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ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

**Social Media και Επαγγελματική Δικτύωση:
Διερευνώντας τη σχέση ανάμεσα στην Αυτοεκτίμηση
και τα Κίνητρα Χρήσης του LinkedIn**

Social Media on Professional Networking:
Investigating the relationship between Self-Esteem
and LinkedIn Motives

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MASTER THESIS

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I hereby certify the submitted master thesis and the work presented is personal and that all sources and material used have been properly referenced in the text and bibliography.

Mary Douroupis

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Περίληψη

Σήμερα τα μέσα κοινωνικής δικτύωσης αποτελούν ένα απαραίτητο κομμάτι της καθημερινότητας μας όπου ποικίλες διαδικτυακές πλατφόρμες προσφέρουν πληθώρα δυνατοτήτων εκ των οποίων μία από αυτές τις δυνατότητες είναι η **επαγγελματική δικτύωση**, στην οποία το **LinkedIn** θεωρείται το πιο δημοφιλές επαγγελματικό δίκτυο. Το LinkedIn αποτελεί επίσης ένα νέο χώρο εύρεσης εργασίας στον οποίο όλο και περισσότεροι χρήστες χτίζουν το διαδικτυακό τους προφίλ για να παρουσιάσουν τον **“επαγγελματικό” τους εαυτό** και να αυξήσουν έτσι την επαγγελματική τους αξία. Κατά συνέπεια είναι σημαντικό η αλληλεπίδραση μας με τον ψηφιακό κόσμο να αντικατοπτρίζει την πραγματική μας προσωπικότητα παρά μια εξειδικευμένη προβολή επιθυμητών χαρακτηριστικών, ενώ η **αυτοεκτίμηση**, ένα από τα πιο σημαντικά συστατικά της προσωπικότητας μας, μπορεί να διαδραματίσει ουσιαστικό ρόλο σε όλη αυτήν τη διαδικασία τόσο στην προσωπική όσο και στην ψηφιακή μας ταυτότητα.

Σκοπός αυτής της εργασίας είναι να **διερευνήσει τη σχέση μεταξύ αυτοεκτίμησης και των κινήτρων που ωθούν στην χρήση του LinkedIn** όταν προβάλλουμε τον επαγγελματικό μας εαυτό. Πιο συγκεκριμένα τα κίνητρα χρήσης του LinkedIn συσχετίζονται θετικά ή αρνητικά με την αυτοεκτίμηση; Η συχνότητα χρήσης ή ενημέρωσης του LinkedIn προφίλ μπορεί να επηρεάσει τη σχέση μεταξύ αυτοεκτίμησης και των κινήτρων που ωθούν στη χρήση του LinkedIn; Δημογραφικά χαρακτηριστικά όπως η ηλικία, το φύλο, η οικογενειακή κατάσταση επηρεάζουν τη σχέση μεταξύ αυτοεκτίμησης και των κινήτρων χρήσης του LinkedIn;

Τα αποτελέσματα της διαδικτυακής έρευνας που πραγματοποιήσαμε μας έδωσε απαντήσεις από **205 Έλληνες χρήστες LinkedIn** που επιβεβαίωσαν ότι τα κίνητρα χρήσης του LinkedIn, δηλαδή η **αναζήτηση εργασίας και η επαγγελματική δικτύωση, συσχετίζονται θετικά ή αρνητικά με την αυτοεκτίμηση** ανάλογα με την ηλικία, το φύλο, την οικογενειακή μας κατάσταση, το πόσο συχνά χρησιμοποιούμε ή ανανεώνουμε το LinkedIn προφίλ μας. Επιπλέον η **εμπειρική έρευνα** όχι μόνο μας διαφωτίζει για τα ερωτήματα αυτά αλλά θέτει τα θεμέλια για περαιτέρω διερεύνηση της γνώμης των Ελλήνων για αυτό το επαγγελματικό δίκτυο.

Λέξεις – Κλειδιά

Αυτοεκτίμηση, LinkedIn, Κίνητρα, Ελλάδα, Επαγγελματική Δικτύωση

Abstract

Nowadays social media have become a necessary part of our everyday life and diverse social network platforms offer different possibilities such is **professional networking**, where **LinkedIn** is been consider to be the most popular professional networking website. LinkedIn is also consider being the new job marketplace where more and more users build an online presence to present their “**professional self**” in order to increase their professional value. Thus it is essential in our interaction with the digital world to reflect our actual personality rather than an idealized projection of desirable traits whereas **self-esteem**, one of the most important components of one’s identity, can play an important role in this process to both our personal and digital identity.

The aim of this Master thesis is to *investigate the relationship between self-esteem and the motives of LinkedIn usage* when presenting the professional self. Specifically do LinkedIn motives correlate positively or negatively with self-esteem? Does LinkedIn frequency usage or updating your LinkedIn profile have a significant impact on the relationship between self-esteem and LinkedIn motives? Finally does age, gender or marital status moderate the relationship between self-esteem and LinkedIn motives?

The results from an online survey consisting of **205 Greek LinkedIn users**’ responses confirm that LinkedIn motives, **job searching** and **networking**, can correlate positively or negatively with **self-esteem** depending on our age, gender, marital status, how often we use or update our LinkedIn profile. Furthermore this **empirical research** not only gives us an insight into these enquiries but also provides a ground for further investigation into Greeks perspectives on the particular professional network.

Keywords

Self-Esteem, LinkedIn, Motives, Greece, Professional Networking

Acknowledgments and Dedication

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List of Abbreviations & Acronyms

CFA: Confirmatory Factor Analysis

EFA: Exploratory Factor Analysis method

HSE: High Self-Esteem

LSE: Low Self-Esteem

NA: Negative Affectivity

Nested Model: LinkedIn Factors Model and Self-Esteem Factors Model

PA: Positive Affectivity

PANAS: Positive & Negative Affect Schedule scales

RSE: Rosenberg Self-Esteem scale

SEM: Structural Equations Model

SNW: Social Network Website

Chapter 1: Introduction

1.1 Aims of the research

Millions of people across the world use social media, like Facebook, Twitter and LinkedIn to communicate and interact with other individuals. Social Media Networks Facebook and Twitter are more of a general interest networks in compare to LinkedIn which is of a professional interest, nevertheless these digital technologies of modern society have a significant impact in both a wide range of ages and most of our daily activities.

With this empirical research we aim to map out some issues related to the motives of using the professional network LinkedIn combined with a social construct such is self-esteem. For this reason a questionnaire was created in order to examine (a) the *motives* of using this networking platform, (b) the *relationship* between these motives and the psychological construct self-esteem and (c) the *potential effect* of frequency usage, updating profile or of different demographic groups on this relationship.

In conclusion the present study has two main purposes: firstly we would like to add to the body of research and analysis a study that focuses on self-esteem in relation to LinkedIn motives, since there have been a lot of such studies about Facebook and personality traits in general and self-esteem in particular, but not regarding self-esteem in relation to a professional social network such is LinkedIn and secondly such a study hasn't been explore enough in Europe much less if not at all in Greece and there is a serious gap in literature.

1.2 Personal Interest

The flourishing of social networking websites has enhanced the interest of exploring their impact on peoples' lives with Facebook being the most analyzed platform all around the world. LinkedIn, on the other hand, as the largest professional network has its own share of analyses but for Greek LinkedIn users are very limited.

Over the last years the growth of professional networking has been prompted in Greece, especially due to the Greek financial crisis and the risen of unemployment. In 2012, a nationwide annual quantitative survey on social media was conducted by Eltrun and LinkedIn was portrayed the fast growing Social Network Website (SNW) in the country becoming the 3rd most popular SNW after Facebook and Twitter. That period unemployment had risen to high levels increasing thus the usage of social media to 79% and at the same time rising LinkedIn's internet penetration rate to 10% and also the number of its unique users.

This research was a trigger for me to further explore the utilization of the particular professional network in Greece and especially from the perspectives of LinkedIn's Greek users'. Furthermore since the social media phenomenon affects so much our daily lives adding a twist with a psychological construct such is self-esteem would be more than interesting to study the relationship between Greek LinkedIn users' motives for utilizing this professional platform in correlation with their self-esteem.

1.3 Structure of the thesis

In the ***first chapter*** we give the Introduction of the thesis subject by expounding the aims of the research and the author's personal interest in the subject.

In the ***second chapter*** we explore social media's globally impact on users, the classification of the online platforms, take a look on past researches on utilizing social media in relation to personal traits and self-esteem, we identify LinkedIn features and uses, we define self-esteem and the emerging online identity, the digital self as it is known, furthermore we examine the theoretical models conceptualizing self-esteem as comprise of two dimensions, then we retrospect self-esteem's relationship with social media and its contradicted findings with positive and negative effects on the users, we review limited researches in association with social media use, self-esteem and demographic variables, we also present Greek researches on LinkedIn and finally we conclude on seven examining hypotheses to explore.

The ***third chapter*** is about the methodology used in the empirical research, the design of the questionnaire, the method and sampling technique for data collection and the administration of the instruments for data analysis.

The ***fourth chapter*** is divided into three sections and presents the results derived from the online survey and the analysis of the primary data. The first section displays the results from the demographic characteristics of the respondents. The second section describes the Exploratory Factor Analysis method (EFA) using IBM SPSS program and explains the factors that were used in the LinkedIn Factors Model, the Self-Esteem Factors Model and the nested model. We then confirm the sufficiency of the factors extracted conducting Confirmatory Factor Analysis (CFA). Finally in the third section we test the hypotheses made it the 3rd chapter using the Structural Equations Model technique.

Finally in the last and ***fifth chapter*** we conclude our empirical research by summarizing the conclusions drawn by the hypotheses and giving insights for further discussion.

Chapter 2: Literature Review

2.1 Social Network Websites

Social media has emerged over the last decade and has since revolutionized the way people communicate and interact globally. The Social Network term, according to Wellman (1996) in his social network analysis approach, derives from the concept of a virtual online community where computer networks link people as well as machines. In simply terms social media are web services, easily accessible where individuals create a “virtual self” (profile) and exchange information and views in virtual communities as Castells (2004) characterized a culture of “*real virtuality*”.

Kaplan & Haenlein (2010, p.61) defined social media as “*a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content*”. Web 2.0 is a term to describe the new way that World Wide Web was used by developers and end-users in which changes such as blogs replacing personal pages occurred while User Generated Content refers to any media content that is created by nonprofessionals and it is creative and published online (Kaplan & Haenlein, 2010) for example a video on YouTube.

Kaplan & Haenlein (2012) further characterized social media as an evolution back to the roots because it has retransformed the internet back to what it was created for, thus a communication platform between users, whereas Papacharissi (2009) simulated the architecture of virtual spaces with the architecture of physical spaces to state the various modes of social media interaction.

Social media interaction occurs in varying types e.g. communicating information, sending and receiving text messages, participating in groups with common interests, public discussions, (Publicissue.gr, 2016). Thus diverse and differing social network platforms offer different possibilities such as networking, socializing and entertainment. Kaplan & Haenlein (2010) categorized social media in the following six types: “*collaborated projects, blogs, content communities, social networking websites, virtual game worlds and virtual social worlds*”.

A more specific classification of online platforms under the vast umbrella of social media includes the following categories (kvdm.gr, 2013):

❖ **Based on Social Networking**

- ★ Social Media (Facebook, LinkedIn, Myspace) for socializing and professional networking

- ★ Blogs (Wordpress, Blogger) for online journals, discussions or information and also Vlogs for video blogs (homemade videos)
- ★ Microblogging (Twitter, Tumblr) for broadcasting short messages
- ★ Wikis (Wikipedia, Wikinews) for free online encyclopedia, news source

❖ **Based on Content**

- ★ Photography-Images-Artwork (Instagram, flickr, devianArt) for hosting photographs, images and artwork
- ★ Video (You Tube, Dailymotion, Vimeo) for hosting and sharing videos
- ★ Music (Last.fm, Myspace music, SoundCloud) for music and podcast streaming
- ★ Presentations and Documents (SlideShare, Scribd) for slide hosting presentations, documents etc and for access to a digital library, e-books and audiobooks

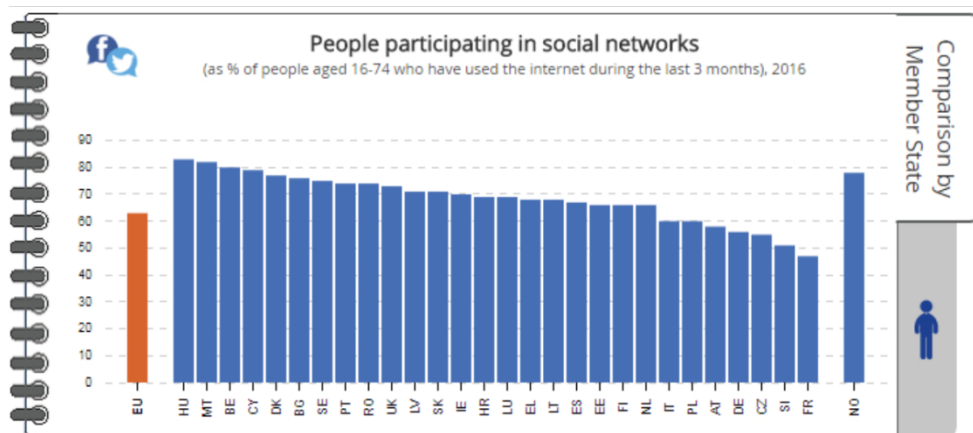
❖ **Based on a Function**

- ★ Live Broadcast (Skype, Ustream) for telecommunication, live video streaming
- ★ Bookmark Links (Delicious, Diigo) for social bookmarking, which is storing, sharing and discovering web bookmarks
- ★ Events (Eventful) for sharing the location of entertainment and local events
- ★ Place (Foursquare) for local searching and recommending places

❖ **Based on Interest**

- ★ News (Digg) for featuring best articles, video and original “talk of the town” content
- ★ Reviews (Yelp, goodreads) for recommendations on best restaurants/nightlife etc., books

One of the main statistical findings in 2016 in the EU-28 was that social networking was being used by just over the half (52%) of the internet users aged 16-74 years old, which is 14 % points higher than in 2011 (Eurostat, 2016). In Europe’s Digital progress report for Greece in 2017 showed that 72% of the internet users participate in Social Networks (European Commission, 2017).



