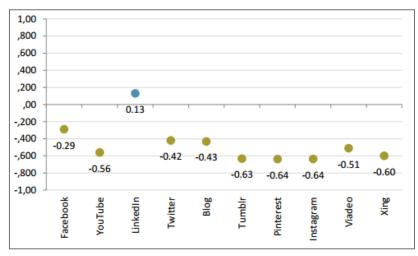


Figure 3 - Effectiveness of social networking sites on matching job seekers with open positions – Source: Adecco Global study 2014

Considering that above numbers and the extent of LinkedIn use mainly on Job related issues as well as on Networking, LinkedIn has become a social networking site that attracts the attention of recent studies and research.

#### 1.2 Literature Review

Researchers have explored and studied the reasons why users actually use LinkedIn for. Study of Basak & Calisir (2014) has brought about reasons such as Job Search/Job Affairs, Professional Networking, Career Advancement, Self-promotion and Group Activities. From another point of view, LinkedIn profiles display professional information that looks like "formatted CVs containing only the most relevant facts on education, current and past positions as well as former experience (van Dijck, 2013). Other studies have shown that members use LinkedIn resources to find employment opportunities, recruit candidates and encourage inter-company communication (Bradley, 2011; Buck 2012) as well as to establish professional connections with their past and present coworkers or classmates (Bradley, 2011; Buck, 2012). Moreover, LinkedIn is found to be largely the most used social networking site on job related issues (35%) followed by Facebook (17%) (Zanella & Pais, 2014), while 18% of LinkedIn users use the platform only for personal reasons, such as Networking, Group Activities or just fun (Pais & Zanella, 2014).

Nevertheless, a literature gap was identified at that point, after detecting a lack of Greek studies and research on the mentioned subject of LinkedIn use identification. To capture the spectrum of motives driving Greek users to engage in LinkedIn use, a relevant study and analysis has to be implemented.

Researches have also focused on recognizing personality impressions and traits, relying on LinkedIn profiles (Vershuren, 2012; Florenthal, 2015) as well as on Facebook profiles (Bachrach et al, 2012; Sharma, 2015) or social media in general (Correa et al, 2009). Allport (1937, p.48) defined personality as "the dynamic organization within the individual of his psychophysical systems that determines his unique adjustments to his environment". Hence, the most common personality traits used for the above purpose are the dimensions of the **Big Five**. Those five dimensions are: **Conscientiousness** (including organization, persistence and need for achievement), **emotional stability**, **extraversion** (including sociability, activity and dominance), **openness to experience** and **agreeableness** (covering sympathy, trust, cooperation and altruism). (McCrae & Costa, 1995). Conscientiousness: people who score high on this trait are even tempered, calm, and not easily stressed out; (3) extraversion: people who score high on this trait are sociable, enthusiastic, and emotionally expressive; (4) openness to experience: people who score high on this trait are open to new experiences, creative, and unconventional; and (5)

agreeableness: people who score high on this trait are sympathetic and warm persons, who prefer to avoid confrontation (McCrae & Costa, 1995). Correa et al (2009) study showed that individuals' personality traits – extraversion, emotional stability and openness to experiences – play a role in the uses of interactive social media. It has also been found that overall, Conscientiousness holds a negative relationship with the Facebook usage, while extraversion, openness and agreeableness hold a positive one (Sharma, 2015). Moreover, Bachrach et al (2012) concluded that one can make accurate predictions regarding an individual's personality reflecting on his Facebook profile, with extraversion being most easy to predict and Agreeableness being most elusive. As to LinkedIn, Bogaert et al (2017) suggest that traits such as extraversion and self-presentation, can be inferred from profiles of job-related social networks such as LinkedIn and thus can be predicted, while other Big Five traits cannot accurately be predicted. However, the formation of accurate personality impressions based on job-related social networking sites such as LinkedIn, is considered to be important as it is primarily used in recruitment process (Roulin & Bangerter, 2013). Study in Belgium, showed that LinkedIn and Facebook, although used differently, are used by Belgian decision makers in both small and large organizations during recruitment and selection processes. In the recruitment phase, LinkedIn is more often used than Facebook, with the latter considered less professional than the former, to communicate vacancies to the outside world and to actively search for potential applicants. Moreover, decision makers do value the information on LinkedIn differently from information on Facebook, marking the benefit of LinkedIn to promote ones' training and work experience (Caers & Castelyns, 2016). Study of Damasche (2012) focused on the identification of LinkedIn elements serving as indicators for a person's capacities regarding those capacities considered relevant in today's recruitment world. It was found that such indicators were the number of clubs a person is member of, the number of LinkedIn groups, the number of recommendations a person has, the amount of spelling mistakes on the profile, and the number of lines that the summary consists of. Moreover, the profile picture as well as the general language use (informal/ formal) provides insights on certain competencies. However, it is mentioned that it is not as easy for an observer to 'predict' a person's competencies on the basis of his/her LinkedIn profile.

At this point, another literature gap was identified given the above findings and studies. There has not been any extensive study examining the correlation between LinkedIn use and the so-called personality aspect: Locus of Control.

### 1.3 Locus of Control

**Locus of Control** is considered to be an important aspect of personality. The concept was developed originally by Julian Rotter in the 1950s (Rotter, 1966).

Locus of Control refers to an individual's perception about the underlying main causes of events in his/her life. Or, more simply: Do you believe that your destiny is controlled by yourself or by external forces (such as fate, god, or powerful others)? The word "Locus" means "place".

"Internal" locus of control people, believe that through their behavior, they can control the likelihood of receiving reinforcers. "External" locus of control people, don't see as much link between their behavior and the likelihood of being rewarded. (Mamlin, Harris, & Case, 2001)



Figure 4 - Internal vs External locus of control – Source: bookmarkurl.info

Locus of Control is a personality variable that has been studied extensively in a whole variety of setting, including organizations (Spector, 1988). Locus of Control, as previously mentioned, is defined as a generalized expectancy that rewards, reinforcements and outcomes of life are either controlled by one's own actions (internality) or by other forces (externality). In terms of work and organizations, rewards or outcomes can be promotions, favorable circumstances, salary increases etc. (Spector, 1988). In reviews of O'Brien (1983) and Spector (1982), locus of control has been shown to relate to a number of organizationally relevant variables. Internals seem to be more satisfied with their jobs than externals. Judge et al (2004) also reinforce the above statement, claiming that Locus of Control is believed to be one of the most useful personality traits, along with conscientiousness, in the prediction of human performance and job satisfaction (Judge et al., 2004).