Graphic 1: EU 2016 on Social Media Use

Although social media applications were originally developed for social reasons, companies use them to interact with customers and potential employees and HR professionals on the other hand to screen potential employees (Gibbs, McDonald & MacKay, 2015). Moreover employees also use them for professional purposes and it's increasingly becoming the new job marketplace. Adecco's Global report 2014 shows that 55% of job seekers use social media for job search purposes and LinkedIn is the most used one with 35%.

In **2012**, a survey was conducted on the behavior of Greek internet users and especially SNWs users by **Eltrun**, AUEB's E-Business Research Center and the results showed that unemployed people aged 22-44 with undergraduate and/or postgraduate studies at a rate 59% declared that they used LinkedIn as a means of finding a job. The following two years similar surveys on Greek users' preferences were conducted showing that LinkedIn was in third place with respectively 61% in 2013 (socialmedialife.gr, 2014) and 66% in 2014 with its popularity rate increased by 5 points compared to the year before (sepe.gr, 2014).

According to a recent survey conducted in **2016** by **Public Issue**, one of the leading Greek companies in public opinion polls, 32% of the population in Greece over 18 (almost 1 in 3) has a social networking account which means approximately 2.851.000 people. Young people aged 18-34 show the highest rate with 81%, followed by those aged 35-54 with 47% and people aged 55 or over with 17% who show the lowest representation. The level of education is a significant factor as social networking accounts are staggered among those with a higher education (44%), those with an average (31%) and those with a lower (4%) education level. In Greece LinkedIn is used by 4% of the population over 18 (about 356.000 people).

Furthermore LinkedIn is used by HR managers' as a tool to gather more information about potential employees in a short amount of time, whereas employees have the opportunity to present their qualifications and professional credentials in a more dynamic way (Zide et al., 2014). Over the years LinkedIn has expanded its features from posting resumes to personal branding to encouraging members to use the network for business purposes beyond job searching in order for users to explore the dynamics of today's labor market (Hutchins, 2016).

Florenthal (2015) revealed that LinkedIn users who were members of LinkedIn university discussion groups had enhanced their profiles due to the visibility of the organizations they were members of, had access to job and internship postings as well as updates to industry trends and had enlarged their contacts network.

Recruiters focus on a various elements of a LinkedIn profile ranging from the number of connections to spelling mistakes in the pre-screening phase (Zide et al., 2014). LinkedIn profile depending on its extensiveness can be used as a predictor for personality since more

information enables recruiters to base more accurately their impression of the user's personality (Verschuren, 2012).

The Big Five model (Extraversion, Openness, Conscientiousness, Agreeableness, and Neuroticism) is the most used and generally accepted model of personality and it is perceived to have the ability to predict human behavior. According to Bachrach et al. (2012) personal traits such as Extraversion is the most easy to predict whereas Agreeableness the most indefinable and it's possible by profiling users to divide them into personality segments.

Correa et al. (2010) on examining social media and personality traits found that extraversion and openness had a positive correlation with the use of social media whereas emotional stability (neuroticism) a negative and furthermore demographics such as gender and age differed in these findings. Specifically, results on differences by age showed that for young adults (18-29 years old) extraversion relates to social media use while for older adults (30+ years old) extraversion and openness were related to social media use. On gender differences the same research showed that for men extraversion was positively related to social media use whereas emotional stability negatively related, while for women both extraversion and openness were related to social media use.

Moreover extraverted users who have many connections on and off the digital world tend to have higher self-esteem (Zywica & Danowski, 2008) but on the other hand since personality plays such a role in internet use, negative traits can also be associated with it (Hamburger & Ben-Artzi, 2000).

Although Social Network Websites provide a convenient online environment to test predictions about personality traits and self-esteem, past researchers have mainly focused on examining Facebook leaving a gap in literature on examining professional networking sites such as LinkedIn in parallel with self-esteem. The purpose of this study is to examine the relationship between LinkedIn motives and self-esteem among Greek LinkedIn users.

2.2 LinkedIn's Features

LinkedIn's website states that it is the world's largest professional network with more than 530 million users in more than 200 countries worldwide. It is also ahead of both its main competitors, XING and VIADEO (Wikipedia, 2017). LinkedIn launched in 2003 and focuses on the interconnection of professionals, who want to broaden their professional circle, create new opportunities for leads, exchange knowledge, opinions and ideas and to find a job or to seek new career opportunities.

It is a platform and specifically a personal network of contacts, where you can make the most of your business acquaintances and also promote yourself professionally by creating a profile with a clear professional orientation, and include education, skills and professional experience. The main goal is to build strategic relationships and have strong ties unlike to other social networks in which the goal is having a large number of connections (“friends”).

A personal network of contacts is made up of 1st-degree, 2nd-degree and 3rd-degree connections and fellow users of your LinkedIn groups. The 1st-degree connections are people directly connected to you; the 2nd-degree connections are people connected to your 1st-degree contacts and the 3rd-degree connections are people connected to your 2nd-degree connections. To connect to your 2nd-degree connections you can either send them an invitation or connect through InMail, which is the only way to connect to your 3rd-degree connections but in this case you need to have a Premium not a basic (free) account to use it (LinkedIn.com, 2017).

LinkedIn scores your profile up to 100% depending on how much information you have in and the closest you are to 100% the more likely is your profile to come up on the search engine results. Thus HR recruiters will have the opportunity to view your profile when searching for a job. Also LinkedIn’s most appealing feature option is to be publicly endorsed with skills on your profile by your 1st-degree contacts. This means that they vouch for the skills you are endorsed with and verify that you indeed are qualified in the certain skill. LinkedIn’s internal search engine will match your skill with profiles relevant with your skill. Endorsing your fellow users and colleagues helps you maintain strong connections (LinkedIn.com, 2017).

Joining a **LinkedIn group** gives you the opportunity to communicate, solicit advice, post or look for job offerings but also to network with other professional users. LinkedIn Groups are virtual places where you can establish yourself as an industry expert and they can either be open for anyone to join or they can require a group membership application.

On your **Home page** you can view the updates of your network connections the companies or groups you follow and also you can share an article, a photo, a video or an idea. On the **Network page** you can view your connections, add personal contacts by sending them a request or you can view recommendations of people you may know. On the **Messaging page** you can communicate with people of your network and on the **Notifications page** you get notifications on work anniversaries, birthdays etc. There is also a menu called **Work** where you can visit LinkedIn Products such as learning courses and LinkedIn Services such as Sales Solutions, Advertise, Find a talent which means find a candidate etc.

On the **Jobs page** and based on your profile and career interests you can view recommendations on job openings; you can keep track of the jobs you applied to or post your career interests. On the section “Get ahead with Premium career” you have a month free to contact recruiters directly, see who’s viewing your profile, get applicant insights on how you are compare to other candidates etc.

Basically LinkedIn is a platform where professionals can cultivate their careers and businesses and also keep their job prospects open.

2.3 Social Media and the Digital Self

Van Dijck (2013) stated that social media are often used for self-expression and self-promotion with LinkedIn mainly focusing on professional promotion and Facebook on personal self-presentation. He also argued that professional value increases on the job market when presenting the professional self. Although during the last years professionals of all ages promote themselves online to attract contacts, customers or employees, LinkedIn discourages any form of self-expression and it is often nicknamed “*Facebook in a suit*” due to its professional attire profiles (Van Dijck, 2013).

It is suggested that Internet offers such of interactive characteristics which allow users to be more active participants that an online identity on a social network like LinkedIn, has emerged as a theme. Thus being visible and promoting a professional identity became important to users in order to be noticed by potential employers. It is also realized that posting professional information and show-casing your CV on your online profile gives you a better chance to find a job in a very complete job market (Florenthal, 2015).

Moreover users have also developed identity strategies and while Facebook is used for self-promotion, LinkedIn is used mainly for self-branding within a professional context (Kietzmann et al., 2011). Having credible both professional identity and professional connections and acquiring professional information is an ongoing development situation (Sweitzer, 2008).

Impression management is also used on social media, as platforms allow users to self-represent themselves in such a way that they can either influence or control the other users’ opinions on them (Bondarouk & Olivás-Luján, 2013). Managing impressions is challenging because you can either mislead other users or if you are on the other end you can be misloaded by a not accurate profile. The latter can lead to not knowing the user’s actual offline personality (Hall, Pennington & Lueders, 2013).

The warranting theory presents a theoretical framework on the connection of the self and the online self, where a warrant (example: a profile picture) is the online information that creates the link between the two selves (Walther & Parks, 2002). But what really can separate our social identity from our personal identity are our perspective levels of the self, since social identity is distinguished between groups whereas personal identity is distinguished between individuals (Brewer & Gardner, 1996; Turner et al., 1994). Social media are the tools to shape identities and building a presence on a professional networking website affects our self-esteem. The psychological construct is analyzed in the next sub-section.

2.4 Self-Esteem

Self-Esteem is one of the most important components of one's identity and also one of the most used constructs in psychology and it refers to the way people evaluate their own worth. According to Kernis (2003, p.3) is understood as a construct which *“consists of self-related emotions that are tied to worthiness, value, likeableness and acceptance”*.

It is thought to have its origins in the work of psychologist William James (1892) who identified two levels of hierarchy: the ME- self (empirical ego) and the I-self (pure ego). However the most cited definition is the one from Rosenberg (1965, p.5) who conceived *“the self-image as an attitude towards the object”* and stated that people have favorable or unfavorable attitudes (ex. opinions) towards objects with the self being one of the objects.

Maslow (1954) suggested in his hierarchy of human needs the concept of “esteem” in the forms of self-respect or self-esteem and respect from other people, which eventually lead to the top of the hierarchy and self-actualization, the fulfillment of all human's needs. According to him satisfying self-esteem needs leads to feeling confidence, worth, strong and capable but on the other hand thwarting them leads to discouragement, inferiority and weakness.

Different theoretical models conceptualize self-esteem as comprise of two dimensions such are: global-specific, high-low, positive-negative, explicit-implicit.

Global self-esteem deals with a person's positive or negative attitude towards the self as a whole and is more relevant to psychological well-being, whereas **specific self-esteem** refers to particular facets of the self and is more relevant to behavior. However specific parts of the self can be responsible for global self-esteem and overall feelings on one's self-worth can be responsible for specific assessments of the self (Rosenberg et al., 1995).

Self-esteem, being rather a perception than reality, essentially consists on how a person thinks and evaluates oneself. **High self-esteem** refers to a highly favorable evaluation on the self that can either lead to an accurate perception on someone's worth and competency or to arrogant and self-conceited behaviors towards others. On the other hand **low self-esteem** refers to an unfavorable evaluation of the self that can either lead to an accurate perception on someone's failures or insecurities caused by psychological / pathological problems (Baumeister et al., 2003).

Some humanistic psychologists suggest that **high self-esteem** can surface when a person, whose ideal and real selves are in harmony, behaves in self-determined autonomous ways and others propose that high self-esteem is goal oriented and affects goal achievement. Specifically positive feedback on one's adequacy is when coping well on circumstances and negative feedback when avoiding threats thus '*high self-esteem increases coping well and low self-esteem leads to further avoidance*' since it is believed to be related to various psychological and personal problems (Leary, 1999). Moreover two forms of **high self-esteem**, secure & fragile high self-esteem, have been proposed, where **secure self-esteem** being characterized by positive attitudes about themselves (well-anchored) and **fragile self-esteem** by negative attitudes (needy, vulnerable) (Zeigler-Hill & Terry, 2007).

Self-esteem has been found to be related to dimensions of emotional experience, with the first one being termed **Positive affectivity (PA)** and the second one **Negative affectivity (NA)**. PA measures the zest individuals have for life, whereas NA measures the emotional distress individuals feel. People with a high PA have a positive self-perspective, are enthusiastic and active, whereas with a low PA are sad and insecure. On the opposite people with a high NA have a negative self-perspective and are anxious, whereas with a low NA are calm and secure. So when a person scores high in PA and low in NA incorporates **high self-esteem (HSE)** and if the person scores high in NA and low in PA incorporates **low self-esteem (LSE)** (Watson & Tellegen, 1985).

The **PANAS** (Positive & Negative Affect Schedule) scales were formed based on the PA & NA and it consisted of 10 descriptors (attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong, active) for the PA scale and 10 (distressed, upset, hostile, irritable, scared, afraid, ashamed, guilty, nervous, jittery) for the NA scale (Watson et al., 1988). Generally a self-esteem scale measures the degree to which people feel good or bad about themselves so it not surprising to find that self-esteem is associated with self-relevant emotions like pride (positive) or shame (negative) because they are evaluative of one's worth (Brown & Marshall, 2001).

The **explicit** and **implicit self-esteem** has been also been discussed within the framework of Cognitive Experiential Self Theory and explores the two separate systems, the cognitive and experimental system, individuals have. In the cognitive system which is rational and conscious resides the *explicit self-esteem* and in the experimental system which is automatic and unconscious resides the *implicit self-esteem*. **Explicit self-esteem** can be measured using the Rosenberg self-esteem scale and is defined as conscious feelings such is self-worth whereas **implicit self-esteem** is difficult to be assessed by self-reports because it lies outside the conscious and is defined as automatic self-evaluation (Epstein & Morling, 1995; Kernis, 2003).

It is possible **discrepant self-esteem** to form between explicit and implicit self-esteem due to the differences in the types & methods of processing information and can take either the *discrepant high self-esteem form* or the *discrepant low self-esteem form*. The **discrepant high self-esteem** form refers to people with high explicit self-esteem and therefore low implicit self-esteem which means although they have positive feelings for the self (high explicit self-esteem) at the same time these feelings are fragile due to the underlining insecurity and doubtless they feel for themselves (low implicit self-esteem). On the other hand **discrepant low self-esteem** form refers to people with low explicit self-esteem and therefore high implicit self-esteem which means although they do not have positive feelings for the self (low explicit self-esteem) at the same time there is a '*glimpse of hope*' (high implicit self-esteem) that might lead to optimistic attitudes (Zeigler-Hill & Terry, 2007).

2.5 Self-Esteem & Social Media Use

During the research for this study we came across literature where self esteem was either the dependant or the independent construct in compare with social media use, giving us interesting alternatives on the examining relationship.

Specifically, in a study by Gonzales & Hancock (2011) on testing the effect of Facebook use on self-esteem it was suggested from the computer-mediated communication scope that **updating and viewing one's own profile** could **enhance self-esteem**. Their research results confirm their suggestion since editing information about oneself needs added time and energy which prompts positive feelings.

However there are researches that contradicted these findings and concluded that using social networking sites **decreases self-esteem**. Specifically, it was supported that self-esteem correlates negatively with neuroticism and positively with extraversion (Watson, Suls, &

Haig, 2002) and individuals that are more extraverted have high levels of self-esteem (Francis, 1997). Thus in a study by Mehdizadeh (2010) revealed that the **intense of online activity** and some self-promotional content was associated with higher levels of narcissism and **lower levels of self-esteem** which another research also confirmed with results that online users were **disclosing more intimate information in status updating** but **not in posting comments** (Winter et al., 2014).

Schwartz (2010) indicated that self-esteem has a negative relationship with **frequency of using** Facebook because the more users go on Facebook thus giving it more meaning, the **lower their self-esteem** will get. Kalpidou et al. (2011) also investigated Facebook use and attitudes among college students and revealed that **spending a lot of time** on Facebook is related to low self-esteem. Furthermore Tazghini et al. (2013) examining the relationship between self-esteem and Facebook use, concluded that **low self-esteem** was associated with behaviors such is accepting requests from "friends" you don't know and experiences such is feeling connected to Facebook. Adding to these findings another survey by Kross et al. (2013) found that the **more people use Facebook the worse they feel**.

There are also researches that can both find positive and negative outcomes on using social networking sites such is the following:

Self-esteem has also been found to have a positive relationship with the **frequency of checking** your Facebook account and specifically concerning **group** users who checked 1-2 times daily in comparison with those who checked a few times per week, with the first group scoring higher than the latter group. On the other hand there was a negative correlation between meeting people, which was one of the **reasons for using Facebook**, and self-esteem. Moreover the same research found not significance between self-esteem and using Facebook, time spending on Facebook and updating status frequently (Eskisu et al., 2017).

In addition to the above Ellison et al. (2007) argued that individuals with social communication difficulties can overcome them in the online environment, resulting that social networking **site usage** can provide college students, who have **low self-esteem**, **greater benefits** to overcome barriers and access more opportunities improving their social capital. Thus if people **with low self-esteem** and high social anxiety can use a social network such is Facebook to overcome these problems it is likely for these people to **express themselves better** in the digital world (Błachnio, Przepiorka & Rudnicka, 2016).

Furthermore Steinfield et al. (2008) also found that Facebook users with **low self-esteem** increased their social capital greater than those with high self-esteem, because communicating online with other users is easier to do, than it is in person. Moreover two more recent

researches by Ghosh & Dasgupta (2015) and by Whitman & Gottdiener (2016) revealed that **higher levels of self-esteem can be related to more social media use.**

Although there are contradicted findings from prior researches that tested whether user profiles of social networking websites, like Facebook can be used to accurately predict users' personality and self-esteem, this has not been the case for professional networking websites such as LinkedIn. Therefore the relationship between self-esteem and LinkedIn motives is examined due to the past contradictory results regarding this matter with the following hypotheses:

- **Hypothesis 1: Positive Self-Esteem has a positive impact on LinkedIn Motives**
- **Hypothesis 2: Negative Self-Esteem has a negative impact on LinkedIn Motives**
- **Hypothesis 3: LinkedIn Frequency Usage has a significant impact on the relationship between Self-Esteem and LinkedIn Motives**
- **Hypothesis 4: Updating your LinkedIn Profile has a significant impact on the relationship between Self-Esteem and LinkedIn Motives**

2.6 Moderating Effect of Age, Gender and Marital status

Demographic variables have been used in past research documenting with association with social media use and personality traits, specifically the Big Five framework. After an extensive and thorough research online and to my acknowledgment there is very little indication that a research in association with **social media use, self-esteem plus demographic variables** (age, gender, marital status etc.) was conducted and findings such is how self-esteem affects different ages or genders when using a social network it is like scratching the surface of a rather interesting domain of a research. Thus although it is almost impossible to compare findings in this particular stage with all three variables in the mix, some exemptions were the following:

- Self-Esteem in Tazghini & Siedlecki (2013) findings was not significantly related to **age, gender** and **education** but significantly correlated with almost all of the personality traits.
- Another survey in 2011 from Gonzales & Hancock concluded that **gender**, although it was included in the research models, was not a significant predictor of self-esteem.
- In a research from the Gothenburg Research Institute (Denti et .al, 2012) on Sweden Facebook users showed that although there was a significant negative relationship between Facebook usage and self-esteem when the variables **age, gender, education** and **income** were enter to the examining model this relationship was not significant

anymore. Furthermore according to this study the reason for Facebook usage not being related to self-esteem when controlling demographical variables is that self-esteem is an assessment of one's worth and it is possible users can't assess accurately people's inner feelings.

- In a research on 23.532 Norwegian Facebook users, aged 16-88 years old, in the association of addictive social media use, narcissism and self-esteem the results on group differences demonstrated that either being a **woman**, or **single**, or a **student** or having a **lower age**, or a **lower education**, or a **lower income and lower self-esteem** is negative related to addictive social media use (Andreassen et al., 2017).
- In a research of 258 Israeli adults with an active Facebook account, results showed that self-esteem was found to be different for **gender**, with women compared to men had a lower self-esteem and for **salary levels**, where users that were in lowest salary band showed a significant difference compared to those of the fourth salary band (Gli-Or, et. al., 2015).

In Greece over the past years there have been studies on LinkedIn users but not in association with self-esteem variable. Some of them are included below in order to give an insight into Greek LinkedIn users' demographics.

In **2010** LinkedIn users in Greece according to a study contacted by the Centre of Research in Organizational Behavior and Leadership (**Crob-L**) in collaboration with the Greek People Management Association were over 20.000. The study examined the use of SNW between both HR executives and employees – job seekers and it was one of the first studies conducted in Greece on the subject. The results of the study showed that male participants were more active and engaged users on LinkedIn and understood its effectiveness than females; older job seekers used LinkedIn, while younger ones used Facebook and high level educated participants associated more with LinkedIn engagement and its effectiveness on the job search (Nikolaou, 2014).

In **2013** a Greek research approach entitled "**Social Networking Websites and their effect in contemporary Human Resource Management**" showed among other findings that the percentage of LinkedIn users increased with age increasing, especially in the age range 38-42, that male participants had higher percentage as LinkedIn users, that the percentage of LinkedIn's users educational level was high on holders of a university and postgraduate degree and low on high school graduates, that civil and private servants as well as unemployed/retired participants were more active users than students who showed a low

LinkedIn use and finally the study showed an increase in the use of LinkedIn in both married and divorcee users in compare to the single users (Aspridis, Kazantzi & Kiriakou, 2013).

In 2014 a survey on the “Use of Social Networking Sites in Greece” showed that the respondents knowledge concerning LinkedIn was 8% and the usage percentage was 8,66% . The demographics of the participants were: 54% male, 66,7% aged 18-30 years and 25% aged 31-40 years, 70,3% unmarried, 43,7% hold a university or a higher education degree and the majority being students, civil and private cervants (Drosos et al., 2015).

In conclusion of the previous literature review and due to the past limited results regarding the matter of examining self-esteem in parallel with LinkedIn use in Greece and demographical characteristics, the following hypotheses are made:

- **Hypothesis 5: Age moderates the relationship between Self-Esteem and LinkedIn Motives**
- **Hypothesis 6: Gender moderates the relationship between Self-Esteem and LinkedIn Motives**
- **Hypothesis 7: Marital Status moderates the relationship between Self-Esteem and LinkedIn Motives**

Chapter 3: Research Methodology

This chapter covers the methodology used in the survey, the design of the questionnaire, the method and sampling technique for data collection and the administration of the instrument for data analysis.

3.1 Methodology

A research plan has to ensure that the research/study can respond to the nature of the problem being investigated and that the methodology will be at the lowest possible cost. There are three research plan categories: (1) *exploratory research* (2) *casual research* and (3) *descriptive research* which will be used for this thesis (Stathakopoulos, 2001).

Descriptive research aims to accurately describe the variables that are part of the problem being investigated and is based on primary data which can help resolve the particular problem (Stathakopoulos, 2001).

Primary data can be collected by using methods such as observation, questionnaires and interviews and may be qualitative or quantitative. **Qualitative data** investigate in depth the particular problem and aim to identify and determine factors of parameters of the research problem without using mathematical models whereas **quantitative data** use mathematical models and hypotheses to estimate numerical the research data. In an analysis it is also important to use **secondary data** which can be collected through research journals, published papers, media, libraries, books, articles, statistical authorities etc. (Kehagias et al., 2008).

The method used in this empirical research will be a **questionnaire** and the analysis will be focus on its **quantitative data**. Also for **secondary data** a variety of sources were reviewed in order to have a better understanding on the subject.

3.2 Questionnaire

The topics in the questionnaire were in the respondents' frame of reference, the writing style conversational and the wording simple. The questionnaire was formed to have four sections categorized as following: *Frequency of LinkedIn use*, *Motives for using LinkedIn*, *Personal Characteristics* and *Demographic Characteristics*.

The *first section* explores **how often LinkedIn is been used** and consists of the five following questions: *How long do you have your LinkedIn account, how often do you use it, update your profile, comment on it or participate in LinkedIn groups*. For this section

multiple choice questions were used in order for the respondent to select either one answer out of four possible options or one out of three possible options.

The *second section* explores the **motives for using LinkedIn** and consists of twelve statements which revolve around topics such as *gaining information, having interactions, job searching and networking* and we asked participants to evaluate these statements giving them a quantitative value. Specifically using a 7-point Likert scale respondents were asked to specify the level of agreement or disagreement for these statements for example if someone strongly disagreed with a statement would have to evaluate it with 1 but on the other hand if someone completely agreed with it then would have to be evaluated with a 7. The format for the Likert scaling was: 1 (*Completely Disagree*), 2 (*Disagree*), 3 (*Mildly Disagree*), 4 (*Neither Agree nor Disagree*), 5 (*Mildly Agree*), 6 (*Agree*), 7 (*Completely Agree*).

These statements, mainly focusing on Job Searching & Networking (Zanella & Pais, 2014), were conceptualized after studying a variety of (a) paper results on utilizing social media in general and specific on LinkedIn/Facebook and also (b) previous questionnaires. The items were used to draw information on individuals' perspectives on the particular network.

The *third section* focuses on the **personality characteristics** of the respondents and it's based on the Rosenberg Self-Esteem scale (RSE) a reliable and valid instrument for assessing global self-esteem which according to Kernis (p.3,2003) is understood as a construct which '*consists of self-related emotions that are tied to worthiness, value, likeableness and acceptance*'. For the empirical research we used eight questions, four positively and four negatively keyed items of which the negatively keyed items later in the data analysis had to be reversed scored.