Thus, with LinkedIn being the number one Professional Network and directly related to job affairs, Locus of Control is considered applicable and valid to be used as a personality aspect in the current study.

# 1.4 Purpose of this study

The purpose of the present study is to: a) identify the underlying factors/reasons why LinkedIn members in Greece use the LinkedIn platform for, b) study the relationship and correlation between LinkedIn uses and personality trait "Locus of Control: and c) examine the potential effect of a user's employment status on this relationship and determine any differences between working and non-working users.

Based on the previously mentioned literature, the following hypotheses are proposed:

Hypothesis 1: People with Internal Locus of Control will use LinkedIn more than people with External Locus of Control.

Hypothesis 2: Employment status has a significant impact on the relationship between Locus of control and LinkedIn usage.

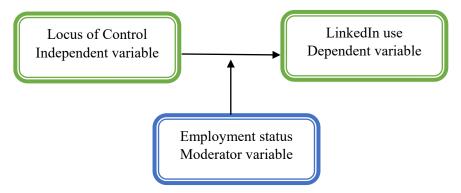


Figure 5 - Employment status as moderator between locus of control and LinkedIn use

The last hypothesis has its foundation on the fact that LinkedIn is a professional networking site and thus the employment status is a dimension that is closely related to its nature. Moreover, the scale used to measure Locus of Control was job-oriented (Halpert & Hill, 2014), in the present study's attempt connect it with LinkedIn usage in the most proper way. Support on this hypothesis can be found on the Adecco Global study (2014) showing that those in employment consider LinkedIn to be more effective (0.32) when compared to those out of work (0.02), who

are more inclined to be distrustful of LinkedIn's effectiveness and thus use it less (Zanella & Pais, 2014). Moreover, ELSTAT's survey for the first quarter of 2017, reveled differences regarding the use of Professional Networking Platforms between working and non-working users, supporting the Adecco study results (ELSTAT, 2017).

# 2. Methodology

# 2.1 Survey sample and procedure

To examine the reasons why Greek users actually use LinkedIn for, as well as the relationship between personality trait "Locus of Control" and LinkedIn use, an online survey was conducted over a period of 4 weeks. The platform used to upload the survey was Google Forms. A total of 216 surveys were collected, by posting the survey link on different LinkedIn groups and sending LinkedIn messages, as well as through Facebook or email messages. 11 of them were excluded because they provided answers that were uniformly positive or negative (skewed responses). Hence the usable questionnaires were 205.

The questionnaire consisted of 4 main sections. The 1<sup>st</sup> section examined the degree of LinkedIn use. The 2<sup>nd</sup> section consisted of 12 questions designed to determine the reasons members use LinkedIn for. Section 3, consisted of eight questions trying to identify the personality trait: Locus of control. And finally, section 4, consisted of demographic questions designed to obtain information about age, gender, educational status and other relevant features.

#### 2.2 Measures

To measure the degree of LinkedIn use, 5 questions were used to identify: since how long a person owns a LinkedIn account, how often they access the account, how often they update their profile, how often they comment on LinkedIn posts and how often they participate in a LinkedIn group. Respondents were asked to answer the above questions by selecting among 3 or 4 different available answers respectively.

In order to determine the reasons why LinkedIn members use the platform, the questions' structure was based on previous papers' results about LinkedIn use and previous questionnaires. Hence, items used in the current study were 12, mainly focusing on Job search and Networking (Paid & Zanella, 2014). Using a 7-point Likert scale, respondents were asked about their level of agreement ranging from 1 (strongly disagree) to 7 (strongly agree) to the following statements.

#### TABLE 3.1 ITEMS ON LINKEDIN USE

informs me about job openings posted by companies

gives me the opportunity to find a job

helps me present my resume to potential employers

allows me to upload files, encourage connections, or search for jobs

I believe it is used by recruiters looking for employees

increases my chances of finding a job

helps me keep in touch with my professional sector

shows that I know a lot of people (from the number of my connections)

helps me keep in touch with a wide network of people

helps me arrange a face-to-face meeting with some members of my network

allows me to have an interesting conversation with other members of my network

shows that I know important people (from my connections' profiles)

Table 1 - Items on LinkedIn use

The construct Locus of Control was measured using the WLCS (work locus of control scale). Among the various Locus of control scales developed in order to measure this personality trait among different aspects of life (Halpert & Hill, 2014), obviously the "work dimension" was chosen as this is the dimension of interest when exploring LinkedIn use (Spector, 1988). Using again a 7-point Likert scale, respondents were asked about their level of agreement on the following statements.

#### TABLE 3.1 – ITEMS ON LOCUS OF CONTROL

On most jobs, people can pretty much accomplish whatever they set out to accomplish

If you know what you want out of a job, you can find a job that gives it to you

Getting the job you want, is mostly a matter of luck

Promotions are usually a matter of luck

Promotions are given to employees who perform well on their job

On most jobs, it takes a lot of luck to be an outstanding employee

The main difference between people who make a lot of money and people who don't, is luck

People who perform well on their jobs, get usually rewarded

Table 2 - Items on locus of control

The demographic characteristics used in the current survey were the following: the first variable included in this section was gender. Age was also measured, in the categories: 18-24, 25-34 and 35 or above. Moreover, marital status was examined, as well as education in the categories: High school graduate, University graduate, Master graduate. The respondents were also asked about their working status. The non-working answers, were accompanied by the question about the "time looking for a stable job". Language and IT knowledge has also been examined. Finally, the respondents were asked about their profession in an open-ended question, about the economic sector they currently work on, and their residence also being an open-ended question. Employment status, was furthermore analyzed as independent variable in subsequent examination

to explore whether the relationship between Locus of Control and LinkedIn use differs by this variable.

# 2.3 Data Analysis Methods

In the first stage, an EFA (Exploratory Factor Analysis) was conducted using SPSS, in order to determine the factors (reasons) of LinkedIn use, based on the respondents' answers. In the second stage, a CFA (Confirmatory Factor Analysis) was performed in order to "confirm" the validity of the factors given by the EFA. And in the last stage, a Structural Equation Model (SEM) was designed, including causal paths in order to examine the relationship between LinkedIn use and Locus of Control trait. For the CFA analysis and SEM, SPSS extension "AMOS has been used.