The *fourth and last section* is about the **demographic characteristics** of the respondents and solicits information about their employment status, age, gender, marital status, education level. For this section there were some multiple choice questions to select one answer out of possible options and also open-ended questions for the respondent to write down a short answer.

3.2.1 Self-Esteem and Research Model

Rosenberg (1965) developed the most used scale to measure self-esteem (**RSE**) in social science researches and it is designed similar to survey questionnaires consisting of five positive and five negative items which are presented alternately and respondents have to indicate the level of their agreement or disagreement with the statements. The Rosenberg self-

esteem scale is not favorable or unfavorable to an attitude towards oneself and thus it is considered a reliable and valid instrument for assessing self-esteem.

The RSE scale was based on the Guttman scale which according to Rosenberg (1965) insures an unidimensionality, a view which has been most often contradicted by researchers over the years and Rosenberg himself (1979) later recognized its multidimensionality. Therefore two distinct factors are revealed from factor analysis, consisting one with five items positive worded and the other one with five negative, but both factors assessing the same construct (Hensley & Roberts, 1976). However this pattern has lead researchers to either accepted it or dismiss it due to the rare discriminant validity of these two factors (Tafarodi & Swann, 1996).

Sharing the view of Gray-Little et al (1997) that “*the RSE scale can be shorten without compromising the measurement of global self-esteem*” due to the uniformity of the item content we decide to exclude a positive worded item containing the starting phrase ‘‘At times’’ and one negative worded item containing the starting phrase “All in all” and use an 8-item RSE scale in the research questionnaire.

3.3 Method and Sampling

A cross sectional **electronic survey** based on the questionnaire we analyzed in the previous section was conducted drawing sample from Greek LinkedIn users in a particular frame of time such was the 14-28th of November 2017. The basic requirement for the participants was to have a LinkedIn account and of course to be adults, from 18 and over, since we would be requesting opinions for a professional network.

The questionnaire’s link page accompanied by an introduction letter was distributed through **email** and also posted on my **LinkedIn account** as well as my **Facebook account** and **Facebook groups** like the Hellenic Open University Student group which consists of over 6.400 members. Friends, collogues, fellow students kindly shared the link with the questionnaire on their accounts drawing more participants to the survey.

The electronic method of collecting data was chosen because an online survey such is Google Survey, can be conducted swiftly, effortless and with no cost. The participants were informed that their responses will be confidential and therefore were kindly requested to respond honestly. They were also given the choice to enter their LinkedIn account name for the reliability of the survey. The questionnaire’s length was less than 10 minutes and **205 questionnaires** were collected, from which 113 respondents were job-seekers and 92 were employed.

3.4 Instruments of Data Analysis

After the questionnaires were collected a database with the primary data had to be created in order to analyze them. For this reason we used the **IBM SPSS STATISTICS 23** program to type, organize and transform the data into a database so that we can conduct later the data analysis. The crucial following steps had to be taken:

- It was important to define the properties of each variable in the Variable View simply by filling in the information of eleven categories such are name, type, width, decimals, label, values, missing, columns, align, measure, role.
- Each response from a question had to be encoded to numbers starting from 1 and going up e.g. ‘‘How long do you have your LinkedIn account? ‘‘ Response: *1-11 months was given number 1, Response: 1-2 years was given number 2 etc.*
- Open questions were organized in categories and then also encoded as above.
- As mentioned earlier some of the questions of the questionnaire were phrased negatively so a reverse scored was conducted to the responses of the negatively keyed items.

After these steps were taken we went ahead and conducted factor analyses on the **Motives for using LinkedIn** and on the **Self-Esteem** questions to group them respectively in categories.

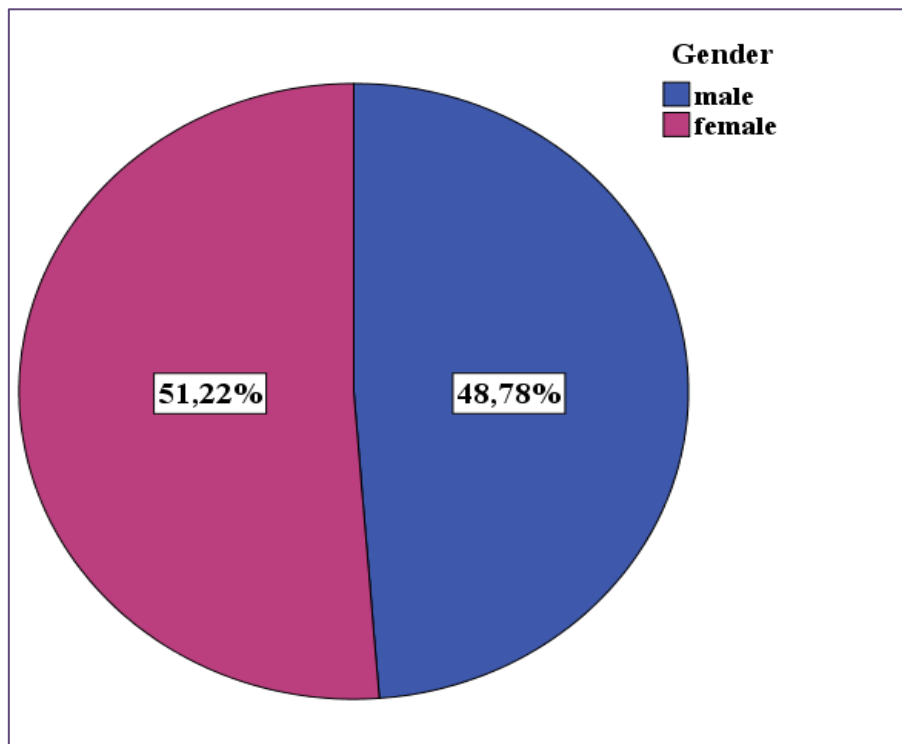
In addition to the SPSS program, **IBM SPSS AMOS** an added SPSS module was also used for structural equation modeling (SEM) to test the validity and statistical significance of the variables as well as the overall adaption of the theoretically model proposed in this paper. Also with AMOS software tests between different groups were conducted and new insights of the data were gained.

Chapter 4: Results

In this chapter we will present the results derived from the online survey and the analysis of the primary data. The results are divided into three sections. The first section will display the results of the respondents' demographic characteristics and information on the LinkedIn usage frequency. The second section will describe the factor analyses methods (EFA & CFA) and explain the factors that were extracted and used in the nested factor model. Finally in the third section we will test the hypotheses using the Structural Equations Models (SEM) technique.

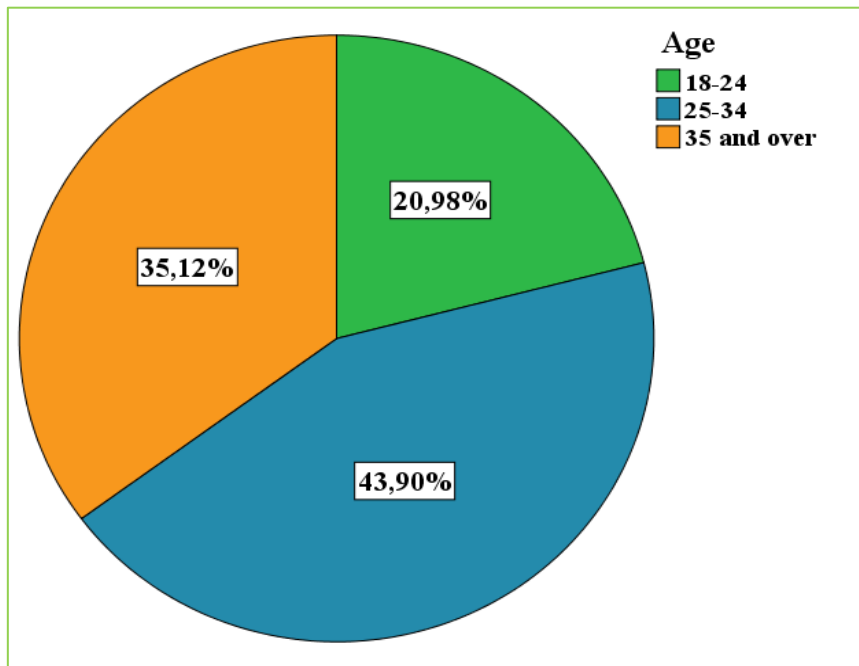
4.1 Demographic Results

The results obtained were from 205 participants of whom 105 were female and consisted the 51.22% of the sample and 100 were male and consisted the remaining 48.78% of the sample.



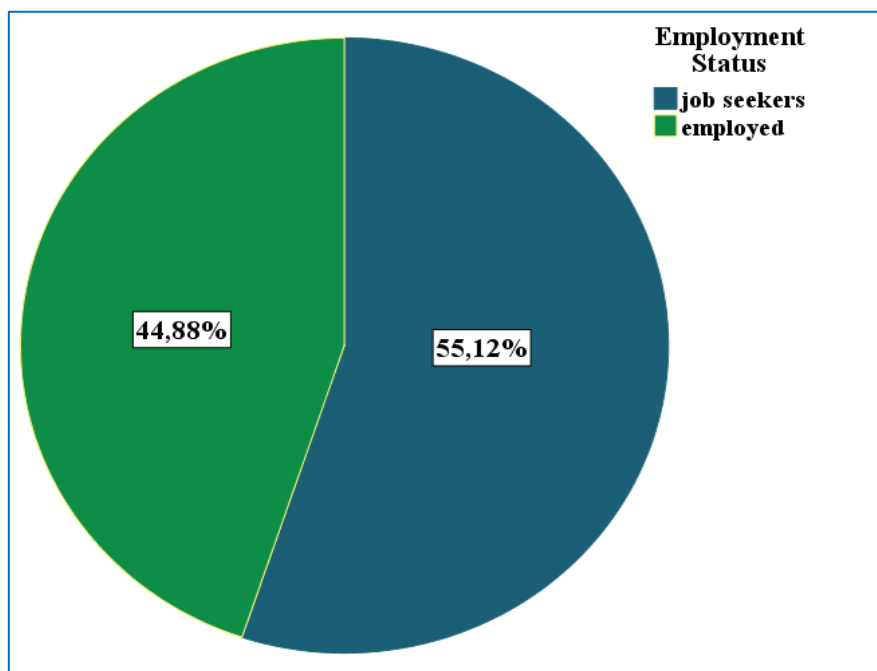
Graphic 2: Participants Gender

There were three age groups with the first one being ages 18-24 years old, the second one ages 25-34 years old and the third one ages 35 and over. The group with the majority of participants as you can view below is the one that consists ages 25-34 years old that has **43.90%**, followed by the ages 35 and over group with **35.12%** leaving in the third place the ages 18-24 years old group with **20.98%**.



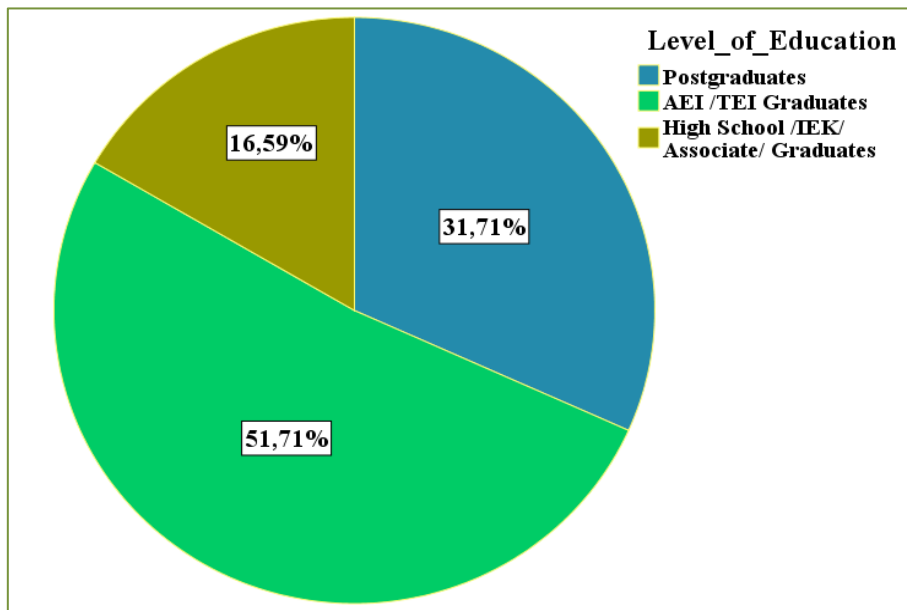
Graphic 3: Participants Age

It was important for this empirical research which is about a professional network to have opinions from job seekers as well as employees to understand better how users from different status utilize LinkedIn. So the results showed that the sample composed of **55.12% job seekers** that means 113 individuals and of **44.88% employed** participants thus 92 individuals.