CFA testing is an approach used to confirm the EFA findings, with CFA being used as a second step to examine whether the structure identified in the EFA works in a new sample (Haig, 2015). In other words, CFA can be used to confirm the factor structure identified in the EFA. CFA requires, unlike EFA, pre-specification of all aspects of the model to be tested and is more theory-driven than data-driven (Harrington, 2009). As measures of good validity and reliability is always necessary in research, CFA can be a very useful step in the development of this process.

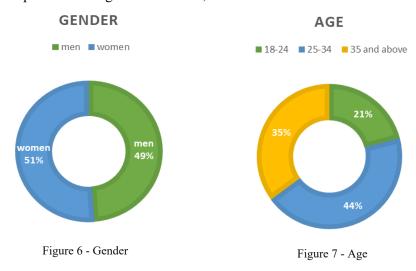
Structural Equation Modeling is a general statistic approach with many applications. SEM could be viewed as an "umbrella" covering a set of statistical approaches such as analysis of variance, analysis of covariance, multiple regression, factor analysis, path analysis and so on. One of the most common SEM's social work applications, is CFA and structural models with latent variables, and that is the approach that needs to be utilized in the current research. SEM models are commonly presented in diagrams. The path diagram is a summary of theoretically suggested relationships among latent variables and indicator variables, and regression/correlation relationships among latent variables. SEM permits simultaneous regression equations that is equations in which one variable can serve as both an independent and a dependent variable. It also permits tests of models in which there are multiple dependent variables. And very important, when dealing with groups, in SEM the estimate and statistical significance of each parameter for each group (e.g. men, women) can be obtained, and differences across groups can be tested for statistical significance (while in regression one has to create product terms gender X stress). Thus, validity of measures across demographic groups can also be determined (Bowen & Guo, 2012).

# 3. Survey Results

# 3.1 Descriptive Statistics

This section discusses some descriptive statistics resulting from the survey questionnaire. In total, 216 LinkedIn users responded to the current survey. The software used for the data analysis was IBM SPSS 23.0.

As it can be seen (figure 6), overall, the split between male and female was almost equal, with 51,22% of the respondents being women and 48,78% men.



The age groups (figure 7) consisted of the groups: 18-24, 25-34 and 35 and above. The majority of respondents participating in the study belongs to the second age group (43.90%).

Figure 8, presents the educational level of the participants. Across the three groups, University/TEI graduate was the predominant major (52%) with Postgraduate studies scoring also relatively high, at 32%. Morevover, as it can be seen in figure 9, the split between working and non-working is 45% and 55% respectively.

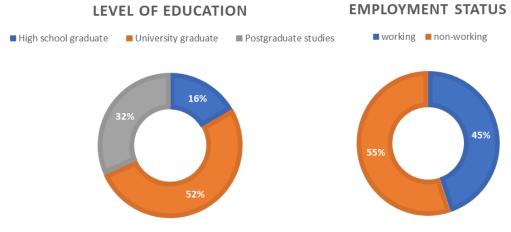


Figure 8 – Level of education

Figure 9 – Employment status

The participants were also classified based on their foreign language and IT skills. Survey results showed a generally high level of competence regarding the use of forein language and IT skills, with 48% of the respondands speaking a foreign language fluently (figure 10), and 51% having excellent IT skills (figure 11).

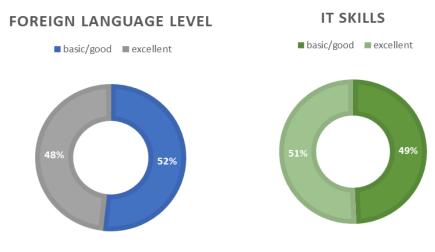


Figure 60 - Foreign language level

Figure 11 - IT skills

To address research questions regarding the degree of LinkedIn use, the participants were also classified into groups as to how long they have been holding a LinkedIn account and the frequency of this account's use.

# TIME HOLDING A LINKEDIN ACCOUNT

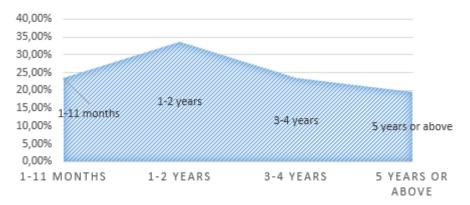


Figure 7 - Time holding a LinkedIn account

The participants were relatively equally distributed among the 4 groups, with "1-2 years" group being the predominant major (33.66%) followed by groups "1-11 months" and "3-4 years", both occuping 23.41% of the total, and finally group "5 years or above" covering the rest 19.51% (figure 12).

# FREQUENCY OF LINKEDIN ACCOUNT USE

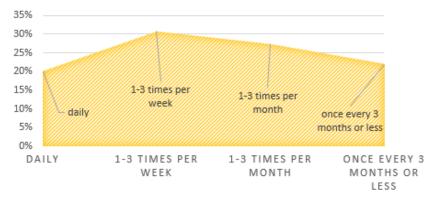


Figure 8 - Frequency of LinkedIn account use

Frequency of LinkedIn account use, followed almost same patern. The dominant group included participants using their LinkedIn account 1-3 times per week (30.73%). Group "1-3 times per month" and "once every 3 months" follow, with percentages of 27,32% and 21,95% respectively. Respondends who use LinkedIn in a daily basis, sum up to 20% of the total.

# 3.2 Data Analysis

This section discusses the results from the Factor Analysis. The first stage of the analysis was conducted through Exploratory Analysis technique (EFA). EFA is a widely utilized and broadly applied statistical technique in the social sciences (Costello & Osborne 2005). EFA was used in order to reduce our large set of observations, to the fewest possible distinct groups/constructs. The specific statistical procedures comprising factor analysis will provide information about the number of common factors underlying a set of measures (Fabrigar et al, 2012).

As for the sample size used in an EFA, strict rules have mostly disappeared. Studies have revealed that adequate sample size is partly determined by the nature of the data (Fabrigar et al., 1999). Researchers conclude that the stronger the data, the smaller the sample can be, with 'strong data' meaning high communalities without cross-loadings, plus several variables loading strongly on one factor. Cross-loadings items, are the items that load at 0,32 or higher on two or more factors. Although in practice, those conditions can be rare. Nevertheless, a commonly accepted rule of thumb, is the rule of 200 (MacCallum, Widaman, Zhang & Hong, 1999) which in this study is adequately met. Moreover, as to subjects-to-variables ratio (STV ratio) a ratio of 5:1 (5 cases/observations for each item in the instrument being used) (David Garson, 2008) is considered acceptable. In the current survey, there are 205 observations, 12 items regarding LinkedIn use, and 8 items regarding Locus of control, thus the above requirement is also significantly met.

Choosing a Factor Extraction model: SPSS offers various factor extraction methods. Although information about the weakness and strengths of each method is scarce, the most popular one among researchers is the Principal Component Analysis method. This method is also the default method in IBM SPSS, and it the one selected for the present study, as there was no adequate documentation and surveys supporting the selection of one of the other methods (Costello & Osborne 2005).

After the extraction, the researcher has to determine and decide how many factors are to be retained for rotation, as both underextraction and overextraction may have serious effects on the outcome. The most commonly used (and default) practice, is retaining factors with eigenvalues greater than 1.0 (Costello & Osborne 2005).

The next step and decision that must be made, is the rotation method. The purpose of the rotation, is to simplify and clarify the data structure. Here again, there are several available methods, with

Varimax rotation being by far the most commonly used method (Costello & Osborne 2005). Varimax is one of the so called orthogonal rotation methods. Orthogonal rotations produce factors that are not correlated, and production of uncorrelated factors is suggested by literature as it creates results that are easy to interpret.

By applying PCA (principal component analysis) method for the factor extraction on LinkedIn reasons, as well as Varimax rotation, 2 factors have emerged with the 1st factor consisting of 7 items related to Job search and Job affairs and 2nd factor consisting of 5 items related to Networking. Based on literature, a minimum of 3 variables per factor is critical for a factor to be characterized as acceptable from some researchers (Velicer & Fava 1998), while others claim that we need at least four measured variables for each common factor (Fabrigar et al, 1999), which are both valid in current case.

As for the overall fit and validity of the above 2 factors, the KMO (Kaiser-Meyer-Olkin) test has been applied. This test measures sampling adequacy for each variable in the model and for the complete model. KMO returns values between 0 and 1. A rule of thumb for interpreting the statistic is that KMO values between 0.80 and 1 indicate the sampling is adequate which in the current case is more than valid, with a KMO test returning the value of 0.90 which could be considered as excellent (Kaiser, 1974).

Next thing to be examined, was the communalities of the variables. The communality measures the percent of variance in a given variable explained by all the factors jointly and may be interpreted as the reliability of the indicator (Gason, 2008). Communality values could be thought as the R<sup>2</sup> values for regression models predicting variables of interest from the factors. A good result, suggests that factor analysis does a good job of explaining variation in the extracted factors. All communalities in this analysis were above 0.5 suggesting a good fit.

The total variance explained from the 2-factor model, is 67.14%, which is considered adequate given the threshold of 50%.

Tables 3 and 4 show the rotated component matrix of our analysis. All factors' items, load higher than 0.6 with 0.66 being the minimum and 0.85 being the maximum result. Item loading magnitude accounted is one of the strongest unique predictor of congruence between sample and population (Osborne, & Costello, 2004). The sample-to-population pattern fit is considered to be very good for the high (.80) loading condition, moderate for the middle (.60) loading condition, and very poor (.40) for the low loading condition (Velicer & Fava, 1998). Moreover, if

components possess four or more variables with loadings above .60, the pattern may be interpreted whatever the sample size used (Guadagnoli & Velicer, 1988).

Tables 3 and 4 also check the reliability of the factors using Cronbach's Alpha which should be above 0.6. Reliability refers to the consistency of the item-level errors within a single factor (Cronbach, 1970). Reliability means in other words a "reliable" set of variables will consistently load on the same factor. In current study, Cronbach's Alpha is 0.9054 for the first factor and 0.0882 for the second, suggesting reliability.

Job search/Job affairs	Estimates	Cronbach's Alpha
increases my chances of finding a job	0.75	
helps me present my resume to potential employers	0.82	
gives me the opportunity to find a job	0.81	
is used by recruiters looking for employees	0.67	0.90
informs me about job openings posted by companies	0.73	
allows me to upload files, encourage connections, or search for jobs	0.85	
helps me keep in touch with my professional sector	0.66	

Table 3 - Rotated component matrix on job affairs/job search

Professional Networking	Estimates	Cronbach's Alpha
helps me keep in touch with a wide network of people	0.79	
shows that I know important people (from my connections'		
profiles)	0.82	
allows me to have an interesting conversation with other members		
of my network	0.80	0.88
helps me arrange a face-to-face meeting with some members of my		
network	0.80	
shows that I know a lot of people (from the number of my		
connections)	0.79	

Table 4 - Rotated component matrix on professional networking

By applying PCA (principal component analysis) method for the factor extraction on Locus of Control trait, as well as Varimax rotation, two factors have emerged with the first factor consisting of 4 items, and the 2nd factor consisting of 3 as 1<sup>st</sup> item of the questionnaire did not load/run at all and had to be eliminated from the model. Both factors adequately meet literature suggestions (Velicer & Fava 1998; Fabrigar et al, 1999). The first factor comprises the construct of External Locus of Control and the second one of Internal Locus of Control. Respondents with

External Locus of Control tend to believe that getting the job you want as well as promotions is a matter of luck. Also, they think that the main difference between people who make a lot of money and people who don't, is luck. On the other hand, respondents characterized by Internal Locus of Control, believe that people who perform well on their jobs, get usually rewarded, that promotions are given to employees who perform well on their job, and that if you know what you want out of a job, you can find a job that gives it to you.

As for the overall fit and validity of the above 2 factors, the KMO (Kaiser-Meyer-Olkin) test has been applied. KMO test returned the value of 0.762 which can be considered accepted. (Kaiser, 1974). The total variance explained from the 2-factor model, is 64.69%, which is considered adequate given the threshold of 50%. Tables 5 and 6 show the rotated component matrix of the analysis. All factors' items load higher than 0.5, with 0.58 being the minimum and 0.80 the maximum. Tables also shows Cronbach's Alpha results, with first factor scoring at 0.08 and second at 0.67, both being accepted as reliable.

External Locus of Control	Estimates	Cronbach's Alpha
promotions usually are a matter of luck	0.86	
On most jobs, it takes a lot of luck to be an outstanding employee	0.83	
The main difference between people who make a lot of money		0.83
and people who don't, is luck	0.76	
Getting the job you want, is mostly a matter of luck	0.75	

Table 5 - External locus of control factor

Internal Locus of Control	Estimates	Cronbach's Alpha
People who perform well on their jobs, get usually rewarded	0.88	
Promotions are given to employees who perform well on their job	0.80	0.67
If you know what you want out of a job, you can find a job that		0.07
gives it to you	0.58	

Table 6 - Internal locus of control factor

The above factors are consistent with the Locus of Control factors suggested by literature (Rotter 1966; Mamlin, Harris, & Case, 2001), which divides the personality trait into External and Internal.