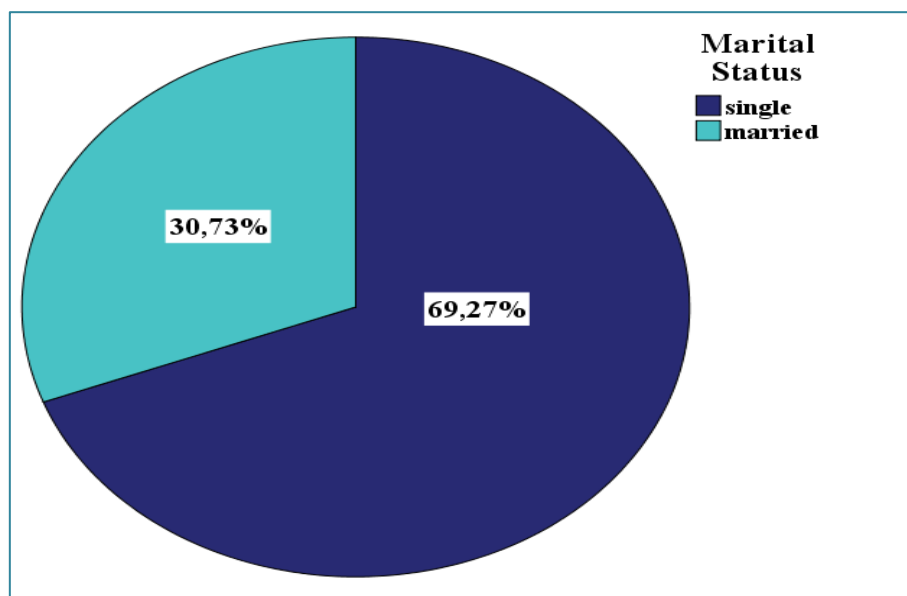
Graphic 4: Participants Employment Status

The majority of the participants were high educated with 51.71% of them being holders of a University degree (AEI) or a Technological Educational Institute (TEI) degree and 31.71% of them having a Postgraduate diploma. The remaining percentage of 16.59% was participants that were holders of a high school degree or an Associate/Vocational Educational & Training diploma (IEK).



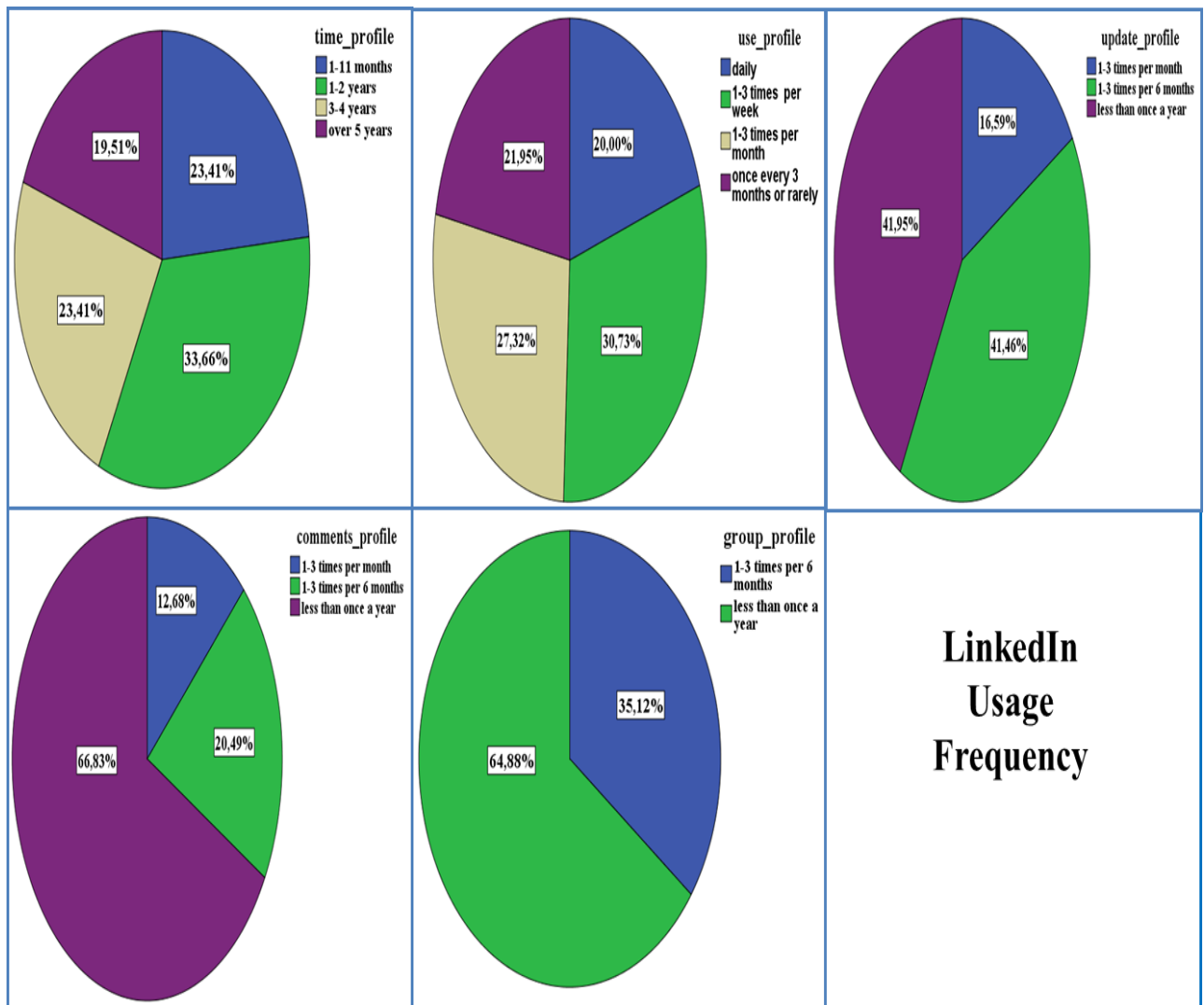
Graphic 5: Participants Level of Education

The marital status of the participants was 69.27% single and 30.73% married or being in a living together relationship as you can view below:



Graphic 6: Participants Marital Status

Concerning the frequency of LinkedIn’s Usage from the Greek participants in this empirical research the results showed that **28.41%** had the their account less than a year, **33.66%** up to two years, **22.41%** three to four years and **19.51%** over five years. On the question ‘‘how often do you use your LinkedIn account’’ the responses were **20%** daily, **30.73%** 1-3 times per week, **27.32%** 1-3 times per month and **21.95%** once every three months or rarely. On the question ‘‘how often do you update your LinkedIn profile’’ the responses were **16.59%** for 1-3 times per week, **41.46%** for 1-3 times per six months and **41.95%** for less than once a year. About commenting their LinkedIn the participants disclose that **12.68%** of them comment 1-3 times per month, **20.49%** comment 1-3 times per six months and **66.83%** comment less than once a year. Finally on how often do you join a group question **35.12%** of the respondents said 1-3 times per six months and **64.88%** said less than once a year.



Graphic 7: LinkedIn Usage Frequency

4.2 Factor Analysis

Factor Analysis is ‘an interdependence technique whose primary purpose is to define the underlying structure among the variables in the analysis’. This multivariate technique provides the tools to analyze the structure of the correlations among a large number of variables such as the questionnaire responses defining them into sets, known as factors, which are highly interrelated and are assumed to represent dimensions within the data. Factor Analysis can be either Exploratory or Confirmatory (Hair et al., p.93, 2014).

The main purpose of the of the factor analytic technique is either to summarize the information that is been contained in a number of original variables into a smaller group of new dimensions with a minimum loss of information or to achieve data reduction either by identifying representative variables from a larger group of variables or by creating a whole new smaller group of variables to replace partially or entirely the original set (Hair et al., 2014).

4.2.1 Exploratory Factor Analysis (EFA)

In this section we use the **Exploratory Factor Analysis** in SPSS to process the primary data we collected and specifically to group firstly the 12 statements which explore the reasons (motives) for using LinkedIn and secondly the self-esteem factors.

The Principal Components method is used for prediction reasons and it summarizes most of the variance in a minimum number of factors. Also the orthogonal rotation method Varimax maximizes the sum of variances of the required factor loadings, which means factor loading that are either very high or very low and therefore easily paired with each variable (Hair et al., 2014).

➡ **LinkedIn Factors Model**

According to the results from the **Rotated Component Matrix** of the **LinkedIn Factors Model** two clear factors were determined with each of them having items listed from high to lowest loadings (Table 1). Moreover the correlation matrix showed that the variables were related to each other and the overall significance was assessed with the **Bartlett’s test of Sphericity** at **0.000** which indicates sufficient correlation if $\text{sig} < 0.05$. The Kaiser-Meyer-Olkin (**KMO**) Measure of Sampling Adequacy (**MSA**) test which also measures how suited is the data for a factor analysis was estimated at **0.901** which is very good considering that values must exceed 0.50 for both the overall test and each individual variable (Hair et al.,

2014). The **Anti-image Metrics** displayed the highest correlation for MSA was at **0.947** and the lowest at **0.839** which is consider very good.

Afterwards we examine the size of **Communalities** which indicates the amount of variance in a particular variable that is accounted for by the factor solution and if there are high values it's an indication that a large amount of variance is extracted by the solution whereas low values indicate that a great part of the variable's variance is not accounted for. A statistical guideline for the lower value can be 0.50 so the estimated values from **0.568** to **0.759** are considered sufficient (Hair et al., 2014).

The **Total Variance Explained** table depicted that the variance is divided into 12 possible factors but only three of them have eigenvalue greater than 1.0 which is the cut off criterion of the factors worth. The two factors retained represent the **67.144%** of the variance of the 12 variables which is sufficient in terms of total variance explained. The **Scree Plot** which is the line chart with eigenvalues on the left axis and potential factors on the right axis also confirms the two factors conclusion (Hair et al., 2014). The **Reliability** of the two factors extracted can be measured with the reliability coefficient **Cronbach's Alpha** which assess the consistency of the entire scale and its lowest limit is 0.600 (Hair et al., 2014). Both factors are over .800 (Table 1)

Rotated Component Matrix ^a		
EFA on LinkedIn Reasons	Component	
	1	2
Job Searching (Cronbach's Alpha: .906)		
linkedin_reason_6 increases my chances of finding a job	.852	
linkedin_reason_2 gives me the opportunity to find a job	.828	
linkedin_reason_3 helps me present my curriculum vitae to potential prospective employers	.815	
linkedin_reason_1 informs me about job openings posted by companies	.750	
linkedin_reason_5 I think it is used by recruiters looking for employees	.739	
linkedin_reason_4 allows me to upload files, encourage connections, or search for jobs	.677	
linkedin_reason_7 helps me keep in touch with my professional sector	.661	
Networking (Cronbach's Alpha: .889)		
linkedin_reason_9 helps me keep in touch with a wide network of people		.827
linkedin_reason_11 allows me to have an interesting conversation with other members of my network		.798
linkedin_reason_10 helps me arrange a face-to-face meeting with some members of my network		.796
linkedin_reason_12 shows that I know important people (from the profile of the connections I have		.793
linkedin_reason_8 shows that I know a lot of people (by the number of my connections)		.793

Table 1: EFA on LinkedIn Motives

The **LinkedIn Factors Model** consists of the **1st Factor** which was labeled **Job Searching** because all the loaded items revolve around finding a job and the **2nd Factor** which was labeled **Networking** because the loaded items are related to networking.

➔ Self-Esteem Factors Model

The same procedure was followed to extract the **self-esteem factors**. According to the results from the **Rotated Component Matrix** of the **Self-Esteem Factors Model** two clear factors were determined with each of them having 4 items listed from high to lowest loadings., the correlation matrix significance was assessed with the **Bartlett's test of Sphericity** at **0.000**, the **KMO MSA** was estimated at **0.821** the **Anti-image Metrics** depicted the highest correlation for MSA was at **0.909** and the lowest at **0.751**, the size of **Communalities** values were from **0.504** to **0.829**, the **Total Variance Explained** table indicated that the variance was divided into 8 possible factors but only two of them had eigenvalues greater than 1.0 and represented the **65.526%** of the variance of the whole variables, the **Scree Plot** also confirmed the two factors conclusion and the **Reliability test** was measured with the reliability coefficient **Cronbach's Alpha** at **.841** for the 1st and at **.796** for the 2nd factor (Table 2).

Rotated Component Matrix ^a		
Self-Esteem Factors	Component	
	1	2
Negative Self-Esteem (Cronbach's Alpha: .841)		
self_esteem6_I certainly feel useless at times	.900	
self_esteem2_At times, I think I am no good at all	.813	
self_esteem8_I wish I could have more respect for myself	.799	
self_esteem5_I feel that I do not have much to feel proud of	.676	
Positive Self-Esteem (Cronbach's Alpha: .796)		
self_esteem3_I feel that I have a number of good qualities		.819
self_esteem4_I am able to do things as well as most other people		.811
self_esteem7_I feel that I'm a person of worth, at least on an equal plane as others		.746
self_esteem1_On the whole, I am satisfied with myself		.653

Table 2: EFA on Self-Esteem

The **Self-Esteem Factors Model** consists of the 1st factor which was labeled **Negative Self-Esteem** because all the items were negatively worded and the 2nd factor which was labeled **Positive Self-Esteem** because all the items were positively worded. Finally the reliability of the Self-Esteem Factors matrix was tested with the Spearman-Brown Coefficient which resulted to **.814** confirming furthermore its sufficiency.