In the second stage of the analysis a Confirmatory Factor Analysis (CFA) was performed in order to verify the constructs' (factors') validity. In other words, CFA was applied to examine

whether the structure identified in EFA works in a new sample. EFA is an appropriate tool for identifying factors and thus it is very useful in developing theory that will lead to a proposed measurement model, and that is where CFA enters the picture. It focuses on the relationships between the indicators and the latent variables and can let the researcher know to which extent the a-priori pattern of factor loadings on specific constructs, represents the actual data (Harrington, 2009, Hair, 2015). The tool being used for CFA (as well as for SEM) analysis is AMOS 23.0 which is an SPSS add-on. If all goes well with the CFA analysis, the same sample can be used to test the structural model (SEM) in later stage of the analysis. In a CFA, 5 elements have to be specified: the latent constructs, the measured variables, the item loadings on specific constructs, the relationship among constructs, and the error terms for each indicator.

#### Confirmatory Factor Analysis on LinkedIn use

The 2-factor model for LinkedIn use was created based on the above directions on path diagram design.

Assessing fit: In order to start estimating the model fit, the researcher first checks the Chi square statistic. For a good fit the Chi square test has to be not significant. In current analysis, it is significant with Chi-square being 92.67, 50 degrees and freedom and p-value 0.00. Although, it should be noted that  $\chi^2$  increases as sample size increases and thus it is very common to accept the null hypothesis and make wrong assumptions. For this reason,  $\chi^2$  is often not used as a sole goodness of fit measure as so many factors impact its significance that practically any result can be questioned (Hair et al, 2015).

Researchers have developed many alternative measures of fit to correct for the bias against large samples. Thus, focus also needs to be placed on other indices, those being:  $\chi^2$  normed, CFI (Comparative Fit Index), TLI (Tucker Lewis Index), RMSEA (root mean square error). What the researcher is looking for, is a  $\chi^2$  less than 0.5, CFI > 0.90, TLI > 0.90 and RMSEA < 0.80. (Hair et al, 2015). The above 3 indices will provide sufficient unique information to evaluate a model.

Results obtained were the following, all being considered as sufficient and accepted. ( $\chi^2$  normed 1.85, CFI 0.971, TLI 0.962 and RMSEA 0.06).

Another aspect examined was the variance among the 2 latent LinkedIn factors. Values below 0.85 are considered accepted and in this case, this is valid with covariance being 0.60. A very high value, would suggest a strong correlation between those factors and would create a problematic situation. (Zainudin, 2015).

In terms of other diagnostic measures, standardized residuals are the next to be examined. Standardized residuals all fall under 2.33 suggesting also good fit as only residuals above 4.0 suggest possible item elimination (Hair, 2015).

Moving forward in the CFA analysis, it is of primary importance to check the **reliability** and **validity** of the factors' model.

With the **reliability** test performed on the survey data, the obtained result is 0.91 suggesting very high reliability.

Next step is to examine the **construct validity** of the model. Construct validity is "the degree to which a test measures what it claims, or purports to be measuring" (Cronbach, 1955) and one of the primary objectives on CFA. In current research, it should be examined whether the constructed model is actually measuring LinkedIn use. The construct validity is being tested through a) **convergent validity** b) **discriminant validity** and c) **content validity**. All types of validity are a requirement of excellent construct validity. Convergent validity is a parameter that refers to the extent to which measures of the same construct are correlated. For this purpose, standardized factor loadings are being examined. Factor loading of 0.7 or higher indicate good convergent validity, and factor loading of 0.5 or higher indicate acceptable validity. This requirement is met in the current model, as loading range between 0.59 and 0.90 and they are all statistically significant.

The second way to test the convergent validity is to use AVE (average variance extracted). AVE is calculated by dividing squared factor loading by the number of items. Job search factor's AVE is 0.59 and Professional Networking factor's AVE 0.58. The rule of thumb is that AVE above 0.5 indicates a good convergent validity, which is adequately met.

The next step, is to test discriminant validity. Discriminant validity refers to the extent to which constructs are distinct. Thus, high discriminant validity provides evidence that a construct is unique and captures some phenomena other measures do not. Discriminant validity was tested by comparing MSV (Maximum Shared Variance) with AVE for each construct. MSV is actually the square of inter-correlation between two constructs. If MSV is less than AVE, discriminant validity can be confirmed. MSV gave the result 0.35 being lower than both AVE values and thus they can confirm discriminant validity (Hair et al, 2010).

Another aspect that needs to be examined in regard to the model validity is **content validity**. When creating a questionnaire for a particular study, the questions have to actually measure what

they are meant to measure. This matching between test questions and the content questions are supposed to measure is called content validity (Ferideh 2003). In other words, the researcher needs to know to which extent a measure represents all facets/aspects of a given construct. In order to perform this test, Aiken's Content-Validity coefficient is being used (Aiken's V, 1985). Validity coefficients V ranges between 0-1. The closest an item to 1, the better it is because it is more relevant to the indicator. All items load in the range of 0.47 to 0.77 suggesting good content validity.

CFA on LinkedIn use, summary: The CFA generally supports the measurement model. The  $\chi^2$  is statistically significant above 0.01 level but this is very common and usual given a total sample of 205. Both RMSEA and CFI suggest a good fit. Evidence of construct and content validity also reinforce the model fit and results.

#### **Confirmatory Factor Analysis on Locus on Control**

The exact same procedure was followed in the application of CFA on Locus of Control trait.

**Assessing fit**: The overall Chi-square of the model is 21.93, with 12 degrees and freedom and the p-value associated with the result is 0.038. P-value is significant at a level of 0.05 but given the large sample used in the survey, other fit indices were examined closely as well.

More specifically,  $\chi^2$  normed, CFI, TLI and RMSEA were examined. Results obtained were the following, all being considered as sufficient and accepted ( $\chi^2$  normed 1.82, CFI 0.98, TLI 0.96 and RMSEA 0.64).

Another aspect examined was correlation between the 2 latent Locus of Control factors. Values below 0.85 are considered accepted (Zainudin, 2015) and thus the result of 0.53 obtained from the analysis also suggests good fit.

In terms of other diagnostic measures, standardized residuals have also been examined. Standardized residuals all fall under 1.0 suggesting good fit.

Modification indices: the only modification suggested, was the covariance of error terms 21 and 22 which was successfully performed.

CFA results suggest that the Locus of Control measurement model provides a reasonably good fit and thus it is suitable to proceed to further examination of model results. So next, issues related to **reliability** and **validity** of the constructs had to be examined.

In order to establish reliability, Cronbach's Alpha test has been performed. The outcome gave a value of 0.78 suggesting high reliability.

Next step was to examine the **construct validity** of the model, divided to **convergent validity** and **discriminant validity**. To assess convergent validity, the factor loadings have been examined. Standardized factor loading in current case range between 0.53 and 0.71, meeting the guidelines suggesting loadings above 0.5 (Hair et al, 2015). All item loadings are statistically significant at a level of 0.01.

Secondly, convergent validity was tested using the AVE (average variance extracted). External Locus of Control AVE is 0.56 (sufficient) while Internal Locus of Control AVE 0.30, placing its convergent validity under question.

Next step, is to test discriminant validity. Discriminant validity was tested by comparing MSV (Maximum Shared Variance) with AVE for each construct. If MSV is less than AVE, discriminant validity can be confirmed which is valid in this case with MSV being 0.27.

Combing all the above tests, evidence supports the construct validity of the measurement model. Although AVE of one factor loaded low, it does not appear to significantly harm model fit or consistency.

Another aspect examined in regard to the model validity was **content validity.** In order to perform this test, Aiken's Content-Validity coefficient has been used (Aiken's V, 1985). Results range between 0.57 and 0.70 suggesting acceptable content validity.

CFA on Locus of Control, summary: The CFA generally supports the measurement model. The  $\chi^2$  is statistically significant at a 0.01 level but this is very common and usual given a total sample of 205. Both RMSEA and CFI suggest a good fit. Evidence of construct and content validity also reinforce the model fit and results.

# 3.3 Structural Equation Modeling

Whereas CFA analysis used in the previous stage, focuses on the relationships between the indicators and the latent variables, a SEM includes structure of causal paths between latent variables. CFA was used as a preliminary step of SEM analysis (Harrington, 2009). In other words, SEM models differ from CFA models because the emphasis moves from the relationship between latent constructs and indicators, to the nature and magnitude of the relationships between constructs. Although most multivariate techniques (such as multiple regression, factor analysis, multivariate analysis of variance etc.) can examine only a single relationship at a time, SEM can examine series of dependence relationships simultaneously. Thus, it can estimate a series of separate multiple regressions at the same time and it also enables the incorporation of latent variables into the analysis which are measured indirectly by multiple measured variables (indicators) (Hair et al, 2015).

Based on the above, SEM is the most appropriate method to examine the relationship among Locus of Control and LinkedIn use. LinkedIn use is considered as the dependent (outcome) variable, consisting of 2 different latent factors. The independent variable will be Locus of Control, also consisting of 2 different latent factors. In SEM terminology, Locus of control will be the exogenous variable whereas LinkedIn use the endogenous. With the relationships and path diagram specified, this format enables the estimation of relationship strengths and helps the researcher access how well the data actually fit the model (Hair et al, 2015).

In SEM the statistical goal is to test a set of relationships representing multiple equations. Therefore, measurement of fit refers to either accepting of rejecting the whole model, determining if the overall model fit is acceptable before examining specific relationships. In other words, once a specified model is estimated, model fit compares the theory to reality by assessing the similarity of estimated covariance matrix (theory) to reality (the observed covariance matrix). The value of any goodness of fit (GOF) measure is to compare those two matrices and determine how close those values are. The closer the values, the better the model is said to fit (Hair et al, 2015).

As mentioned before, even though Chi-square is a fundamental measure of differences between covariance matrices, complications raised by several factors, as well as its sensitivity to large sample size, has led to the development of alternative goodness of fit measures. Indeed, chi-square received was 205.66 with 143 degrees of freedom and p-value close to 0 implying difference of the 2 matrices, so the examination of other fit measures had to be applied.

A statistic less sensitive to sample size is GFI (goodness of fit index). The possible range of GFI values is 0 to 1 with values greater than 0.90 or 0.95 typically considered good. Current model's GFI is 0.97 suggesting a very good fit.

Next and one of the most widely used measures that attempts to correct for the tendency of  $\chi^2$  test to reject models, is RMSA. Although there is some debate on RMSA acceptable value, the cut-off of 0.08 and below, is a commonly acceptable one. Current model's RMSEA is 0.04 suggesting good fit.

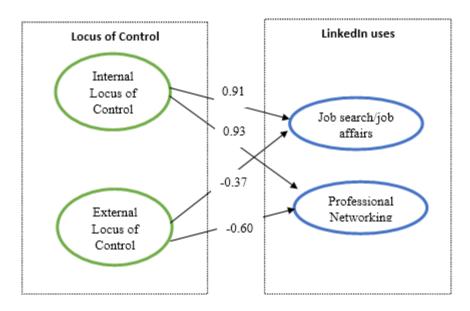
Normed Chi-square has also been examined to evaluate goodness of fit. As discussed earlier a rule of thumb is to accept it when smaller than 3, which is valid in this case, with a normed chi-square of 1.44.

Also, CFI was examined as a goodness of fit measure. CFI is a normed index that returns values from 0 to 1 with values more than 0.9 being considered as acceptable. The model's CFI was 0.97 suggesting good fit.

Next thing to perform, is the assessment of structural model validity, as good model fit alone is insufficient to support a proposed structural theory. A model is considered valid to the extent that the parameter estimates are: statistically significant and in predicted direction, and nontrivial (meaning standardized estimates should be inside the range of -1 to +1) (Hair et al, 2015). The estimates in a SEM model are interpreted like regression coefficients. All estimate coefficients of the model are within the accepted standardized range.

Model suggests that there is a direct negative relation between External Locus of Control and LinkedIn use (on both factors) and a direct positive relation between Internal Locus of Control and LinkedIn use (on both factors). As mentioned before all path estimates are statistically significant at a level of 1% and more specifically, for "Internal Locus of control to Job search"  $\beta$  = 0.91, for "Internal Locus of Control to Professional Networking"  $\beta$  = 0.93, for "External Locus on control to Job search"  $\beta$  = -0.37 and for "External Locus of Control to Professional Networking"  $\beta$  = -0.60.

Figure 14 shows the SEM model addressing the relationship between locus of control and LinkedIn use while Table 7 shows the overall model fit and path estimates.