4.2.2 Confirmatory Factor Analysis (CFA) with SEM

After the EFA we conducted Confirmatory Factor Analysis (CFA) using the Structural Equation Model (SEM) technique to confirm the sufficiency firstly of the two factors extracted from the statements on reasons (Motives) for using LinkedIn (**LinkedIn Factors Model**) and secondly the sufficiency of the two factors extracted from the Self-Esteem items (**Self-Esteem Factors Model**), in order to proceed to further analysis.

SEM is a multivariate technique that combines aspects of factor analysis as well as multiple regressions which enables at the same time the examination of interrelated dependence relationships among and between the measured variables and constructs. The visual representation of a SEM model is called **path diagram** where the complete set of relationships of the model's variables/constructs is depicted (Hair et al., 2014).

Specifically dependence relationships are demonstrated by **straight arrows** emanating from the predictor variable and pointing to the dependent variable/construct, correlational relationship is depicted by **curval arrows**, unobserved (latent) variables are represented by **circle or ellipse shape**, observed variables (indicators) are represented by **rectangle or square shape**, a **single-headed arrow** represents a casual relation whereas a **double-headed arrow** represents a non-casual relation, **single-headed arrows which do not emanate from a rectangle or square** represent residuals (e) and **double-headed arrows between two residuals** represent the covariance of the residuals. Also the **links** between constructs might be estimated by independent regression equations (Hair et al., 2014).

➡ **LinkedIn Factors Model**

In the path diagram for the **LinkedIn Factors Model** the unobserved variables represented by an **ellipse** shape are each of the two factors (Job Searching, Networking) we extracted from the EFA. The observed variables represented by **rectangle** are the linkedin_reasons loadings for each of the two factors. **Straight arrows** emanating from each of the factors and pointing to their specific linkedin_reasons loadings depict the dependence relationships between them. **Double-headed curval arrows** depict the correlational relationship between the two factors of the model and **single-headed arrows** which do not emanate from the linkedin_reasons loadings represent residuals (e) and **double-headed arrows** between two residuals represent the covariance between them.

It is important for a good model fit to have the following values: $p\text{-value} < 0.005$, for RMSEA between 0.05 and 0.08, for TLI approaching 1 and for CFI above 0.90 (Hair et al., 2014). Thus we run the path diagram for the **LinkedIn Factors Model**, checking the boxes for

standardized estimates and modification indices on the Analysis Properties and the results indicate that the two factor model is sufficient with $\chi^2 = 108.542$ $df= 51$, **p-value**=0.000 and also a very good model fit with indices values **TLI**= .950 , **CFI**=.961 and **RMSEA**=.074 (Table 3).

Measure	Estimate	Threshold
CMIN	108.542	--
DF	51	--
IN/DF	2.128	Between 1 and 3
CFI	0.961	>0.95
TLI	0.95	>0.90
GFI	0.918	>0.90
RMSEA	0.074	<0.08

Table 3: LinkedIn Factors Model Indices

At a minimum, factor loadings should be statistically significant of the absolute value of 1 to satisfy the adequate level of convergent validity and to consider factor loadings strong should be 0.50 or higher (Hair, 2014). The **convergent validity** of the examining model depicts that factors loadings ranged from the highest loading of 0.90 to the lowest of 0.59, not only satisfy the adequate level but exceed it.

For further validation of the **LinkedIn Factors Model** the discriminant validity test was used. **Discriminant validity** examines the *extent a construct is distinguish from other constructs and if the fit of the two construct model is significantly different from the one-construct model then this criterion is supported* (Hair et al., p.680, 2014). The square correlation value between the factors Job Searching and Networking was 0.354, lower in comparison of each of the two factors estimates 0.583 and 0.587 respectively, which were calculated with the **Average Variance Extracted (AVE)** a summary indicator for convergent validity, thus criterion was supported.

➡ **Self-Esteem Factors Model**

The same procedure was followed for the path diagram of the **Self-Esteem Factors Model** with the unobserved variables being the two self-esteem factors (Positive Self-Esteem, Negative Self-Esteem) and the observed variables being the self_esteem item loadings of each of the two factors. The results from running the path diagram indicated that $\chi^2 = 44.908$, $df= 18$, **p-value**=0.000 and indices values **TLI**= .936 , **CFI**=.959 , **RMSEA**=.086 which is consider acceptable taking in consideration that it is close to the boardline and all the rest measurements were excellent, confirming overall a good model fit (Table 4).

Measure	Estimate	Threshold
CMIN	44.908	--
DF	18	--
CMIN/DF	2.495	Between 1 and 3
CFI	0.959	>0.95
TLI	0.936	>0.90
GFI	0.949	>0.90
RMSEA	0.086	<0.08

Table 4: Self-Esteem Model Indices

Convergent validity on factor loadings was exceeded in this model measurement too, since factor loadings ranged from 0.89 to 0.60. The **AVE** estimation of the factors loadings for Negative Self-Esteem was 0.588 and for Positive Self-Esteem 0.496 very close to the threshold, so both were acceptable. The **discriminant validity** square correlation value 0.285 was lower than the factors estimates of 0.588 & 0.496 thus criterion was supported.

➡ **Nested Model (LinkedIn & Self-Esteem Factors Model)**

After examining both factor models and confirming their sufficiency the next step was to combine them into our examining nested SEM model (Figure1) in order to test the hypotheses we made. Modification indices were suggested for a better model fit and thus the loadings from Job Searching, Networking, Negative Self-Esteem and Positive Self-Esteem provided with $\chi^2 = 335.045$, **p-value**=0.000 and indices values **TLI**= .909 , **CFI**=.922 and **RMSEA**=.072 (Table 5).

Measure	Estimate	Threshold
CMIN	335.045	--
DF	163	--
CMIN/DF	2.055	Between 1 and 3
CFI	0.922	>0.95
TLI	0.909	>0.90
GFI	0.862	>0.90
RMSEA	0.072	<0.08

Table 5: Nested LinkedIn & Self-Esteem Model Indices

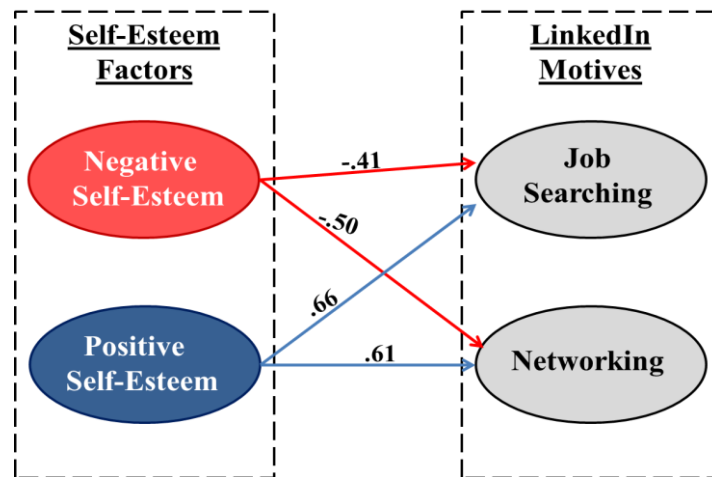


Figure 1: Nested LinkedIn & Self-Esteem Factors Model

All the tests met our desirable thresholds' for each fit index showing that all models are fully acceptable fit for their data. The hypothesized nested SEM model is further tested for hypotheses H1 and H2.

- **Hypothesis 1: Positive Self-Esteem has a positive impact on LinkedIn Motives**
- **Hypothesis 2: Negative Self-Esteem has a negative impact on LinkedIn Motives**

The results are depicted with the standardized path coefficient (β), significance level (p-value), two tailed p-value (C.R.) and standard error (S.E.). As demonstrated in Table 6 paths from Negative Self-Esteem to Job Searching and Networking respectively, are negative (ranged from $\beta=-0.41$ to $\beta=-0.50$) as well as statistically significant (ranged from $t=-4.107$ to $t=-0.50$). On the other hand paths from Positive Self-Esteem to Job Searching and Networking are positive (ranged from $\beta=0.61$ to $\beta=0.66$) as well as statistically significant (ranged from $t=4.751$ to $t=5.512$).

Hypotheses	Path		S.E. < 2.58	C.R. (t-value) > 1.96	Pvalue < 0.05	Path Coefficient (β)	Hypothesis Test Result
H1 & H2	Job Searching	<---	0.073	-4.017	0.000	-0.41	CONFIRMED
	Networking	<---	0.07	-4.414	0.000	-0.5	CONFIRMED
	Job Searching	<---	0.165	5.512	0.000	0.66	CONFIRMED
	Networking	<---	0.152	4.751	0.000	0.61	CONFIRMED

Table 6: Nested SEM Model Confirmed Hypotheses

Thus this test supports both the H1 and the H2 that Positive Self-Esteem and Negative Self-Esteem have an impact on both Job Searching and Networking. Overall Positive Self-Esteem

has a greater impact on Job Seeking ($\beta=0.66$) and Networking ($\beta=0.61$) than Negative Self-Esteem.

4.2.3. SEM on LinkedIn Groups

After confirming that the examining model with the LinkedIn and Self-Esteem factors has a good fit we test our hypotheses concerning group differences. First we examine the overall model for differences between the unconstrained and the fully constrained chi square of the competing nested models. If there are no differences at the model level we check at the path level. Path analysis estimates the relationships in a SEM model and also determines the strength of the each path (Hair et al., 2014). The next hypothesis is related to self-esteem and frequency of profile use:

- **Hypothesis 3: LinkedIn Frequency Usage has a significant impact on the relationship between Self-Esteem and LinkedIn Motives**

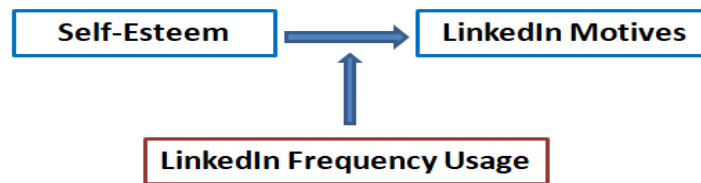


Figure 2: Hypothesis 3

We moderate the nested SEM model by adding four groups concerning the **frequency of profile usage: daily, 1-3 times per week, 1-3 times per month and once a year and rarely**. The chi square differences statistic ($\Delta\chi^2$) was measured at 111.99 with $df=60$ (unconstrained: 1069.133 with $df=652$ and fully constrained: 1081.126 with $df=712$) indicating clearly that there are differences between the groups concerning the frequency of profile usage (Table 7).

Overall Model	χ^2	Df	$\Delta\chi^2$	Δdf	Sig.
Unconstrained	1.069,133	652			
Constrained	1.081,126	712	111.99	60	<0.05

Table 7: $\Delta\chi^2$ on Groups with Frequency of Profile Usage

In order to specify these differences we check each of the paths by constraining each time the regression weight of the examining path with a parameter and checking if the constrained path χ^2 is higher than the path thresholds of $\Delta\chi^2$. The results indicate that there are differences in paths Negative Self-Esteem to Job Searching and Positive Self-Esteem to Job Searching & Networking respectively, thus we check on path level to specify these differences (Tables 8 & 9).

USE				
Paths	χ^2	$\Delta\chi^2$	Confidence	Difference
Negative Self-Esteem & Job Searching	1085.02	1080.48	99%	1% difference
Negative Self-Esteem & Networking	1071.20	1075.39		No difference
Positive Self-Esteem & Job Searching	1083.00	1080.48	99%	1% difference
Positive Self-Esteem & Networking	1077.66	1076.95	95%	5% difference

Table 8: Path Differences on Profile Usage groups

Hypothesis	Group	Path		S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue < 0.05	Path Coefficient (β)	Hypothesis Test Result	
H3	daily use	Job Searching	<---	Negative Self-Esteem	0.053	0.706	0.48	0.12	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.108	-2.357	0.018	-0.47	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.101	1.724	0.085	0.35	NOT CONFIRMED
		Networking	<---	Positive Self-Esteem	0.178	2.22	0.026	0.44	CONFIRMED
	every 1-3 times per week	Job Searching	<---	Negative Self-Esteem	0.094	-2.492	0.013	-0.41	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.122	-2.704	0.007	-0.48	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.393	3.137	0.002	0.81	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.463	2.966	0.003	0.73	CONFIRMED
	every 1-3 times per month	Job Searching	<---	Negative Self-Esteem	0.163	-3.485	0.000	-0.68	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.078	-1.584	0.113	-0.44	NOT CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.35	3.104	0.002	0.71	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.164	1.61	0.107	0.51	NOT CONFIRMED
	once a year or rarely	Job Searching	<---	Negative Self-Esteem	0.28	-0.342	0.732	-0.13	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.245	-0.403	0.687	-0.15	NOT CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.484	0.527	0.598	0.21	NOT CONFIRMED
		Networking	<---	Positive Self-Esteem	0.421	-0.209	0.835	-0.8	NOT CONFIRMED

Table 9: Paths on Frequency of Profile Usage groups

As demonstrated in Table 9 eight differences are confirmed. Path Negative Self-Esteem to Networking confirms a slight difference between groups **daily** ($\beta=-0.47$) and **1-3 times per week** ($\beta=-0.48$) and path Negative Self-Esteem to Job Searching confirms greater differences between groups **1-3 times per week** ($\beta=-0.68$) and **1-3 times per month** ($\beta=-0.41$). On the other hand path Positive Self-Esteem to Job Searching confirms differences between groups **1-3 times per week** ($\beta=0.81$) and **1-3 times per month** ($\beta=0.71$), whereas Positive Self-Esteem to Networking confirms differences between groups **daily** ($\beta=0.44$) and **1-3 times per week** ($\beta=0.73$).

Specifically path Negative Self-Esteem to Job Searching has a greater impact on a **1-3 times per month** basis with $\beta=-0.68$ than on a **1-3 times per week** basis ($\beta=-0.41$) and path Positive Self-Esteem to Networking has a greater impact with $\beta=0.73$ on a **1-3 times per week** basis than on a **daily** basis ($\beta=0.44$). Positive Self-Esteem has a greater impact to Job Searching ($\beta=0.81$) and to Networking ($\beta=0.73$) on a **1-3 times per week** basis than Negative Self-Esteem.

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H3	daily use	Networking	<---	Negative Self-Esteem	0.108	-2.357	0.018	-0.47	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.178	2.22	0.026	0.44	CONFIRMED
	every 1-3 times per week	Job Searching	<---	Negative Self-Esteem	0.094	-2.492	0.013	-0.41	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.122	-2.704	0.007	-0.48	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.393	3.137	0.002	0.81	CONFIRMED
	every 1-3 times per month	Networking	<---	Positive Self-Esteem	0.463	2.966	0.003	0.73	CONFIRMED
		Job Searching	<---	Negative Self-Esteem	0.163	-3.485	0.000	-0.68	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.35	3.104	0.002	0.71	CONFIRMED

Table 10: Confirmed Hypotheses on Frequency Profile Usage groups

Overall Positive Self-Esteem has a significant impact to Job Searching ($\beta= 0.81$) on a **1-3 times per week** basis than on an **every 1-3 times per month** basis ($\beta= 0.71$). No results were confirmed on a once a year or rarely basis and on a daily use the results were weaker than on an **every 1-3 times per week** basis. Thus hypothesis H3 is partially confirmed (Table 10).

- **Hypothesis 4: Updating your LinkedIn Profile has a significant impact on the relationship between Self-Esteem and LinkedIn Motives**

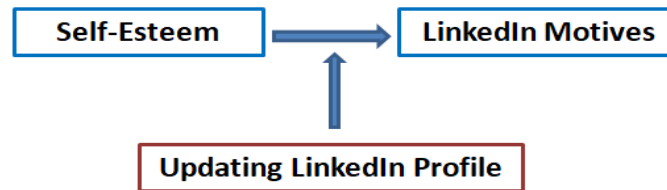


Figure 3: Hypothesis 4

Next, in order to check Hypothesis 4, we moderate the nested SEM model by adding three groups concerning the **frequency of updating profile: 1-3 times per month, 1-3 times per six months and less than once a year**. The chi square differences statistic ($\Delta\chi^2$) was measured at 46.916 and $df=40$ and the overall model concerning these three groups did not indicate any differences (Table 11).

Overall Model	χ^2	Df	$\Delta\chi^2$	Δdf	Sig.
Unconstrained	788.166	489			
Constrained	835.08	529	46.914	40	<0.05

Table 11: $\Delta\chi^2$ on Frequency Updating Profile

In order to specify if there are any differences between the groups we check each of the paths by constraining each time the regression weight of the examining path with a parameter. The results in table 12 indicate that there are differences in the paths thus we check on path level to specify these differences (Tables 12 & 13).

UPDATE PROFILE			
Paths	χ^2	$\Delta\chi^2$	Difference
Negative Self-Esteem & Job Searching	794.71	794.16	5% difference
Negative Self-Esteem & Networking	793.94	792.77	10% difference
Positive Self-Esteem & Job Searching	794.19	794.16	5% difference
Positive Self-Esteem & Networking	798.16	797.38	1% difference

Table 12: Paths Differences on Updating Profile groups

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H4	1-3 times per week	Job Searching	<---	Negative Self-Esteem	0.52	-2.181	0.029	-1.5	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.589	-2.117	0.034	-1.29	NOT CONFIRMED
		Job Searching	<---	Positive Self-Esteem	1.214	2.26	0.024	1.82	NOT CONFIRMED
		Networking	<---	Positive Self-Esteem	1.388	2.221	0.026	1.6	NOT CONFIRMED
	1-3 times per month	Job Searching	<---	Negative Self-Esteem	0.101	-3.049	0.002	-0.41	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.097	-2.978	0.003	-0.45	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.195	4.385	0.000	0.68	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.184	3.558	0.000	0.6	CONFIRMED
	once every year or rarely	Job Searching	<---	Negative Self-Esteem	0.096	-1.678	0.093	-0.25	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.088	-2.926	0.003	-0.52	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.233	2.644	0.008	0.46	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.221	2.669	0.008	0.47	CONFIRMED

Table 13: Paths on Updating Profile groups

On a **1-3 times per week** basis all path coefficients are above 1 so no results can be acceptable on the other hand results from the other two groups can be confirmed. Specifically path **Negative Self-Esteem to Networking** confirms differences between groups **1-3 times per month** and **once every year or rarely** whereas paths **Positive Self-Esteem to Job Searching** and **Positive Self-Esteem to Networking** confirm differences between all remaining groups.

Specifically, path **Positive Self-Esteem to Job Searching** has a greater impact with $\beta=0.68$ on a **1-3 times per month** basis than on **once every year or rarely** basis ($\beta=0.46$). Also path **Positive Self-Esteem to Networking** has a greater impact with $\beta=0.60$ on a **1-3 times per month** basis than on a **once every year or rarely** basis ($\beta=0.47$) (Table 13). Overall updating your LinkedIn Profile has a significant impact on the relationship between **Positive Self-Esteem** and **LinkedIn Motives**, thus hypothesis H4 is confirmed (Table 14).

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H4	1-3 times per month	Job Searching	<---	Negative Self-Esteem	0.101	-3.049	0.002	-0.41	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.097	-2.978	0.003	-0.45	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.195	4.385	0.000	0.68	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.184	3.558	0.000	0.6	CONFIRMED
	once every year or rarely	Networking	<---	Negative Self-Esteem	0.088	-2.926	0.003	-0.52	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.233	2.644	0.008	0.46	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.221	2.669	0.008	0.47	CONFIRMED

Table 14: Confirmed Hypotheses on Updating Profile groups

➤ **Hypothesis 5: Age moderates the relationship between Self-Esteem and LinkedIn Motives**

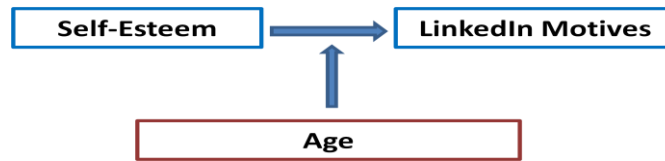


Figure 4: Hypothesis 5

Participants were categorized in three age groups: **18-24**, **25-34** and **35 & over**, so we added these groups into our examining model. The chi square differences statistic ($\Delta\chi^2$) was measured at 45.621 with $df=40$ and the overall model concerning the three age groups did not indicate any differences (Table 15).

Overall Model	χ^2	Df	$\Delta\chi^2$	Δdf	Sig.
Unconstrained	813.248	489			
Constrained	858.869	529	45.621	40	<0.05

Table 15: $\Delta\chi^2$ on Age groups

In order to specify if there are any differences between the groups we check each of the paths by constraining each time the regression weight of the examining path with a parameter. The results in table 16 indicate that there are differences on path level (Tables 16 & 17).

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H5	18-24 years old	Job Searching	<---	Negative Self-Esteem	0.192	-2.142	0.032	-0.47	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.292	-2.938	0.003	-0.87	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.647	2.757	0.006	0.9	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.704	2.615	0.009	0.82	CONFIRMED
	25-34 years old	Job Searching	<---	Negative Self-Esteem	0.091	-2.398	0.016	-0.34	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.089	-1.888	0.059	-0.28	NOT CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.208	3.66	0.000	0.62	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.184	2.159	0.031	0.35	CONFIRMED
	35 & over	Job Searching	<---	Negative Self-Esteem	0.156	-1.64	0.101	-0.29	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.142	-2.678	0.007	-0.5	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.256	2.574	0.01	0.49	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.242	3.205	0.001	0.66	CONFIRMED

Table 16: Paths on Age groups

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H5	18-24 years old	Job Searching	<---	Negative Self-Esteem	0.192	-2.142	0.032	-0.47	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.292	-2.938	0.003	-0.87	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.647	2.757	0.006	0.9	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.704	2.615	0.009	0.82	CONFIRMED
	25-34 years old	Job Searching	<---	Negative Self-Esteem	0.091	-2.398	0.016	-0.34	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.208	3.66	0.000	0.62	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.184	2.159	0.031	0.35	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.142	-2.678	0.007	-0.5	CONFIRMED
	35 & over	Job Searching	<---	Positive Self-Esteem	0.256	2.574	0.01	0.49	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.242	3.205	0.001	0.66	CONFIRMED

Table 17: Confirmed Hypotheses on Age groups

Specifically Positive Self-Esteem to Job Searching has a greater impact on ages 18-24 with $\beta=0.90$ than ages 25-34 ($\beta=0.62$) and ages 35 & over ($\beta=0.49$). Positive Self-Esteem to Networking has a greater impact on ages 18-24 with $\beta=0.82$ than ages 35 & over ($\beta=0.66$) and ages 25-34 ($\beta=0.35$) (Table 16). Negative Self-Esteem to Job Searching has a greater impact on ages 18-24 with $\beta=0.47$ than ages 25-34 ($\beta=0.34$) and Negative Self-Esteem to Networking has a greater impact on ages 18-24 with $\beta=0.87$ than ages 35 & over ($\beta=0.5$). Overall ages 18-24 have a significant impact on the relationships Self-Esteem and Job Searching (positive $\beta= 0.90$, negative $\beta=0.47$) and Self-Esteem and Networking (positive $\beta=0.82$, negative $\beta=0.87$) than the other two age groups. Thus hypothesis H5 is confirmed.

➤ **Hypothesis 6: Gender moderates the relationship between Self-Esteem and LinkedIn Motives**

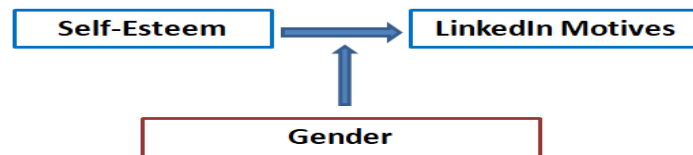


Figure 5: Hypothesis 6

We moderated the nested SEM model by adding the two gender groups, we then tested the square differences statistic ($\Delta\chi^2$) which was measured at 11.592 with $df=20$ and the results did not indicated any differences in the overall model (Table 18).

Overall Model	χ^2	Df	$\Delta\chi^2$	Δdf	Sig.
Unconstrained	565.05	326			
Constrained	576.642	346	11.592	20	<0.05

Table 18: $\Delta\chi^2$ on Gender groups

We then check each of the paths to specify if there are any differences between gender groups. From the results represented on Table 19 eight differences are confirmed.

Hypothesis	Group	Path	S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue < 0.05	Path Coefficient (β)	Hypothesis Test Result
H6	male	Job Searching <--- Negative Self-Esteem	0.103	-3.137	0.002	-0.43	CONFIRMED
		Networking <--- Negative Self-Esteem	0.113	-3.777	0.000	-0.56	CONFIRMED
		Job Searching <--- Positive Self-Esteem	0.234	4.422	0.000	0.75	CONFIRMED
		Networking <--- Positive Self-Esteem	0.244	4.128	0.000	0.72	CONFIRMED
	female	Job Searching <--- Negative Self-Esteem	0.101	-2.127	0.033	-0.32	CONFIRMED
		Networking <--- Negative Self-Esteem	0.08	-2.296	0.022	-0.38	CONFIRMED
		Job Searching <--- Positive Self-Esteem	0.219	2.98	0.003	0.5	CONFIRMED
		Networking <--- Positive Self-Esteem	0.17	2.393	0.017	0.43	CONFIRMED

Table 19: Confirmed Differences on Gender groups

Specifically Positive Self-Esteem to Job Searching has a greater impact with $\beta=0.75$ on the male participants group than on the female ($\beta=0.50$) and also Positive Self-Esteem to Networking has a greater impact with $\beta=0.72$ on the male participants group than on the female ($\beta=0.43$). Altogether male participants with Positive or Negative Self-Esteem use LinkedIn more when Job Searching ($\beta=0.75$, $\beta=0.43$ respectively) than the female participants with positive or negative self-esteem ($\beta=0.5$, $\beta=0.32$ respectively). Also male participants with Positive or Negative Self-Esteem use LinkedIn when Networking more ($\beta=0.72$, $\beta=0.56$ respectively) than the female participants with Positive or Negative Self-Esteem ($\beta=0.43$, $\beta=0.38$ respectively). Thus hypothesis H6 is confirmed (Table 20).