 $Figure \ 9-SEM \ model \ on \ LinkedIn \ use \ and \ locus \ of \ control$ 

Overall model fit / path results									
	Desirable				β				
Fit Index	threshold	Result		Paths	coefficient	р	test result		
Chi-				Internal Locus ->					
square		205.66		Job search	0.91	0.00	Supported		
				Internal Locus ->					
DF		143		Professional Networking	0.93	0.00	Supported		
Normed					ng 0.93 0				
Chi-				External Locus ->					
square	< 3.00	1.43		Job search	-0.37	0.01	Supported		
				External Locus ->					
GFI	>0.90	0.91		Professional Networking	-0.6	0.00	Supported		
RMSEA	< 0.80	0.04							
CFI	>0.90	0.69							

Table 7 - Overall model fit / path results

# 3.4 Multigroup analysis

In the last stage of present research, which examined whether the relationship between Locus of Control and LinkedIn use differs by employment status, the results revealed several differences. Those findings are consistent with previous suggestions made by Zavella and Pais (2014), showing that those in employment, consider LinkedIn to be more effective when compared to those out of work, who are more inclined to be distrustful of LinkedIn's effectiveness and thus us it less. Based on those finding current research aimed to further examine this difference between working and non-working groups, with the addition of Locus of Control construct. In CFA/SEM terminology employment status is called a "moderator variable" as the researcher examines its moderation between Locus of Control (exogenous variable) and LinkedIn use (endogenous variable).

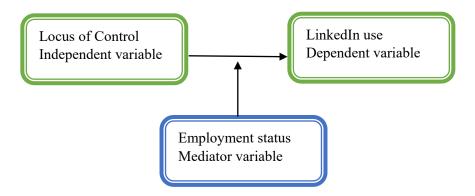


Figure 10 - Employment status as mediator between locus of control and LinkedIn use

To examine potential differences, AMOS extension has been used. Two different groups of employment status were set up: working and non-working. In the sample collected, working population consisted of 92 observations and non-working population of 113, allowing the performance of this test, as the two groups contain relatively similar amount of observations. The procedure applied is the following: the researcher only needs to identify the path of interest where the moderator variable is to be assessed (e.g. Internal Locus of Control and Job search). The particular path would be constrained with parameter = 1 and the model is termed as the constrained model. The procedure will estimate two models separately. One is the constrained model while the other is the unconstrained (Zainudin, 2015). Then, one obtains the difference of Chi-square value between the above two models and path differences are being examined.

In current case, Chi-square result for the model was statistically significant, implying differences regarding employment status. (Chi-square difference 50.17, degrees of freedom difference 19 and p-value 0.00.) Thus, it is concluded that moderator variable "employment status" does moderate the effect of the exogenous variable Locus of Control on endogenous variable LinkedIn use. Further examination of each path for differences, showed statistically significant differences (apart from path Internal Locus of control → Job search for non-working). Table 8, shows the standardized parameter estimates for each path.

	Paths			Worki	ing	Non-working		
	ratiis		beta	beta P Result		beta P		Result
Job search/job		External Locus			significant			Non -
affairs	<b>←</b>	of Control	-0.28	0.04	at 0.05	-0.19	0.07	significant
Job search/job		Internal Locus			significant			significant
affairs	<b>←</b>	of Control	0.67	0.05	at 0.05	0.77	0	at 0,01
Professional		External Locus			significant			significant
Networking	<b>←</b>	of Control	-0.53	0.31	at 0.05	-0.48	0	at 0,01
Professional		Internal Locus			significant			significant
Networking	<b>←</b>	of Control	0.93	0.01	at 0.05	0.88	0	at 0,01

Table 8 - Standardized path estimates of working and non-working group

The results suggest that the effect of Locus of Control (both external and internal) is more pronounced in "Working" compared to "Non-working" in regard to Factor: Professional Networking. For "working group", Internal Locus of control and Professional Networking path yielded the largest standardized coefficient suggesting that working people with Internal locus of control will use LinkedIn more in order to connect with their professional network. Moreover, for "non-working group", Internal locus of control and Job search/affairs path. produced the largest standardized coefficient showing that non-working people with Internal locus of control are more likely to engage in LinkedIn use in order to look for a job. A more general ascertainment that concerns all paths, is that Internal locus of control is positively related to LinkedIn use and External locus of control negatively related, for both groups.

## 4. Conclusion and Discussion

The first aim of this study was to explore the LinkedIn motives among users of Greece. Moreover, the second purpose was to examine the relationship between LinkedIn use and personality trait "Locus of Control" and examine as well differences related to users' employment status. For the purpose of this study, a total of 205 online surveys were collected from LinkedIn users. In the first stage, EFA method was used to construct the factors that identified LinkedIn use among its members. According to the results of EFA, the following two factors were determined: Job search/job affairs and Professional Networking. In the second stage, CFA confirmed the 2factors structure both for LinkedIn use as well as for the trait "Locus of Control" which is divided into Internal and External. Moreover, after the construction of the proper SEM model, it was found that personality trait "Locus of Control" is correlated with LinkedIn use, as reflected on both Job search and Professional Networking factors. Users with Internal Locus of Control, meaning users that believe that the outcome of their lives and in particular of their jobs, is a result of their actions, decisions and efforts, have a more positive, direct and intense relationship with LinkedIn use. On the contrary, External Locus of Control, is negatively correlated with LinkedIn use. Hence, it can be assumed that people who believe to have the control of their environment, will engage in the use of a professional network like LinkedIn in order to reinforce their efforts considering either job search/job affairs and/or networking. On the other side, people who believe that the outcome of their lives is just a matter of luck or fate, won't trust that a platform such as LinkedIn will help them achieve their goals on their professional career. The above findings, are also affected by employment status. The relationship between Internal Locus of Control and Professional Networking, was particularly important among "working" group. As for the relationship between Internal Locus of Control and Job search, a difference was also noticed, but in favor of "Non-working" group. The above findings are also supported and consistent with ELSTAT survey for the 1st quarter of 2017. The survey showed that 43.1% of unemployed internet users in Greece, engage in LinkedIn and other professional networks' use, in order to look for a job or search a job application, compared to the lower 34.6% of employed users. Moreover, 50.9% of employed users, use LinkedIn and other similar platforms to participate in professional networks compared to the lower 22.9% of unemployed ones.

This may illustrate the differences in the ways employed and unemployed users actually use LinkedIn for – employed users place a greater emphasis on connecting with their professional network, while unemployed users seem to place a greater emphasis on looking for a job through

the use of LinkedIn. As for the specific research hypothesis stated in chapter 1, the following documentation can be given.

Based on present research findings and path estimates it can be assumed that the effect of Locus of Control on LinkedIn use, will be more pronounced in users with Internal than in users with External Locus of Control. Also, Internal Locus of Control is positively and highly related to LinkedIn use, whereas External Locus of Control shows a negative relationship.

The employment status was found to have a significant difference between "working" and "non-working" group, when examining Locus of Control and LinkedIn use. Working users tend to use LinkedIn more for Professional Networking while non-working users seem to use the platform mainly for Job search/affairs. Those finding however, concern more people Internal Locus of control, regardless the group they belong to.

Avenues for future research could include the test of all possible dimensions of personality that literature has shown to be relevant with LinkedIn use. Moreover, in-depth interview with LinkedIn users might facilitate a better understanding regarding the results of the survey. Additionally, current survey's data was based on online survey participants, and the respondents might not be representative of Greece national population, which could be noted as one of this study's limitations. A follow-up research could emphasize on collecting a much larger sample, representative of Greece population for more robust results. Finally, other demographic characteristics (such as age, gender, educational level e.tc) could be examined as to how they moderate this Locus on Control and LinkedIn use relationship.

Overall this research contributes to the understanding of how Locus of Control affects LinkedIn use and how employment status moderates this impact. It is hoped those finding will lay the groundwork for future experimental research in this particular domain.

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# **Appendix**



School of Economics & Political Sciences
Department of Economics
Master of Science in

Business Administration, Analytics and Information Systems

#### QUESTIONAIRE – The use of LinkedIn in Greek professional terrain and its users' profile

In the framework of my Master Thesis in MSC "Business Administration, Analytics and Information Systems, in National and Kapustin University of Athens, we are conducting a survey regarding the use of LinkedIn in Greek professional terrain and its users' profile. Your participation in the survey will help us extract useful and scientifically proven conclusions. We would like to reassure you that your answers are to remain confidential and will only be used for the scientific purposes of the current Master Thesis. Thank you in advance for your cooperation.

#### SECTION A: FREQUENCE OF LinkedIn use

**Instructions:** Please complete the box of your choice.

How long do you have your LinkedIn account?

1-11months

1-2 years

3-4 years

5 years or more

How often do you access your LinkedIn accour	nt?
Everyday	
1-3 times a week	
1-3 times a month	
1 time every trimester	
How often do you update your profile on Linke	edIn?
1-3 times a month	
1-3 times a semester	
Less once per year	
How often do you write a comment on Linked	n?
1-3 times a month	
1-3 times a semester	
Less than once per year	
How often do you participate in a LinkedIn gro	up?
1-3 times a month	
1-3 times a semester	
Less than once per year	
<u></u> -	

#### SECTION B: REASONS FOR USING LinkedIn

**Instructions:** Please rate each of the following sentences according to the degree of disagreement (closer to 1) or your degree of agreement (closer to 7). Scale grading: 1 Strongly Disagree, 2 Disagree, 3 Mildly Disagree, 4 neither Agree nor Disagree, 5 Mildly Agree, 6 Agree, 7 Strongly Agree

#### LinkedIn ...

informs me about job openings posted by companies	1	2	3	4	5	6	7
gives me the opportunity to find a job	1	2	3	4	5	6	7
helps me present my resume to potential employers	1	2	3	4	5	6	7
allows me to upload files, encourage connections, or search for jobs	1	2	3	4	5	6	7
I believe it is used by recruiters looking for employees	1	2	3	4	5	6	7
increases my chances of finding a job	1	2	3	4	5	6	7
helps me keep in touch with my professional sector	1	2	3	4	5	6	7
shows that I know a lot of people (from the number of my connections)	1	2	3	4	5	6	7
helps me keep in touch with a wide network of people	1	2	3	4	5	6	7
helps me arrange a face-to-face meeting with some members of my network	1	2	3	4	5	6	7
allows me to have an interesting conversation with other members of my network	1	2	3	4	5	6	7
shows that I know important people (from my connections' profiles)	1	2	3	4	5	6	7

#### **SECTION C: PERSONALITY CHARACTERISTICS**

**Instructions:** Please rate each of the following sentences according to the degree of disagreement (closer to 1) or your degree of agreement (closer to 7). Scale grading: 1 Strongly Disagree, 2 Disagree, 3 Mildly Disagree, 4 neither Agree nor Disagree, 5 Mildly Agree, 6 Agree, 7 Strongly Agree

On most jobs, people can pretty much accomplish	1	2	3	4	5	6	7
whatever they set out to accomplish							
If you know what you want out of a job, you can find	1	2	3	4	5	6	7

a job that gives it to you							
Getting the job you want is mostly a matter of luck	1	2	3	4	5	6	7
Promotions are usually a matter of luck	1	2	3	4	5	6	7
Promotions are given to employees who perform well	1	2	3	4	5	6	7
on the job							
On most jobs, it takes a lot of luck to be an outstanding employee	1	2	3	4	5	6	7
People who perform well on their jobs, get usually	1	2	3	4	5	6	7
rewarded							
The main difference between people who make a lot of	1	2	3	4	5	6	7
money and people who don't, is luck							

**Instructions:** Please complete the box of your choice

Please fill in your current employment status						
Employed						
Unemployed						
How long have you been looking for a stable/regular work?						
Under 6 months						
6 to12 months			Over a year			

In which sector do you currently work? Select ONE				
Dining out - Leisure (café, restaurant, tavern, bar, etc.)				
Tourism (rooms to let, hotels, guided tours, etc.)				
Retail (shop, store)				
Agricultural sector (agriculture, livestock, trader)				
Small Industries/ Industrial Production or Wholesale (Dealership, etc.)				
Building / Construction industry				
Health, Education and Culture (doctors, tutorials, theater, schools, etc.)				
Professional services (bank, accounting, consulting, technology / communications, etc.)				
Personal and Social services (hair salon, home help, social care, etc.)				
Other (please indicate)				
SECTION D: DEMOGRPHIC CHARACHERISTICS  Instructions: Please complete the box of your choice.				
Gender:				
Male Female				
Age:				
18-24				
25-34				
>35				

Marital Status:	
Single	
Married	
Education:	
Postgraduate studies	
University or Technological Education Graduate	
High school Graduate/IEK	
What are your professional qualifications (e.g. acco	untant, doctor, craftsman, etc.)?
Place of permanent residence: (city, area)	
	Basic/good excellent
Knowledge of foreign languages:	
Knowledge of IT / New Technologies:	