Hypothesis	Group	Path		S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result	
H6	male	Job Searching	<---	Negative Self-Esteem	0.103	-3.137	0.002	-0.43	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.113	-3.777	0.000	-0.56	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.234	4.422	0.000	0.75	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.244	4.128	0.000	0.72	CONFIRMED
	female	Job Searching	<---	Negative Self-Esteem	0.101	-2.127	0.033	-0.32	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.08	-2.296	0.022	-0.38	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.219	2.98	0.003	0.5	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.17	2.393	0.017	0.43	CONFIRMED

Table 20: Confirmed Hypotheses on Gender groups

➤ **Hypothesis 7: Marital status moderates the relationship between Self-Esteem and LinkedIn Motives**

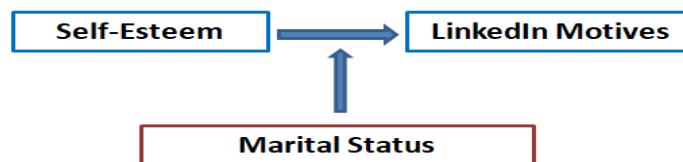


Figure 6: Hypothesis 7

Evaluating our final hypothesis we moderate the nested SEM model by adding two groups with the single and married participants. We then test the square differences statistic ($\Delta\chi^2$) which was measured at 29.588 with $df=20$ (unconstrained: 578.684 with $df=326$ and fully constrained: 608.272 with $df=346$) and the overall model indicated for differences between the groups (Table 21).

Overall Model	χ^2	Df	$\Delta\chi^2$	Δdf	Sig.
Unconstrained	578.684	326			
Constrained	608.272	346	29.588	20	<0.05

Table 21: $\Delta\chi^2$ on Marital Status groups

In order to specify the differences between the groups we check each of the paths by constraining each time the regression weight of the examining path with a parameter and checking if the constrained path χ^2 is higher than the path thresholds of $\Delta\chi^2$. The results indicate that there are differences in paths (Table 22) and from the path to path analysis six differences are confirmed (Table 23).

MARITAL STATUS				
Paths	χ^2	$\Delta\chi^2$	Confidence	Difference
Positive Self-Esteem & Job Searching	586.795	585.32	99%	1% difference
Positive Self-Esteem & Networking	584.935	582.53	95%	5% difference

Table 22: Differences in Marital Status paths

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H7	single	Job Searching	<---	Negative Self-Esteem	0.096	-4.471	0.000	-0.6	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.091	-4.293	0.000	-0.61	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.378	4.222	0.000	0.84	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.342	3.961	0.000	0.81	CONFIRMED
	married	Job Searching	<---	Negative Self-Esteem	0.137	-0.589	0.556	-0.1	NOT CONFIRMED
		Networking	<---	Negative Self-Esteem	0.142	-1.844	0.065	-0.31	NOT CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.188	2.291	0.022	0.39	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.188	2.051	0.04	0.36	CONFIRMED

Table 23: Confirmed paths on Marital Status groups

Specifically Positive Self-Esteem to Job Searching has a greater impact with $\beta=0.84$ on the single participants than on the married ones ($\beta=0.39$) and also Positive Self-Esteem to Networking has a greater impact with $\beta=0.81$ on the single participants group than on the married ones ($\beta=0.36$). Altogether single participants with positive self-esteem use LinkedIn more when Job Searching ($\beta=0.84$) and Networking ($\beta=0.81$) than the married participants when Job Searching ($\beta=0.39$) and Networking ($\beta=0.36$). Thus hypothesis H7 is confirmed (Table 24).

Hypothesis	Group	Path			S.E.< 2.58	C.R. (t-value) > 1.96	Pvalue <0.05	Path Coefficient (β)	Hypothesis Test Result
H7	single	Job Searching	<---	Negative Self-Esteem	0.096	-4.471	0.000	-0.6	CONFIRMED
		Networking	<---	Negative Self-Esteem	0.091	-4.293	0.000	-0.61	CONFIRMED
		Job Searching	<---	Positive Self-Esteem	0.378	4.222	0.000	0.84	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.342	3.961	0.000	0.81	CONFIRMED
	married	Job Searching	<---	Positive Self-Esteem	0.188	2.291	0.022	0.39	CONFIRMED
		Networking	<---	Positive Self-Esteem	0.188	2.051	0.04	0.36	CONFIRMED

Table 24: Confirmed Hypotheses on Marital Status groups

Chapter 5: Conclusions & Further Discussion

5.1 Conclusions

In this final chapter we summarize the results of the empirical research which provided clear evidence that self-esteem can moderate LinkedIn users' motives overall and on groups' level.

Specifically, **Hypothesis H1** "*Positive Self-Esteem has a positive impact on LinkedIn Motives*" was confirmed by the test conducted supporting that Positive Self-Esteem moderates both Job Searching and Networking motives but has a greater impact on Job Searching. Moreover **Hypothesis H2** "*Negative Self-Esteem has a negative impact on LinkedIn Motives*" was also supported since Negative Self-Esteem was proven to have an impact on both the examining motives of LinkedIn use. Overall Positive Self-Esteem has a greater impact on Job Seeking ($\beta=0.66$) and Networking ($\beta=0.61$) than Negative Self-Esteem

Hypothesis H3 "*LinkedIn Frequency Usage has a significant impact on the relationship between Self-Esteem and LinkedIn Motives*" was partially confirmed. Specifically Positive Self-Esteem has a significant impact to Job Searching ($\beta= 0.81$) on a 1-3 times per week basis than on an every 1-3 times per month basis ($\beta= 0.71$) confirming the H3 whereas Positive Self-Esteem to Networking has a greater impact on a 1-3 times per week ($\beta=0.73$) than on a daily basis ($\beta=0.44$) thus not confirming the H3. Path Negative Self-Esteem to Networking confirms to have a slightly greater impact on a 1-3 times per week ($\beta=-0.48$) than on a daily ($\beta=-0.47$) and path Negative Self-Esteem to Job Searching confirms a greater impact on a 1-3 times per month basis with $\beta=-0.68$ than on a 1-3 times per week basis ($\beta=-0.41$) thus both paths not confirming the H3.

Hypothesis H4 "*Updating your LinkedIn Profile has a significant impact on the relationship between Self-Esteem and LinkedIn Motives*" was confirmed and the test results supported that the updating of profile can moderate the relationship between Positive Self-Esteem and both Job Searching and Networking motives. Specifically, Positive Self-Esteem had a greater impact on Job Searching on a 1-3 times per month basis than on once every year or rarely basis and also on Networking on a 1-3 times per month bases than on a once every year or rarely basis respectively. Overall Positive Self-Esteem had a greater impact on Job Searching than Networking which can be explained that self-esteem affects positively LinkedIn users when they update their LinkedIn profile account for Job Searching.

Hypothesis H5 "*Age moderates the relationship between Self-Esteem and LinkedIn Motives*" was confirmed and the test results supported that different age group's self-esteem

is positively related when Job Searching and Networking. Specifically having Positive Self-Esteem has a greater impact on ages 18-24 when Job Searching and Networking than ages 25-34 and 35 & over, which can be explained that self-esteem affects positively younger people the most when they are looking for a job or networking and with Job Searching taking the lead from the latter.

Hypothesis H6 “*Gender moderates the relationship between Self-Esteem and LinkedIn Motives*” was confirmed and the test results supported that different gender’s self-esteem is positively related when Job Searching and Networking. Specifically having Positive Self-Esteem has a greater impact on the male participants group than on the female when Job Searching as also is the case when Networking. Altogether male LinkedIn users positive self-esteem is more affected than the female one when Job Searching.

Hypothesis H7 “*Marital Status moderates the relationship between Self-Esteem and LinkedIn Motives*” was confirmed and the test results supported that different marital status relationships are positively related when Job Searching and Networking. Specifically having Positive Self-Esteem has a greater impact on the single than on the married participants when Job Searching as also when Networking. Altogether positive self-esteem affects more single LinkedIn users than married ones when Job Searching.

5.2 Further Discussion

In Gonzales & Hancock (2011) theory from the social psychology scope that like when people look in the mirror are prone to self-evaluate themselves based on social standards in a negative or positive way thus Facebook usage could either diminish or enhance self-esteem respectively. The results concerning this theory suggested that when viewing your online profile which was designed by you can enhance your self-esteem rather than diminish it.

A similar study including more demographical variables such is educational level or employment status may also be a subject for future research. Moreover increasing the size of the data may be analyzed as a further study as well.

We also addressed lingering ambiguity regarding the dimensionality of the RSE scale and proved Gray-Little et al (1997) suggestion that the RSE scale can be shorten without compromising the measurement of global self-esteem by that using eight out of the 10 items of the scale. Of course no insights can be given just predictions from the overall analysis of the data but nevertheless it contributes to the sparse literature and the establishment of theoretical foundation on the subject.

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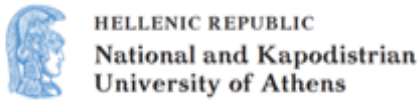
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Appendix A: “Questionnaire”



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

In the age of social media, LinkedIn is a website for professional social networking. The purpose of the questionnaire is to investigate Self-Esteem in relation with the motives of LinkedIn use. Your participation in the research will help to extract useful and scientifically valid conclusions. We assure you that your responds will remain completely confidential. Thank you in advance for your cooperation.

SECTION A: FREQUENCY OF USING LinkedIn

Instructions: Please complete with X the box of your choice.

How long do you have your LinkedIn account?

- 1-11 months
- 1-2 years
- 3-4 years
- Over 5 years

How often do you go on your LinkedIn account?

- Daily
- 1-3 times a week
- 1-3 times a month
- 1 time every 3 months or rarely

How often do you update your profile on LinkedIn?

- 1-3 times a month
- 1-3 times a semester
- Less than 1 time a year

How often do you comment on LinkedIn?

- 1-3 times per month
- 1-3 times per 6 months
- Less than 1 time a year

How often do you participate in a LinkedIn group?

- 1-3 times per month
- 1-3 times per 6 months
- Less than 1 time a year

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 ...	1	2	3	4	5	6	7
informs me about job openings posted by companies	1	2	3	4	5	6	7
helps me present my curriculum vitae to potential prospective 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
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
gives me the opportunity to find a job	1	2	3	4	5	6	7
I think it is used by recruiters looking for employees	1	2	3	4	5	6	7
shows that I know a lot of people (by 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 the profile of the connections I have)	1	2	3	4	5	6	7

SECTION C: PERSONAL 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 the whole, I am satisfied with myself	1	2	3	4	5	6	7
At times, I think I am no good at all	1	2	3	4	5	6	7
I feel that I have a number of good qualities	1	2	3	4	5	6	7
I am able to do things as well as most other people	1	2	3	4	5	6	7
I feel that I do not have much to feel proud of	1	2	3	4	5	6	7
I certainly feel useless at times	1	2	3	4	5	6	7
I feel that I'm a person of worth, at least on an equal plane as others	1	2	3	4	5	6	7
I wish I could have more respect for myself	1	2	3	4	5	6	7



Instructions: Please complete with X the box of your choice

Today you are Employed or Unemployed

Employed
Unemployed

How long have you been looking for a stable/regular work?

Under 6 months 6 to 12 months Over a year

In which sector you work in? Select ONE

Restaurant - Leisure (café, restaurant, tavern, bar, etc.)	<input type="checkbox"/>
Tourism (rooms to let, hotels, guided tours, etc.)	<input type="checkbox"/>
Retail (shop, store)	<input type="checkbox"/>
Agricultural sector (agriculture, livestock, trader)	<input type="checkbox"/>
Small Industry/ Industrial Production or Wholesale (Dealership, etc.)	<input type="checkbox"/>
Building / Construction Industry	<input type="checkbox"/>
Health, Education and Culture (doctors, tutorials, theater, schools, etc.)	<input type="checkbox"/>
Professional services (bank, accounting, consulting, technology / communications, etc.)	<input type="checkbox"/>
Personal and Social services (hair salon, home help, social care, etc.)	<input type="checkbox"/>
Other (please indicate)	<input type="checkbox"/>

SECTION D: DEMOGRAPHIC CHARACTERISTICS

Instructions: Please complete with X the box of your choice.

Gender:

Male Female

Age:

18-24
25-34
35 & over

Marital Status:

Single
Married/ Living together

Education:

Post Graduate holder	<input type="checkbox"/>	University or Technological Education Graduate	<input type="checkbox"/>
Associate / Institute of Vocational Training (IEK)	<input type="checkbox"/>	High school Graduate	<input type="checkbox"/>

What are your professional qualifications (e.g. accountant, doctor, craftsman, etc.)?

.....

Place of permanent residence: (city, area)

.....

	basic	good	excellent
Knowledge of foreign languages:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of IT / New Technologies:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>